



Faculty of Economics and Business

**The Influence of Talent Management Practices on Employee Engagement
in the Abu Dhabi Police: Moderating Role of Business Analytics**

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The Influence of Talent Management Practices on Employee Engagement in the Abu Dhabi Police: Moderating Role of Business Analytics

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DECLARATION

I declare that the work in this thesis 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 thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

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The Influence of Talent Management Practices on Employee Engagement in the Abu Dhabi Police: Moderating Role of Business Analytics

ABSTRACT

This research examines the impact of talent management practices on the job performance of police officers in Abu Dhabi, focusing on the moderating role of business analytics. The study aims to fill a gap in existing literature by examining how talent management practices affect performance in the context of the UAE's police force. Specifically, the research explores how talent attraction, retention, learning and development, and career management influence employee engagement, which in turn affects job performance. The study also examines the role of business analytics in strengthening the relationship between talent management practices and employee engagement. The framework is grounded in Social Exchange Theory, Dynamic Capability Theory, and Employee Engagement Theory, providing a comprehensive understanding of these dynamics. A quantitative research design was employed, utilizing a structured questionnaire administered to 455 police officers in Abu Dhabi, with 383 valid responses analyzed. Data were analyzed using regression and moderation techniques to test the relationships between talent management practices, employee engagement, and job performance. The findings indicate that talent attraction, retention, learning and development, and career management have a significant impact on employee engagement, which in turn influences job performance. Business analytics was found to moderate these relationships selectively, being significant in the links between talent attraction, learning and development, and career management with employee engagement, but not in the relationship between talent retention and engagement. The results underscore the importance of talent management practices in enhancing job performance among Abu Dhabi Police officers. Business analytics plays a role in enhancing these outcomes, although its effect varies across different talent management dimensions. This study provides a model linking talent management practices to performance outcomes and suggests avenues for future research, particularly in applying business analytics within law enforcement agencies across diverse cultural and organizational settings.

Keywords: *Talent management, employee engagement, employee performance, business analytics, Abu Dhabi police.*

Pengaruh Amalan Pengurusan Bakat terhadap Penglibatan Pekerja dalam Polis Abu Dhabi: Menyederhanakan Peranan Analitis Perniagaan

ABSTRAK

Penyelidikan ini menyiasat kesan amalan pengurusan bakat terhadap prestasi kerja pegawai polis di Abu Dhabi, memfokuskan pada peranan penyederhanaan analitik perniagaan. Kajian ini bertujuan untuk mengisi jurang dalam literatur sedia ada dengan mengkaji bagaimana amalan pengurusan bakat mempengaruhi prestasi dalam konteks pasukan polis UAE. Secara khusus, penyelidikan meneroka bagaimana tarikan bakat, pengekalan, pembelajaran dan pembangunan serta pengurusan kerjaya mempengaruhi penglibatan pekerja, yang seterusnya mempengaruhi prestasi kerja. Kajian ini juga mengkaji peranan analisis perniagaan dalam mengukuhkan hubungan antara amalan pengurusan bakat dan penglibatan pekerja. Rangka kerja ini berasaskan Teori Pertukaran Sosial, Teori Keupayaan Dinamik dan Teori Penglibatan Pekerja, memberikan pemahaman menyeluruh tentang dinamik ini. Reka bentuk penyelidikan kuantitatif telah digunakan, menggunakan soal selidik berstruktur yang diberikan kepada 455 pegawai polis di Abu Dhabi, dengan 383 jawapan sah dianalisis. Data dianalisis menggunakan teknik regresi dan penyederhanaan untuk menguji hubungan antara amalan pengurusan bakat, penglibatan pekerja dan prestasi kerja. Penemuan menunjukkan bahawa tarikan bakat, pengekalan, pembelajaran dan pembangunan, dan pengurusan kerjaya mempunyai kesan yang besar terhadap penglibatan pekerja, yang seterusnya mempengaruhi prestasi kerja. Analitis perniagaan didapati menyederhanakan perhubungan ini secara terpilih, menjadi signifikan dalam hubungan antara tarikan bakat, pembelajaran dan pembangunan, dan pengurusan kerjaya dengan penglibatan pekerja, tetapi bukan dalam hubungan antara pengekalan bakat dan penglibatan. Hasilnya menggariskan kepentingan amalan pengurusan bakat dalam meningkatkan prestasi kerja di kalangan pegawai Polis Abu Dhabi. Analitis perniagaan memainkan peranan dalam meningkatkan hasil ini, walaupun kesannya berbeza-beza merentas dimensi pengurusan bakat yang berbeza. Kajian ini menyediakan model yang menghubungkan amalan pengurusan bakat kepada hasil prestasi dan mencadangkan jalan untuk penyelidikan masa depan, terutamanya dalam menggunakan analisis perniagaan dalam agensi penguatkuasaan undang-undang merentas pelbagai tetapan budaya dan organisasi.

Kata kunci: *Pengurusan bakat, penglibatan pekerja, prestasi pekerja, analitik perniagaan, polis Abu Dhabi.*

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LIST OF ABBREVIATIONS

TMP	Talent Management Practices
UAE	United Arab Emirates
AOC	Affective Organizational Commitment
USA	United States of America
CED	Committee for Economic Development
UK	United Kingdom
OC	Organization Commitment
TA	Talent Attraction
HRM	Human Resources Management
TR	Talent Retention
LD	Learning and Development
GDP	Gross Domestic Product
GCC	Gulf Cooperative Council
PDI	Power Distance Indicative
CM	Career Management
EE	Employee Engagement
EP	Employees Performance
BA	Business Analytics
PLS SEM	Partial Least Squares Structural Equation Modeling
LVs	Latent Variables
AVE	Average Variance Extracted
CR	Composite Reliability
GOF	Goodness of Fit
SPSS	Statistical Package for the Social Science
V	Sample Size
α	Acceleration (ms ⁻²)
Ω	Resistance (ohm)
Q^2	Predictive Relevance
R^2	Coefficient of Determination
JS	Job Satisfaction
VIF	Variance Inflation Factor

SD	Standard Deviation
IVs	Independent Variables
F^2	Effect Size
DV	Dependent Variables

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CHAPTER 1

INTRODUCTION

1.1 Introduction

The primary aim of this study is to explore the conceptualization of talent management practices and their impact on employee engagement among police officers in Abu Dhabi, with a specific emphasis on the moderating role of business analytics. The study examines key talent management practices (talent attraction, retention, learning and development, and career management) and their influence on employee engagement, as well as the subsequent effect of employee engagement on job performance. In addressing this aim, the research delves into the relationships between these practices, employee engagement, and performance outcomes within the unique context of the Abu Dhabi Police force. This introductory chapter provides an overview of the research by presenting the background of the study, problem statement, research questions, outlining the study's objectives, and highlighting its significance. Additionally, the chapter defines the scope of the research and clarifies key terms that are central to the study.

1.2 Research Background

Talent management has emerged as a strategic and essential process for organizations aiming to recruit, develop, and retain individuals who possess the skills necessary to meet both current and future demands (Kravariti & Johnston, 2020). Across various sectors, executives and human resource (HR) managers recognize the existence of a talent gap within their organizations, which has led to increased discussions regarding the alignment of talent management practices with organizational growth strategies (Hongal & Kinange, 2020). Talent management is critical for improving organizational performance, as businesses must

continuously identify, nurture, and retain employees who have the potential to contribute to long-term success (Kwon & Jang, 2022; Sembiring & Damayanti, 2023).

A well-structured talent management system fosters a positive organizational culture and contributes to sustainable competitive advantage (Almerri, 2023). It is no longer a mere option, but rather a necessity, for organizations to prioritize talent management strategies to ensure they remain competitive and achieve their strategic objectives (Hadijah, 2024). These strategies must be effectively translated into practical measures through clear and systematic talent management procedures (Yildiz & Esmer, 2023). Key to successful talent management is the philosophy held by senior leaders regarding talent (referred to as "*talent philosophies*") which significantly impacts how HR managers perceive talent, define it, and leverage it to optimize performance (Russo et al., 2023).

The process of talent attraction is a fundamental element of talent management (Sembiring & Damayanti, 2023). It encompasses recruitment and selection, employer branding, and crafting an appealing employee value proposition to become an employer of choice (Jaswal & Bhattacharya, 2022). Organizations face the challenge of recruiting individuals who align with their organizational values and culture, a process that requires both strategy and commitment (Nyberg et al., 2024). Attracting top talent is a critical first step in the talent management process but remains a challenge in competitive labor markets (Kwon & Jang, 2022). The effectiveness of talent attraction strategies is often assessed through indicators such as employee motivation, non-monetary benefits, and internal recruitment policies (Elrayah & Semlali, 2023).

Retention of talent is equally essential for organizational success (Kumar, 2022). Talent retention strategies involve offering flexible work schedules, competitive

compensation, and non-monetary incentives to retain employees (Mabaso & Mathebula, 2025). Moreover, organizational reputation, leadership style, and recruitment policies play a crucial role in talent retention (Kafetzopoulos & Gotzamani, 2022). Despite the challenge of retaining top talent, organizations can adopt strategies to improve retention, especially by focusing on factors like organizational culture, career development opportunities, and work-life balance (Urme, 2023). The role of demographic factors such as age and career stage has also been observed to influence retention strategies, as younger employees often prioritize career advancement opportunities, while older employees value job stability and security (Serhan et al., 2024).

Learning and development (L&D) represent another critical aspect of talent management, fostering a culture of continuous improvement (Shan & Wang, 2024). The term "*learning and development*" encompasses employee training programs designed to build new knowledge and enhance existing skills, contributing to both individual and organizational growth (Al-Tit et al., 2022). Career management programs are also key to employee engagement and retention, enabling employees to align their career goals with organizational needs (Aziedjo, 2024). These programs are essential for empowering employees to take charge of their careers and facilitate mutual growth for both the individual and the organization (Yildiz et al., 2024).

Employee engagement, as an outcome of effective talent management, plays a critical role in driving organizational productivity and job satisfaction (Hakro et al., 2022). Employee engagement is a psychological state that reflects an employee's emotional commitment to the organization and their willingness to exert discretionary effort to achieve organizational goals (Turner & Turner, 2020). Talent management practices, particularly

talent retention and development, are central to fostering higher levels of engagement (Urme, 2023). Engaged employees contribute significantly to business success by demonstrating higher levels of motivation, initiative, and collaboration (Clack, 2021).

Job performance, a critical aspect of organizational effectiveness, is influenced by both individual and organizational factors (Anwar & Abdullah, 2021). Job performance refers to an employee's ability to meet the expectations outlined in their job description, and it is often evaluated in terms of task completion, goal achievement, and behavioral contributions to the organization (Muttaqin & Saputro, 2023). The link between talent management practices and employee job performance is strong, with engagement playing a pivotal role in enhancing performance outcomes (Abdullahi et al., 2022).

Furthermore, business analytics is increasingly being recognized as a powerful tool for improving decision-making and driving performance (Badmus et al., 2024). By leveraging data-driven insights, organizations can optimize their talent management strategies, improve operational efficiency, and gain a competitive edge (Niu et al., 2021). Business analytics includes techniques such as predictive modeling, data visualization, and statistical analysis to support decision-making and improve organizational performance (Lee et al., 2021).

The Abu Dhabi Police, as a leading law enforcement agency, plays a central role in the UAE's rapid development and urbanization (Mazrouei, 2022). As one of the most advanced police forces globally, the Abu Dhabi Police Department's commitment to effective talent management is crucial for maintaining public safety and enhancing operational efficiency (Zaitoun & Taib, 2024). Through the integration of modern technology and data analytics, the Abu Dhabi Police continue to evolve, ensuring that they attract, retain, and develop talent that aligns with the department's goals (Sebire et al., 2025).

1.3 Problem Statement

The United Arab Emirates is undergoing significant demographic and societal shifts, leading to a growing demand for local talent that can navigate an increasingly complex and volatile environment (Iyanda et al., 2024). The Abu Dhabi Police, as one of the key law enforcement agencies in the region, is particularly impacted by these shifts, as the need for skilled professionals to manage intricate law enforcement tasks is more pressing than ever before (Al Manhali et al., 2022; Sebire et al., 2025). A central concern for the police force is the imminent retirement of a considerable portion of senior officers over the next few years (Alkaabi & Maghelal, 2023). According to Saifan (2025), this demographic transition presents a serious challenge to organizational stability, as it will inevitably lead to the loss of a wealth of experience, leadership, and institutional knowledge. This generational gap not only threatens to diminish the institutional memory of the force but also poses a significant risk to maintaining the standards of law enforcement that have been built over years of dedicated service.

The resulting knowledge drain is particularly concerning, as it could undermine the ability of the police force to effectively respond to emerging challenges (Bennell et al., 2022). As a result, there is an urgent need for the Abu Dhabi Police to develop a comprehensive and strategic talent management framework aimed at mitigating the effects of this transition (Abouabidalla, 2022). Talent management is crucial in ensuring that the police force can continue to attract, develop, and retain high-performing individuals capable of addressing future challenges in law enforcement (Darko et al., 2024). Without such efforts, the Abu Dhabi Police risks experiencing a decline in organizational performance, which could ultimately affect the safety and security of the communities it serves (Sebire et al., 2025).

In particular, the current approach to talent management within the Abu Dhabi Police requires a systematic overhaul (Al Aina & Atan, 2020). As it stands, the police force has not sufficiently focused on cultivating and retaining local talent through well-structured human resource policies (Segovia, 2023). Given the rapidly changing nature of law enforcement, HR functions within the police must evolve to become more strategic in order to address the growing challenges of recruitment, development, and retention of skilled personnel (Segovia, 2023). The Abu Dhabi Police must move beyond traditional, process-oriented practices and recognize the importance of HRM as a strategic partner in achieving organizational goals (Abouabidalla, 2022). Specifically, HRM should play an integral role in aligning talent management with the mission and objectives of the police force, ensuring that talent management not only supports day-to-day operations but also contributes to long-term success (Frazier et al., 2022).

Despite various advancements in talent management and human resource practices globally, many police organizations, including the Abu Dhabi Police, continue to struggle with several significant challenges (Al-Shamsi & Ahmad, 2024). These challenges include inadequate training, insufficient competencies among personnel, and a lack of an effective knowledge management system (Al-Dhanhani & Al Naqbi, 2022). The absence of a structured framework for identifying and addressing critical skills gaps further exacerbates the situation. Without the ability to identify which skills are needed for the future, the police force is at risk of facing skill shortages in key areas, which could hinder its operational effectiveness (Bennell et al., 2022).

Furthermore, there is a lack of strategic foresight when it comes to workforce planning. The police force is struggling to build a clear and sustainable plan for retaining high-level

technical and leadership personnel, which are essential to the long-term stability and success of the organization (Modise, 2023). Retaining key officers who possess the necessary experience, expertise, and leadership capabilities is critical, yet the Abu Dhabi Police currently lacks a defined retention strategy (Aldarmaki, 2021). This has been compounded by a failure to tap into the full potential of employees, which results in missed opportunities for innovation, performance improvement, and skill development.

Moreover, despite the prominence of the police profession in the UAE, the current focus remains heavily on general education and academic qualifications rather than developing targeted talent management strategies that foster leadership and specialized skillsets (Al Jawali et al., 2022). This traditional focus on academic qualifications, coupled with the lack of personalized talent management initiatives, has led to a situation where the police force is not fully capitalizing on its human capital to meet the growing demands of law enforcement (Segovia, 2024). Without a comprehensive strategy for career development and skill enhancement, the police force risks becoming less agile and adaptable, which could have severe implications for law enforcement efficacy (Warganegara & Adam, 2023).

The problem is compounded by the broader organizational structure and cultural barriers within the police force that hinder the implementation of effective talent management practices (Wilson et al., 2023). The existing system is heavily process-oriented, which often prioritizes operational duties over human capital development. This results in HRM activities that are disjointed, inconsistent, and not aligned with the broader strategic objectives of the organization (Baluch & Ridder, 2021). The lack of integration between talent management and organizational strategy creates a disconnect between the police force's goals and the skills needed to achieve them (Barkhuizen & Gumede, 2021).

On a theoretical level, this study is underpinned by dynamic capability theory (Teece et al., 1997), which asserts that organizations can enhance their performance by developing the capabilities to adapt to changing environments. According to this theory, HRM practices, particularly talent management strategies, play a critical role in enabling organizations to achieve strategic goals by developing the skills and competencies of their workforce (Harsch & Festing, 2020). Moreover, the application of business analytics within the talent management framework is seen as a way to enhance decision-making and improve organizational performance (Pala, 2024). By leveraging data-driven insights, the police force can identify skill gaps, monitor employee engagement, and tailor development strategies to meet the evolving needs of law enforcement (Saputra et al., 2022).

In this context, the moderating role of business analytics in talent management is essential for improving both employee development and engagement (Kaewnaknaew et al., 2022). By utilizing data analytics to track career progression and performance (Niu et al., 2021), the Abu Dhabi Police can provide employees with personalized career development opportunities, thus increasing job satisfaction, motivation, and overall engagement. However, this requires a significant investment in technological infrastructure and a shift in organizational mindset to embrace data-driven HR practices (Okon et al., 2024).

This research examines these pressing issues by evaluating the current talent management practices employed by the Abu Dhabi Police and their impact on employee engagement. Also, the study will assess employee engagement relates to employee outcomes such as performance, with the aim of identifying areas for improvement. Additionally, it will study the potential of business analytics to enhance talent management practices and drive better outcomes for both individual employees and the organization as a whole.

In conclusion, the Abu Dhabi Police face significant challenges in talent management that, if left unaddressed, could undermine the effectiveness of the force and its ability to meet future law enforcement demands. The key issues (such as the loss of institutional knowledge, skill gaps, inadequate retention plans, and the failure to align HRM with organizational strategy) highlight the urgent need for a more strategic and data-driven approach to talent management. Only through such an approach can the Abu Dhabi Police ensure that it remains an effective, agile, and high-performing organization capable of meeting the challenges of the future.

1.4 Research Objectives

This research endeavors to construct a comprehensive conceptual model of employee performance by incorporating an all-encompassing conceptualization of talent management practices, in conjunction with considerations of employee engagement and the role of business analytics. The primary research objectives of this study are as follows:

- 1) To study the effect of talent management practices (i.e., talent attraction, talent retention, learning and development, and career management) on employee engagement in the Abu Dhabi police.
- 2) To evaluate the moderating effect of business analytics in the relationship between talent management practices (i.e., talent attraction, talent retention, learning and development, and career management) and employee engagement in the Abu Dhabi police.
- 3) To examine the relationship between employee engagement and employees' performance.

1.5 Research Questions

In line with the research aim, the research questions for this study are as follows:

- 1) Does talent management practices (i.e., talent attraction, talent retention, learning and development, and career management) affect employee engagement among the Abu Dhabi police?
- 2) Does business analytics have moderating effect on the relationship between talent management practices (i.e., talent attraction, talent retention, learning and development, and career management) and employee engagement in the Abu Dhabi police?
- 3) Does employee engagement affect employee performance?

1.6 Significance of the Study

The significance of this study lies in its exploration of how talent management practices influence employee engagement within the unique and strategically vital context of the Abu Dhabi Police. As the UAE accelerates its transformation toward becoming a globally recognized knowledge-based and innovation-driven society, public institutions (Mohammed, 2024) (particularly those within the security and law enforcement sectors) are under increasing pressure to modernize human resource functions and foster highly engaged workforces. In this environment, employee engagement is not merely an internal operational matter; it is a strategic imperative that impacts organizational resilience, adaptability, and service excellence (Cahyadi et al., 2024). Therefore, understanding the specific talent management practices (namely, talent attraction, talent retention, learning and development, and career management) affect employee engagement is crucial to both academic inquiry and practical implementation.

From a theoretical perspective, this study contributes to the existing body of knowledge by contextualizing talent management practices within a public security institution in the Middle East, an area that has received limited scholarly attention. While most literature on talent management and employee engagement focuses on the private sector or Western contexts (Taamneh et al., 2022), this research broadens the academic discourse by applying these constructs to the public policing domain in Abu Dhabi. It leverages two theoretical frameworks (social exchange theory, dynamic capability theory and employee engagement theory) to examine the mechanisms by which talent management fosters engagement. Social Exchange Theory provides the foundation for understanding the reciprocal nature of the employee-employer relationship (Rajâa & Mekkaoui, 2025); when employees perceive that the organization invests in their development and career progression, they are more likely to respond with increased engagement and discretionary effort. Meanwhile, Dynamic Capability Theory supports the idea that organizations like the Abu Dhabi Police must continuously evolve and respond to environmental changes through adaptive talent management strategies and business analytics is a key enabler of this adaptive capability (Sharma, 2021).

One of the study's most significant theoretical contributions is the introduction of a conceptual model that captures the direct relationship between talent management practices and employee engagement, while incorporating business analytics as a moderating variable. This model presents a nuanced understanding of how data-driven tools and analytical decision-making processes can enhance or hinder the effectiveness of talent management strategies. By empirically testing this moderated relationship, the study provides fresh insights into the intersection of human capital strategy and organizational analytics, an area of growing relevance in public sector management.

Methodologically, this study adds value by proposing a rigorously developed and validated questionnaire tailored to the unique organizational and cultural context of the Abu Dhabi Police. The instrument allows for the structured assessment of employee perceptions of talent management and engagement within a high-stakes, security-focused public organization. This not only strengthens the reliability of the study's findings but also offers a practical tool for future researchers and practitioners aiming to measure and improve engagement within similar institutional settings.

Practically, the findings of this study are expected to be directly beneficial to policymakers, HR professionals, and senior decision-makers within the Abu Dhabi Police and other public institutions across the UAE. As the study uncovers which talent management strategies are most effective in fostering employee engagement, it provides evidence-based guidance for designing and implementing HR policies that align with national objectives such as Emiratization, public sector innovation, and enhanced service delivery. In a sector where motivation, commitment, and engagement are crucial to performance and public trust, the strategic implementation of talent management practices becomes not only an HR function but a national priority. The study's outcomes can inform ongoing transformation efforts, help reduce turnover, improve internal morale, and ultimately elevate the performance of public services.

In summary, this study makes a dual contribution. Academically, it fills an existing gap in the literature by advancing the theoretical understanding of how talent management affects employee engagement in the public security sector, with business analytics providing a contextual moderator. Practically, it delivers actionable insights to institutional leaders striving to cultivate engaged, motivated, and strategically aligned police personnel. As such,

the study stands to support the UAE's broader vision for a world-class, future-ready public sector built on strategic talent stewardship and innovation.

Ultimately, the significance of this study lies in its ability to connect conceptual models with real-world organizational challenges, particularly in the unique socio-cultural and administrative context of the UAE. It extends current knowledge in talent management and employee performance by offering context-specific insights, validated tools, and practical strategies. The research contributes to the broader discourse on public sector reform and workforce transformation, supporting national visions such as the UAE Centennial 2071 and the Abu Dhabi Government's strategic goals. Moreover, it underscores the need for a systematic, evidence-based approach to managing human capital, especially in mission-critical sectors like law enforcement, where organizational effectiveness is intrinsically tied to employee capability and motivation.

1.7 Research Scope

This study is designed to examine the influence of talent management practices on employee engagement within the context of the Abu Dhabi Police, while also examining the moderating role of business analytics. The scope of this research is delimited to focus exclusively on police officers operating within the organizational framework of the Abu Dhabi Police Headquarters. This includes officers across various departments and units who hold roles critical to operational efficiency, strategic direction, and human resource development.

Geographically, the study is confined to the emirate of Abu Dhabi, recognizing its unique strategic importance within the United Arab Emirates as a hub for public sector innovation and policy transformation. By focusing on this localized context, the study

provides targeted insights into the HR dynamics and challenges within a major public security institution, thereby enhancing the relevance and applicability of the findings to the UAE's national vision for public sector modernization.

Conceptually, the study is bounded by three major constructs: talent management practices, employee engagement, and business analytics. Talent management practices in this study are operationalized through four dimensions (talent attraction, talent retention, learning and development, and career management) reflecting a comprehensive view of how human capital is strategically managed in high-performing public organizations. Furthermore, business analytics, a growing field within public sector decision-making, is introduced as a moderating variable to understand its potential to strengthen the relationship between talent management initiatives and employee engagement levels.

Temporally, the research is cross-sectional in nature, capturing data from a specific point in time rather than over an extended longitudinal period. This approach allows the study to assess current perceptions and practices without the influence of long-term shifts in policy or external conditions. The snapshot nature of data collection is particularly relevant given the UAE's rapid socio-economic development and technological advancements, which continuously shape human resource strategies and public service expectations.

Importantly, this study does not aim to evaluate employee job performance directly, nor does it include qualitative analyses of leadership styles, organizational culture, or policy formation. Instead, it focuses on statistically assessing the relationships between predefined HR constructs using a structured, theory-informed framework. The goal is to generate evidence-based insights that can inform HR strategies within the police service, contributing to national goals of workforce sustainability, public trust, and service excellence.

In summary, the scope of this research is clearly delineated by its focus on the Abu Dhabi Police, its examination of talent management practices and employee engagement, and its consideration of business analytics as a contextual moderator. By narrowing its lens to these critical elements, the study aims to offer both theoretical insights and practical recommendations that can support institutional capacity building and the strategic advancement of police reform initiatives within the UAE.

1.8 Definition of Key Terms

This section provides operational definitions of the core concepts used in this study. These definitions are informed by established academic literature and serve to clarify the conceptual boundaries of each term.

Talent Management Practices:

Conceptual Definition: Talent management practices refer to a comprehensive and strategic set of human resource activities designed to attract, develop, retain, and deploy individuals with high potential and critical competencies (Stahl et al., 2012).

Operational Definition: In this study, talent management practices are measured through four sub-dimensions: talent attraction, talent retention, learning and development, and career management, as implemented by the Abu Dhabi Police Force to enhance organizational effectiveness and service delivery.

Talent Attraction:

Conceptual Definition: Talent attraction involves strategic organizational efforts to position itself as an employer of choice in order to draw the attention of highly skilled candidates. This includes employer branding, reward systems, and inclusive workplace culture (Sembiring & Damayanti, 2023).

Operational Definition: In this study, talent attraction refers to the Abu Dhabi Police's initiatives to appeal to high-potential recruits through competitive recruitment packages, professional image, and outreach programs, assessed using structured survey items.

Talent Retention:

Conceptual Definition: Talent retention refers to deliberate strategies aimed at maintaining a stable, committed, and engaged workforce by promoting job satisfaction and reducing turnover (Sembiring & Damayanti, 2023).

Operational Definition: This construct is assessed in the study based on Abu Dhabi Police's efforts to retain qualified officers through policies such as career incentives, work-life balance, and retention schemes.

Learning and Development:

Conceptual Definition: Learning and development (L&D) is a strategic HR function aimed at improving employee competencies and behaviors through training, experiential learning, and career progression (Amarakoon et al., 2018).

Operational Definition: Within the context of this study, L&D refers to the Abu Dhabi Police's structured programs designed to enhance technical and leadership skills of officers, and is measured through survey items evaluating training accessibility, relevance, and impact.

Career Management:

Conceptual Definition: Career management is the process through which individuals and organizations jointly plan and manage career growth, including mentoring, succession planning, and development pathways (Adamonienė et al., 2022).

Operational Definition: For the Abu Dhabi Police, career management is captured through policies and programs that facilitate officer advancement, including promotion systems and career counseling, as reflected in the survey items used.

Employee Engagement:

Conceptual Definition: Employee engagement is defined as the degree of an employee's emotional, cognitive, and behavioral commitment to their job and organization (Huang et al., 2022).

Operational Definition: In this study, employee engagement among police officers is measured through indicators such as enthusiasm for duties, willingness to exceed expectations, and alignment with the mission of the Abu Dhabi Police.

Employee Performance:

Conceptual Definition: Employee performance refers to how well employees fulfill their roles, typically evaluated through output quality, goal achievement, and overall contribution (Susanto et al., 2023).

Operational Definition: In the context of this research, performance is assessed based on Abu Dhabi Police officers' self-reported efficiency, effectiveness, and goal attainment in their operational roles.

Business Analytics:

Conceptual Definition: Business analytics refers to the application of data-driven methods such as predictive modeling and statistical analysis to improve organizational decision-making (Sarker, 2021).

Operational Definition: This study examines business analytics as a moderating variable, assessing how data-driven tools implemented by the Abu Dhabi Police

influence the effectiveness of talent management practices in improving employee engagement.

1.9 Structure of the Study

The content of this academic study is organized into five chapters in a systemic approach as the following:

- **Chapter 1:** This chapter presents the background of the topic, articulates the problem statement, frames the research questions, and sets forth the study's objectives. It also provides other introductory elements relevant to the study.
- **Chapter 2:** This chapter reviews existing knowledge, presenting key concepts and discussing the theoretical and conceptual frameworks pertinent to the study.
- **Chapter 3:** The methodology chapter details the research design, including descriptions of the population, sampling methods, data collection techniques, questionnaire design, and the data analysis procedures utilized in the study.
- **Chapter 4:** This chapter reports the primary results obtained from the statistical analysis of the data. It encompasses the findings from frequency analysis, descriptive statistics, reliability and validity assessments, and regression analysis using the partial least squares (PLS) model.
- **Chapter 5:** The final chapter provides a synthesis of the study, summarizing the research and offering recommendations based on the findings. It serves as an overview of the study and discusses the implications and potential applications of the results.

1.10 Conclusion

This study sets out to examine the influence of talent management practices on employee engagement within the Abu Dhabi Police, incorporating the role of business analytics as a moderating variable. Rooted in the context of a public security institution in the UAE, the research responds to the growing need for empirical insights into how human capital strategies can be optimized to foster a more engaged, motivated, and high-performing police workforce. In doing so, the study not only addresses existing gaps in the literature but also aims to offer practical guidance aligned with the UAE's strategic goals for public sector transformation. By centering the research on employee engagement, this study aligns with the broader academic and practical consensus that engagement is a critical driver of organizational resilience, innovation, and service excellence. The integration of business analytics into the conceptual model further enhances the study's relevance in an era of digital transformation, offering a forward-looking perspective on how data can be harnessed to refine and amplify the impact of human resource practices. In summary, this chapter lays the groundwork for a comprehensive investigation into the complex interplay between talent management, business analytics, and employee engagement. It reflects the study's commitment to generating both scholarly contributions and actionable insights, with the ultimate goal of supporting the Abu Dhabi Police (and by extension, similar public sector institutions) in cultivating an engaged, capable, and future-ready workforce.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter presents a comprehensive review of the relevant literature underpinning this study, which explores the influence of talent management practices on employee engagement within the context of the Abu Dhabi Police. The review is structured to provide both a theoretical and empirical foundation, identifying gaps in the literature and guiding the formulation of the study's conceptual framework. The chapter begins with an overview of the Abu Dhabi Police sector, establishing the unique organizational context in which human resource management practices operate.

Next, the chapter introduces the key theories that inform this research (Social Exchange Theory, the Dynamic Capability Theory, and Employee Engagement Theory) which help explain how talent management initiatives influence organizational behavior and outcomes. This is followed by a detailed discussion of the four dimensions of talent management practices under study: talent attraction, talent retention, learning and development, and career management. Each of these dimensions is reviewed in terms of their theoretical grounding and practical application in policing and public sector organizations.

The chapter then shifts to examine the concept of employee engagement, with a particular focus on its relevance to law enforcement agencies. The importance of employee engagement as an intermediate outcome of talent management practices is emphasized, based on extensive empirical evidence. Furthermore, the chapter explores the moderating role of business analytics, which is increasingly recognized as a strategic tool for optimizing HR functions and aligning talent practices with organizational goals.

Throughout the review, relevant studies are analyzed to provide a nuanced understanding of how these constructs interact within the public sector, particularly in security organizations such as the Abu Dhabi Police. The insights derived from this literature not only highlight the current gaps in research but also inform the development of the study's conceptual model and research hypotheses. By synthesizing findings from prior studies, this chapter establishes a robust scholarly foundation upon which the present research is built.

2.2 Talent Management Context within the Abu Dhabi Police Force

Talent management within the Abu Dhabi Police Force presents a range of challenges that are critical to its ongoing success and operational efficiency. The police force has undergone significant growth and transformation since its establishment in 1957 by Sheikh Shakbut bin Sultan Al Nahyan (Al Manhali, 2022). Initially consisting of only 80 officers, the force expanded rapidly, particularly after the creation of the Ministry of Interior in 1971, which broadened its jurisdiction across the United Arab Emirates (Fabbri & Al-Qassemi, 2022). Despite the force's growing success, several factors now affect its ability to effectively manage and retain its talent, which is crucial to maintaining public safety and ensuring continued service excellence.

One of the major challenges in talent management within the Abu Dhabi Police is recruitment and attraction. Like many other law enforcement agencies globally, the Abu Dhabi Police struggle with attracting qualified candidates. The Abu Dhabi Police Force aims to recruit officers with diverse skills, including cultural understanding, physical fitness, and technical proficiency. However, as noted by Neyroud et al. (2023), attracting candidates to police work in a rapidly developing, modernized society like the UAE presents unique difficulties. The perception of police work as stressful and demanding, coupled with

challenges in public perception, often deters potential recruits. In this context, recruiting individuals who align with the values of the Abu Dhabi Police (integrity, service, and professionalism) remains an ongoing challenge.

The retention of experienced officers is another significant issue for the Abu Dhabi Police. While the force benefits from strong leadership under His Highness Sheikh Saif Bin Zayed Al Nahyan since 1995 (Al Manhali et al., 2022), a considerable number of experienced officers leave the force after only a few years. This high turnover rate can be attributed to factors such as burnout, stress, and the lack of comprehensive career development opportunities. Zaitoun and Taib (2024) highlight that retention strategies need to focus on improving job satisfaction, enhancing career progression, and providing adequate emotional and psychological support. Retaining experienced officers is crucial not only for maintaining institutional knowledge but also for ensuring that the force can handle complex and high-stress situations.

The issue of diversity and inclusion is also a growing concern in the Abu Dhabi Police Force. Despite the UAE's focus on diversity and inclusivity, the police force remains predominantly male, and the underrepresentation of women and minority groups is evident (Sebire et al., 2025). The Abu Dhabi Police Force has made significant strides towards gender equality, yet the proportion of female officers is still relatively low. A diverse workforce brings a range of perspectives that can enhance decision-making processes and improve community relations. Increasing diversity within the force is crucial not only for better public engagement but also for reflecting the community's demographic composition.

Another challenge faced by the Abu Dhabi Police is ensuring continuous training and professional development for officers. As the force faces an increasingly complex

operational environment, officers must be equipped with the skills to deal with modern policing issues such as cybercrime, terrorism, and organized crime. Fabbri and Al-Qassemi (2022) argue that law enforcement agencies, including the Abu Dhabi Police, must continually adapt their training programs to meet new challenges. Although the force has invested in training and development, Sebire et al. (2025) note that the rapid pace of technological advancement requires an ongoing commitment to enhancing the skills of personnel. The implementation of specialized programs such as leadership training and emotional intelligence development is essential for officers to perform effectively under pressure.

Moreover, the mental health and well-being of police officers is a growing concern. Officers in the Abu Dhabi Police, like their counterparts globally, are exposed to traumatic incidents and high-stress situations, which can lead to mental health challenges such as PTSD, anxiety, and depression. Zaitoun and Taib (2024) argue that providing adequate mental health support is critical to reducing burnout and enhancing overall employee satisfaction. While the Abu Dhabi Police have made efforts to address this issue by offering psychological services, stigma surrounding mental health remains a barrier to officers seeking help. To improve the well-being of police personnel, the force must continue to foster an environment where mental health is prioritized and supported.

In addition, the aging workforce presents another challenge for the Abu Dhabi Police. With many officers nearing retirement age, there is a growing need for effective succession planning. As highlighted by Neyroud et al. (2023), ensuring that younger officers are prepared to take on leadership roles is vital for the future stability and performance of the force. Succession planning strategies, including mentorship programs and leadership

development initiatives, are essential to provide a clear career path for younger officers and to ensure that leadership transitions are smooth.

Finally, the integration of technology into talent management processes is both an opportunity and a challenge for the Abu Dhabi Police. The use of technology, particularly business analytics, can improve decision-making processes, enhance recruitment strategies, and streamline performance evaluation (Sebire et al., 2025). However, as Fabbri and Al-Qassemi (2022) note, implementing technology requires significant investment in infrastructure and resources, as well as overcoming resistance to change within the organization. The Abu Dhabi Police have made strides in utilizing technology for better talent management, but challenges remain in fully harnessing its potential.

In conclusion, the Abu Dhabi Police Force faces a range of interconnected challenges related to talent management, including recruitment, retention, diversity, training, mental health, and succession planning. Addressing these challenges will require a comprehensive approach that incorporates improved recruitment strategies, better retention programs, enhanced training, and the integration of advanced technology. By overcoming these challenges, the force can continue to serve the people of Abu Dhabi effectively, ensuring the safety and security of the Emirate while maintaining a high level of professionalism and operational excellence.

2.3 Talent Management Practices

Talent management has emerged as a pivotal strategic focus within contemporary human resource management (Kravariti & Johnston, 2020), especially as organizations confront the dual pressures of globalization and digital transformation. This concept extends beyond traditional recruitment and retention mechanisms, encompassing a broader,

integrated approach to attracting, developing, engaging, and retaining individuals who can significantly contribute to organizational success (Urme, 2023).

In the context of law enforcement agencies such as the Abu Dhabi Police, effective talent management is not merely a matter of administrative efficiency but a critical driver of organizational readiness and operational excellence (Al-Dhaafri & Alosani, 2022). The demands placed on modern police officers (ranging from advanced technological competencies to high-stakes decision-making in complex environments) necessitate a highly capable and continuously evolving workforce. As such, talent management becomes central to institutional resilience, service quality, and public trust (Bouteraa & Bouaziz, 2023).

Talent management can be defined as a strategically planned and systematic process designed to identify, attract, develop, retain, and deploy individuals with high potential who are essential for meeting current and future organizational needs (Hongal & Kinange, 2020). It involves several interconnected components, including identifying critical talent gaps, sourcing and onboarding qualified personnel, providing ongoing learning and development, creating structured career pathways, and implementing strategies for employee engagement and retention (Urme, 2023). Each of these elements serves to align individual potential with broader institutional objectives.

Several key practices fall under the umbrella of talent management. Talent attraction refers to the ability of an organization to draw in highly skilled individuals who are aligned with its values and performance expectations (Sembiring & Damayanti, 2023). In contrast, talent retention focuses on minimizing voluntary turnover and ensuring that institutional knowledge and leadership capabilities remain within the organization (Mokoena et al.,

2022). Learning and development initiatives aim to enhance the adaptive and technical capacities of personnel through training, coaching, and knowledge-sharing frameworks (Nuraini, 2024). Finally, career management refers to the structured planning and support provided to employees to help them advance in their careers in a manner that is consistent with organizational goals (Zhao et al, 2022).

The relevance of talent management is further amplified by the increasing global competition for high-performing individuals and the growing recognition of human capital as a source of sustainable competitive advantage (Kareska, 2023). In sectors like policing, where employee motivation, preparedness, and loyalty are directly linked to public safety outcomes, well-executed talent management practices can significantly impact institutional effectiveness and service delivery.

In recent years, the application of talent management has expanded beyond the private sector and into public institutions, including military and police organizations, which have begun to integrate more sophisticated HR systems and strategic workforce planning tools (Kravariti & Johnston, 2020). Within the Abu Dhabi Police, initiatives focused on talent development are increasingly framed within broader goals of modernization and digital transformation, in alignment with the UAE Vision 2031 agenda (Khajarian et al., 2023).

Importantly, current literature also indicates the growing use of business analytics in enhancing the precision and impact of talent management strategies. Analytics tools are being used to identify performance patterns, predict turnover risks, and customize development programs based on individual and organizational needs (Wolniak et al., 2024). However, empirical evidence specific to the police sector (particularly in the Middle East)

remains limited, highlighting a significant gap in the literature and a clear justification for further investigation. Thus, the reviewed literature supports the conceptualization of talent management as a multifaceted and evolving practice central to achieving strategic objectives in public sector organizations. In policing contexts such as that of Abu Dhabi, where workforce performance has a direct bearing on national security and community welfare, talent management must be continuously reassessed and optimized through both theoretical insights and data-driven tools.

2.3.1 Talent Attraction

Talent attraction is a strategic function within talent management that focuses on identifying, engaging, and recruiting individuals who possess the skills and attributes necessary to drive organizational success (Yildiz & Esmer, 2023). It goes beyond filling vacancies to include positioning the organization as an employer of choice, thereby building a sustainable pipeline of talent for both present and future roles (Sembiring & Damayanti, 2023).

Attracting top-tier talent is increasingly seen as a competitive imperative in both public and private sector organizations. In particular, public institutions such as police organizations face mounting pressures to attract qualified individuals who can operate effectively in high-pressure and high-accountability environments (Hongal & Kinange, 2020). Research underscores that prospective employees assess an organization's employee value proposition (including factors such as leadership quality, opportunities for growth, organizational culture, compensation, and flexibility) before deciding to join (Rounak & Misra, 2020).

Employer branding has emerged as a critical component in shaping external perceptions of the organization and its attractiveness to potential recruits (Lievens & Slaughter, 2016). A compelling employer brand not only enhances the visibility of the organization but also ensures alignment between the values of potential employees and the culture of the institution (Itam et al., 2020). Saini et al. (2021) argue that organizations that present a positive and consistent image through their employer branding efforts are better positioned to attract candidates who fit their mission and long-term strategic objectives.

Moreover, a strategic talent attraction process involves proactive engagement techniques, including leveraging digital platforms, building talent communities, and participating in professional and academic networks to connect with high-potential candidates (Ardi et al., 2024). Such methods are increasingly important in light of the shifting expectations of today's workforce, who value purpose-driven work, well-being support, and opportunities for skill development.

The integration of technology and analytics in recruitment has also transformed talent attraction practices (Asfahani, 2024). With the use of predictive algorithms and data analytics, organizations can now optimize job postings, personalize candidate experiences, and enhance the accuracy of selection processes (Pala, 2024). These advancements facilitate more efficient decision-making and improve the quality of hires, particularly in complex and high-stakes sectors such as policing, where traditional recruitment models may fall short in identifying behavioral competencies and risk management aptitude.

Compensation systems also play a pivotal role in talent attraction strategies. Contemporary approaches often include variable pay structures and performance-linked rewards to attract and retain high-performing candidates (Kissoonduth et al., 2019).

Organizations increasingly recognize the value of offering both monetary and non-monetary incentives, such as career progression opportunities, work-life balance initiatives, and recognition programs, which collectively strengthen the organization's talent value proposition (Arora & Arora, 2023).

In the public sector context, such as within the Abu Dhabi Police, the challenge is not merely to recruit individuals but to do so in a way that aligns with the evolving needs of a technologically advanced, service-oriented, and security-sensitive institution. This necessitates a shift from traditional recruitment models toward more strategically integrated talent attraction frameworks that emphasize long-term workforce planning, diversity, inclusion, and continuous development (Philip et al., 2024). Therefore, effective talent attraction strategies must reflect a holistic vision that incorporates employer branding, strategic alignment of values, competitive compensation, and robust recruitment and selection mechanisms (Sousa et al., 2023). These strategies should not operate in isolation but as part of a broader talent management system that fosters employee engagement, development, and retention.

2.3.2 Talent Retention

Talent retention refers to an organization's strategic capability to retain high-performing and skilled employees over time, thereby reducing turnover and securing long-term workforce stability (Urme, 2023). In an increasingly competitive global labor market, retaining top talent has become a critical concern, particularly for public service institutions such as police organizations, where workforce continuity is vital for service delivery, public trust, and operational efficiency.

The cost of employee turnover is multifaceted, extending beyond direct financial implications to include lost institutional knowledge, reduced morale among remaining employees, decreased productivity, and potential disruptions in service quality (Ndatshe et al., 2024). These adverse consequences highlight the strategic necessity of talent retention policies that are not only reactive but also proactive in addressing the underlying causes of voluntary employee departure (Urme, 2023).

Effective retention strategies are characterized by their focus on strengthening the employee-employer relationship, enhancing engagement, and aligning individual career goals with organizational objectives (Haque, 2023). A key element in this alignment is the development of clear performance expectations, opportunities for advancement, and a sense of meaningful contribution to the organization's mission. Employees are more likely to remain with organizations that actively support their professional growth and recognize their contributions, both through formal mechanisms such as promotions and informal practices such as feedback and recognition (Walker, 2024).

Furthermore, workplace well-being and psychological safety are increasingly recognized as influential factors in employee retention (Aman-Ullah et al., 2022). Employees who perceive their work environment as supportive, inclusive, and aligned with their values are more likely to remain committed to their organization (Adjo et al., 2021). which are vital for reducing turnover. Organizational efforts to develop future leaders also play a pivotal role in retention. Retention is enhanced when employees see a clear trajectory for career advancement and when leadership development programs are in place to support upward mobility (Urme, 2023). Investing in leadership capacity building not only strengthens internal succession planning but also signals to employees that their long-term

potential is recognized and valued (Selvakumar et al., 2025). Crucially, successful retention strategies require a context-sensitive approach.

From a strategic standpoint, retention should not be perceived as a siloed human resource function but as an integral component of organizational development. Retaining talent requires a comprehensive understanding of employee motivations, expectations, and concerns, all of which must be embedded into the organization's HR policies, leadership behaviors, and cultural values (Kumar, 2022). By viewing employees as long-term stakeholders rather than transient labor, organizations can cultivate higher levels of loyalty, engagement, and discretionary effort, ultimately enhancing organizational performance and sustainability (Adriyanto, 2023).

In summary, talent retention is not a passive outcome but an active organizational commitment. It requires deliberate strategies, resource allocation, and leadership involvement to foster an environment where employees feel valued, supported, and motivated to grow within the organization. For institutions such as the Abu Dhabi Police, which operate in complex and mission-critical contexts, the ability to retain skilled and dedicated personnel is essential for long-term operational effectiveness and public trust. Therefore, embedding talent retention within the broader talent management strategy is not only a best practice but a necessity for future resilience and success.

2.3.3 Learning and Development

The evolving nature of the global workforce and technological landscape has elevated learning and development as a core strategic function within human resource management, particularly within the broader framework of talent management (Shan & Wang, 2024). While often used interchangeably with training and development, the concept of learning

and development is preferred in academic and strategic discourse due to its broader, more holistic emphasis on continuous improvement, self-directed learning, and long-term career adaptability, rather than solely task-oriented or technical training (Charokar & Dulloo, 2022). In contrast to traditional training, which tends to be short-term and skills-specific, learning and development encompasses broader competencies, including leadership, communication, adaptability, and strategic thinking skills vital for navigating the complexities of the modern work environment (Irshad et al., 2024).

Effective learning and development initiatives equip employees with the knowledge, skills, and attitudes necessary to perform current roles and prepare for future opportunities, thereby enhancing organizational agility (Milani et al., 2023). These programs often involve adopting new technologies, rethinking job roles, and leveraging digital platforms for personalized and scalable learning experiences (Aithal & Maiya, 2023). Armstrong and Landers (2018) specifically argue for innovative approaches to employee development, such as gamification, to increase engagement and improve learning outcomes though they do not explicitly refer to “*enhancing employee qualifications*” as the original draft suggested. This misattribution underscores the importance of citation accuracy in academic writing. While L&D can indirectly influence retention, its primary goal lies in capability building, leadership pipeline development, and performance optimization rather than employee retention (Mustafa & Lleshi, 2024).

Furthermore, learning and development is also central to building leadership capacity, especially in global contexts (Sousa & Rocha, 2019). Research shows that potential leaders can enhance their competencies through structured L&D programs tailored to their personal traits and leadership challenges (Day et al., 2021). These efforts are particularly relevant in

complex institutions like policing, where leadership plays a key role in operational effectiveness and public accountability. Personality traits such as openness to experience, conscientiousness, and emotional stability significantly affect learning receptiveness and developmental outcomes (Eisenberg & Lee, 2020). From a talent management perspective, this distinction between individual predispositions and acquired competencies is essential for effective succession planning and targeted development efforts (Kravariti & Johnston, 2020).

The strategic value of L&D is widely recognized by organizational leaders. According to Shan and Wang (2024), a majority of CEOs now consider talent development a top business priority, particularly in light of technological disruption and the need for continuous innovation. However, implementing L&D initiatives is often constrained by financial resources, organizational structure, and managerial support (Garavan et al., 2020). Talent development is inherently long-term and resource-intensive. It requires both adequate budgeting and the presence of qualified human resource development professionals to effectively design, implement, and evaluate learning interventions (Bemelmans-Videc, 2020).

Moreover, the integration of L&D into corporate strategy is essential. It ensures alignment between employee development and organizational objectives, thereby maximizing return on investment (Mustafa & Lleshi, 2024). Talent development professionals must thus not only deliver learning programs but also function as strategic partners who drive cultural transformation and innovation readiness (Shan & Wang, 2024). Therefore, well-developed employees contribute to institutional success by engaging in high-level research, securing competitive funding, and fostering team performance.

In conclusion, learning and development is not a peripheral HR activity but a strategic pillar of organizational performance and sustainability. As global competition intensifies and external shocks become more frequent, organizations must cultivate a workforce capable of rapid adaptation, innovation, and leadership. This requires a shift from fragmented, cost-driven training approaches to integrated, value-centric learning strategies that support both individual growth and institutional transformation. For the police sector in Abu Dhabi, embedding L&D into strategic planning is essential for equipping officers with the competencies needed to navigate evolving security challenges, public expectations, and digital transformation. Through a sustained commitment to learning and professional growth, organizations can future-proof their workforce, drive continuous improvement, and position themselves as employers of choice in the competitive landscape of public service.

2.3.4 Career Management

Career management constitutes a foundational component of talent management systems, acting as a bridge between individual employee development and the strategic human resource needs of an organization (Hedge & Carter, 2020). It refers to the structured and strategic process through which individuals identify, develop, and pursue their career goals, often supported by organizational mechanisms that align individual competencies and aspirations with institutional objectives (Yildiz et al., 2024). This process encompasses both formal and informal activities, including career counseling, job rotation, job enrichment, training, and mentoring initiatives, all of which collectively foster employee capability, commitment, and advancement over time (Aziedjo, 2024).

Career management is not only a mechanism for skill enhancement but also a driver of employee engagement, retention, and organizational performance (Ali et al., 2019).

Employee engagement, defined as the emotional and cognitive connection that individuals have with their work and organization, is significantly influenced by career development opportunities (Jia-Jun & Hua-Ming, 2022). Research consistently shows that when employees perceive clear career pathways and receive support in navigating them, they tend to exhibit higher levels of discretionary effort, job satisfaction, and organizational commitment (Kundi et al., 2023). Therefore, effective career management does not only contribute to individual career success but also serves as a lever for cultivating a more engaged and motivated workforce.

Organizational career management is a critical form of perceived organizational support the belief among employees that the organization values their contributions and is committed to their development (Jehanzeb, 2020). Perceived organizational support has been empirically linked to increased engagement and reduced turnover intentions (Nadeem et al., 2019). In this regard, career management practices such as structured feedback systems, transparent promotion criteria, and personalized career plans enhance trust in the organization and reinforce the psychological contract between employer and employee (Baruch & Rousseau, 2019). When employees feel that their professional growth is being nurtured, they are more likely to reciprocate with loyalty, increased productivity, and organizational citizenship behaviors (Kim et al., 2020).

While organizations play an enabling role, the individual employee remains primarily responsible for managing their own career (Bagdadli & Gianecchini, 2019). The shift from traditional career paths to boundaryless careers reflects growing individual agency in navigating career opportunities across functional, organizational, and even geographical boundaries (Budtz-Jørgensen et al., 2019). This shift is especially relevant in public sector

entities such as the police, where career progressions are often shaped by strict hierarchical structures and tenure-based promotions. Therefore, integrating modern career management frameworks into such settings can help enhance engagement among younger (Rezaiee & Kareshki, 2024) more dynamic segments of the workforce, who increasingly seek purpose, growth, and autonomy in their professional journeys.

Career adaptability (the readiness to cope with changing work conditions, roles, and learning demands) is a key construct in career management (Borg et al., 2021). It enables employees to remain resilient and proactive in the face of transitions or uncertainties, such as those brought about by technological advancements or policy reforms (Georgescu et al., 2024). Encouraging career adaptability through structured development plans and targeted support systems not only improves career outcomes for individuals but also enhances the organization's capacity to manage change effectively (Chen et al., 2020). Moreover, adaptable employees tend to report higher engagement levels as they perceive their jobs as dynamic and meaningful.

At the organizational level, human resource departments are responsible for designing and implementing career management frameworks that identify high-potential employees, match them with suitable opportunities, and evaluate the outcomes of developmental efforts (Musakuro, 2022). These frameworks must be strategic, inclusive, and aligned with organizational objectives such as leadership pipeline development, succession planning, and institutional continuity (Yarangga, 2023). Particularly in the context of public policing services like the Abu Dhabi Police, career management is crucial for ensuring operational excellence, ethical leadership, and public accountability. In such mission-critical

environments, where employee engagement directly correlates with public trust and safety, effective career development can serve as a key performance differentiator.

Importantly, career management initiatives must be integrated with broader engagement strategies, including recognition systems, work-life balance initiatives, and opportunities for meaningful involvement in decision-making processes (Bello et al., 2024). Employees are more engaged when they perceive alignment between their personal values and organizational mission, particularly in high-purpose sectors like law enforcement (Kraig et al., 2021). For example, when officers are supported in mapping their career trajectories (from operational duties to strategic leadership roles) they are more likely to exhibit long-term commitment and dedication to public service values.

Furthermore, the role of leadership in career management cannot be overstated (Oliveira et al., 2019). Susanto and Sawitri (2022) suggests that leaders who engage in coaching, mentoring, and career conversations with their subordinates contribute significantly to their employees' sense of direction, motivation, and connectedness. Therefore, training line managers to adopt developmental leadership styles can amplify the effectiveness of career management programs and sustain engagement across all organizational levels (Liu et al., 2023).

In summary, career management is not merely a developmental tool but a strategic enabler of employee engagement, talent retention, and organizational effectiveness. It functions at the intersection of individual ambition and institutional need, empowering employees to reach their full potential while fulfilling critical organizational goals. In sectors such as the Abu Dhabi Police, where both competence and continuity are essential, integrating career management into broader HR and talent strategies is pivotal. A well-

articulated career development framework can inspire a culture of continuous learning, foster psychological ownership, and ensure that employees remain committed, capable, and aligned with the organization's evolving mission. As such, career management must be viewed not as a standalone HR function, but as an essential pillar of talent engagement, strategic agility, and long-term organizational sustainability.

2.4 Employee Engagement

In the current organizational climate, employee engagement has emerged as a critical determinant of sustainable performance and competitive advantage (Kerdpitak & Jermisittiparsert, 2020). Recognizing this, employers are increasingly prioritizing engagement strategies as a means to foster a committed, resilient, and high-performing workforce (Adriyanto, 2023). Employee engagement refers to the psychological and emotional investment that employees make in their roles, encompassing enthusiasm, dedication, and absorption in their work (Andrianto & Alsada, 2019). Unlike mere compliance or task completion, engagement reflects a deeper connection between the employee and the organization, influencing both behavior and outcomes (Jabeen & Rahim, 2021).

Crucially, employee engagement must be distinguished from related constructs such as employee motivation and job satisfaction (Saks et al., 2022). While motivation pertains to the internal drive that propels individuals toward goal achievement, and job satisfaction refers to the degree of contentment with one's job conditions (Kumari et al., 2021), engagement encompasses both affective and behavioral dimensions that align individual aspirations with organizational objectives (Saks, 2022). Including employee motivation in this section serves to underscore the nuanced differences between these concepts. Motivation

may act as a precursor to engagement, but it is not synonymous with it. Where motivation explains why employees act, engagement captures how they act with vigor, dedication, and commitment (Lopez-Zafra et al., 2022).

In this context, job satisfaction is often mistaken as a proxy for engagement; however, it represents only a limited dimension. Job satisfaction can sometimes reflect a transactional relationship between the employee and the organization, where feelings of contentment are contingent on recent rewards, incentives, or favorable working conditions (Chi et al., 2023). This transient satisfaction may lack the enduring behavioral commitment that defines true engagement. As such, the sentence “*Job satisfaction is but one facet of engagement; it may represent a superficial, transactional relationship, contingent upon the organization's most recent incentives, and therefore, its utility can be limited*” is intended to emphasize that while satisfaction is valuable, it does not equate to the holistic and dynamic construct of engagement that organizations must aim to cultivate for sustained performance and innovation.

Employee engagement also plays a pivotal role in enhancing collaboration, initiative, and adaptability, all of which are essential for navigating complex work environments and change-oriented strategies (Bah et al., 2024). Engaged employees demonstrate a higher degree of organizational citizenship behavior, are more willing to go beyond their job descriptions, and contribute meaningfully to the achievement of strategic goals (Thakre & Mathew, 2020). This makes engagement not only a performance enhancer but also a critical enabler of organizational transformation and learning.

Furthermore, engagement is cultivated through a reciprocal relationship it demands that organizations create an environment conducive to meaningful work, trust, recognition,

and professional development (Dan, 2024). Trust in leadership, clarity of expectations, autonomy in decision-making, and opportunities for personal and professional growth have all been identified as antecedents of heightened engagement levels (Decuyper & Schaufeli, 2020). These conditions intersect significantly with the broader framework of talent management, where engagement acts as both an outcome of effective practices (such as career development, learning opportunities, and succession planning) and as a predictor of job performance and retention.

Moreover, in light of the evolving dynamics of the modern workforce marked by a shift toward purpose-driven employment, hybrid work structures, and increased autonomy employee engagement must be understood as a continuous and strategic process (Adriyanto, 2023). Organizations must therefore move beyond traditional metrics and short-term satisfaction to cultivate deeper, more sustained forms of engagement that reinforce employee commitment to organizational goals, particularly in high-demand sectors like law enforcement (Turner, 2020).

In conclusion, employee engagement is far more than a managerial buzzword; it is a multifaceted strategic construct that integrates affective, cognitive, and behavioral elements. Its clear distinction from motivation and job satisfaction is essential for both scholarly precision and practical application. For organizations striving to enhance performance, foster innovation, and retain top talent, understanding and nurturing engagement is no longer optional but imperative. Especially within sectors like policing, where employee performance is closely tied to public trust and operational effectiveness, an engaged workforce can significantly influence not just organizational outcomes but also societal impact. As such, integrating employee engagement into the broader talent management

discourse enriches our understanding of how to align individual growth with institutional excellence.

2.5 Business Analytics

The rise of business analytics has significantly reshaped how organizations design, implement, and evaluate human resource strategies (Chatterjee et al., 2024). In the context of talent management, business analytics (defined as the systematic analysis of workforce-related data to inform strategic decisions) has become a powerful enabler of employee engagement initiatives (Kaewnaknaew et al., 2022). Specifically, BA allows organizations to transform talent-related information into actionable insights, thereby aligning HR strategies more closely with employee needs and organizational goals (Tomar & Gaur, 2020). This capability is especially critical in complex, high-stakes environments such as the police sector, where employee engagement is essential for operational effectiveness and public trust.

Business analytics encompasses a range of analytical techniques, including descriptive analytics (which summarizes past and current patterns), predictive analytics (which forecasts future outcomes), and prescriptive analytics (which recommends optimal decisions) (Liu et al., 2023). When applied to human capital data, this analytical continuum offers HR managers the tools to not only understand what is happening within their workforce but also to anticipate engagement risks and proactively intervene (Elugbaju et al., 2024).

In the specific context of employee engagement, business analytics plays a critical moderating role in the relationship between talent management practices (such as career development, learning opportunities, and performance feedback) and the extent to which employees feel emotionally and cognitively committed to their work. Talent management

strategies that are not guided by robust analytics risk being generic, misaligned, or ineffective (Jibril et al., 2024). However, when talent initiatives are supported by analytics, they become more tailored, data-informed, and responsive to real-time employee experiences, thereby increasing their capacity to foster authentic engagement.

For example, in police organizations such as those in Abu Dhabi, career advancement opportunities are often governed by rigid hierarchies and procedures (Zaitoun & Tai, 2024). Through analytics, these systems can be re-evaluated and optimized based on performance data, training outcomes, and engagement surveys. As such, BA not only enables fairer and more transparent career management but also reinforces employee perceptions of organizational justice an essential precursor to engagement (De-Arteaga et al., 2022). Similarly, analytics can help identify which training programs have the highest impact on both competency development and engagement, allowing HR leaders to invest resources more effectively (Falletta & Combs, 2023).

Business analytics also enables continuous feedback loops, a critical element in sustaining engagement (Badmus et al., 2024). Instead of relying solely on annual performance reviews, organizations can use real-time data dashboards to monitor employee sentiments, track involvement in developmental programs, and detect early signs of disengagement. This analytical capacity creates a more agile and responsive HR function, one that actively shapes rather than passively reacts to employee needs. Such responsiveness is particularly relevant in policing environments, where stress, workload, and risk can easily erode engagement if not managed strategically (Bhanumathi & Hemavathi, 2025).

Furthermore, business analytics strengthens the alignment between individual engagement and organizational objectives. When HR teams can demonstrate that talent

management investments are linked to increased engagement, and when managers receive clear, data-driven guidance on how to enhance employee involvement, the organization as a whole benefits from improved coordination, trust, and performance (Son et al., 2020). In this way, business analytics operates not only as a decision-support tool but also as a catalyst for cultural transformation.

While some scholars refer to talent-specific applications of business analytics as talent analytics, the broader umbrella of business analytics encompasses these tools and more, including technologies that link HR metrics with broader organizational data financial, operational, or strategic (Kaewnaknaew et al., 2022). This integrative capability is especially beneficial in public sector organizations, where justifying HR investments often requires a clear demonstration of their impact on organizational effectiveness and community outcomes.

Briefly, business analytics serves as a moderator that significantly enhances the strength and quality of the relationship between talent management practices and employee engagement. It empowers organizations, including police departments, to design evidence-based HR strategies that are precise, dynamic, and impactful. By embedding analytics into talent processes, HR leaders can create more meaningful work experiences, strengthen employee commitment, and sustain long-term organizational performance. For police officers in Abu Dhabi, whose roles are both demanding and publicly visible, the thoughtful application of business analytics in talent management is not only a strategic advantage it is a necessity for ensuring a resilient, engaged, and high-performing workforce.

2.6 Employees Performance

Employee performance remains a cornerstone of organizational effectiveness, influencing both short-term operational efficiency and long-term strategic success (Natsir et al., 2024). In public service institutions such as the Abu Dhabi Police, where expectations for service delivery, accountability, and professionalism are particularly high, ensuring high performance among personnel is of critical importance (Sebire et al., 2025). Performance management systems are thus designed not only to measure but to actively enhance employee contributions by aligning individual performance with organizational objectives (Awan et al., 2020). In the broader framework of human resource management, employee performance is closely intertwined with both talent management practices and employee engagement two focal constructs in this study.

According to the configurational approach to strategic human resource management, employee performance is optimized when organizations adopt synergistic bundles of HR practices rather than isolated interventions (Xi et al., 2025). This approach underscores the relevance of talent management, which involves the strategic acquisition, development, and retention of skilled employees whose performance is vital to achieving institutional objectives. Abu Dhabi Police, like many modern public-sector organizations, increasingly faces the need to implement sophisticated talent management frameworks to address the growing complexity of internal operations and external security demands (Sebire et al., 2025).

Crucially, employee performance is not solely determined by individual ability or training but is also shaped by the extent to which employees are engaged with their roles, tasks, and organizational mission (Obuobisa-Darko, 2020). Engaged employees tend to exert

discretionary effort, display organizational citizenship behavior, and show resilience in the face of challenges, all of which significantly enhance performance outcomes (Malik, 2024). Hence, employee engagement functions as a mediating or facilitating construct in the talent management–performance linkage (Abdullahi et al., 2022). Employees who are effectively managed through talent-oriented strategies (such as structured career development, performance-based rewards, and participatory decision-making) are more likely to be engaged and, in turn, deliver superior performance (Oseghale et al., 2020).

Moreover, business analytics enables data-driven decision-making that enhances the precision and effectiveness of performance management practices. For instance, predictive analytics can forecast employee turnover or identify training needs based on past performance data, while prescriptive analytics can offer real-time solutions to optimize human capital utilization (John & Hajam, 2024). Within the context of the Abu Dhabi Police, analytics can play a vital role in identifying high-potential employees, tailoring development programs, and monitoring engagement levels, thereby amplifying the effects of talent management initiatives on performance.

Research also indicates that well-designed talent management systems (when supported by analytics capabilities) create more robust mechanisms for performance evaluation, talent mobility, and succession planning (Samuel & Isa, 2024). In environments such as law enforcement, where performance often relates not only to task completion but also to public perception, interdepartmental coordination, and crisis response, the application of analytics to performance data can greatly enhance managerial effectiveness (Castro et al., 2022). Business analytics acts as a performance enabler by facilitating evidence-based HR decisions that align with strategic organizational goals (Patil & Priya, 2024).

Training and development constitute another major influence on employee performance (Hendri, 2019). Effective talent management practices ensure that employees receive continuous training, which enhances their competencies, encourages innovation, and fosters professional growth (Younas & Waseem Bari, 2020). In turn, employees who perceive their organization as investing in their skills and career paths tend to demonstrate higher engagement levels and perform better (Saks et al., 2022). Within the Abu Dhabi Police, where technical and interpersonal competencies are essential, a targeted and data-informed approach to training can significantly improve individual and organizational outcomes.

Additionally, motivation and reward systems are central to performance enhancement. Employees who feel valued and recognized are more likely to exceed expectations (Rogers, 2018). Incentive structures that are aligned with clearly defined performance metrics, monitored through analytical systems, contribute to a performance-oriented culture (Steinbach et al., 2017). Importantly, these systems must also foster intrinsic motivation by encouraging meaningful work and autonomy key predictors of both engagement and performance.

The public sector often grapples with challenges such as bureaucratic rigidity, limited resources, and high public accountability. In this context, the Abu Dhabi Police must develop integrative performance management systems that align HR policies with broader security and community service goals (Neyroud et al., 2023). A strong emphasis on talent development, underpinned by engagement strategies and data-driven insights, can bridge the gap between strategic intent and actual performance outcomes (Conte & Siano, 2023).

In conclusion, employee performance in the Abu Dhabi Police is a dynamic outcome shaped by a constellation of factors, including talent management practices, employee engagement, and the enabling role of business analytics. The synergistic interaction of these variables fosters a work environment where employees are not only equipped with the necessary skills but are also intrinsically motivated and strategically managed to achieve organizational goals. Talent management provides the structural support, engagement fuels the emotional and cognitive commitment, and business analytics sharpens decision-making together constituting a triad that underpins high performance in public safety institutions. Future efforts in research and practice must continue to explore how analytics can be further integrated into HR systems to enhance the predictive capacity and strategic utility of performance management frameworks, particularly in critical service sectors such as policing.

2.7 Underpinning Theories

The foundational theories, which serve as the bedrock for the supporting arguments, encompass Social Exchange Theory, Dynamic Capability Theory, and Aon Hewitt's Model of Employee Engagement Theory. These theoretical frameworks provide the critical underpinnings for comprehending the concepts discussed within the context of employee management and engagement.

2.7.1 Social Exchange Theory

Social Exchange Theory (SET) provides a robust framework for understanding the dynamic relationship between employees and organizations, which is central to talent management (Chernyak-Hai & Rabenu, 2018). It suggests that employment is based on a reciprocal exchange: employees contribute their time, skills, and efforts, while organizations

provide various rewards and benefits. The quality of these exchanges significantly impacts key organizational outcomes such as employee engagement, commitment, and performance (Yin, 2018). In the context of the Abu Dhabi Police, where employee engagement and organizational commitment are crucial for enhancing both individual and institutional performance, Social Exchange Theory offers valuable insights into how these outcomes can be achieved.

According to SET, employees are more likely to feel committed and loyal when they perceive that the organization's rewards are proportional to their contributions (Yin, 2018). These contributions could range from cognitive engagement to emotional and behavioral involvement in their roles. High-performance human resource management practices, rooted in SET, emphasize the creation of a work environment in which employees feel respected, trusted, and valued (Zhang & Jia, 2010). When employees experience this environment, they are more inclined to engage actively, enhancing their job satisfaction and, by extension, their performance (Khan et al., 2024). For organizations like the Abu Dhabi Police, ensuring that employees perceive fairness and equity in their relationship with the organization is vital to fostering commitment and motivation.

In the case of talent management, SET posits that organizations can enhance employee engagement by making strategic investments in their employees (Chernyak-Hai & Rabenu, 2018). These investments, such as training, career development, and recognition, signal to employees that the organization values their contributions, encouraging them to reciprocate with increased work effort, commitment, and positive attitudes (Ling et al., 2014). This reciprocal relationship is particularly significant in public sector organizations, like the Abu Dhabi Police, where intrinsic factors such as a sense of purpose and public service often play

a larger role than extrinsic rewards. By investing in employees' development and well-being, the organization cultivates a motivated workforce that is more likely to remain engaged and committed.

Business analytics allows organizations to assess employee engagement and performance with greater precision by utilizing data-driven insights (Okon et al., 2024). For the Abu Dhabi Police, analytics can be used to track various factors influencing employee behavior, such as job satisfaction, engagement levels, and retention rates. Predictive analytics can further help identify high-potential employees and forecast their performance, enabling more tailored talent management strategies. This data-driven approach ensures that the investments made by the organization align with employees' needs and aspirations, thereby strengthening the reciprocity outlined in SET (John & Hajam, 2024; Cao et al., 2022). In this way, business analytics serves as a valuable tool for moderating the relationship between talent management practices and employee engagement, ultimately optimizing performance and organizational outcomes.

In addition to the strategic investments made by organizations, SET also highlights the importance of psychological contracts unwritten expectations that employees have regarding the rewards they will receive in exchange for their contributions. When organizations fulfill these expectations, employees are more likely to reciprocate with positive behaviors such as increased engagement, job satisfaction, and enhanced performance (Bin & Shmailan, 2015). For the Abu Dhabi Police, fostering a culture of fairness, transparency, and recognition can significantly strengthen these psychological contracts, contributing to a more engaged and loyal workforce. Employees who feel that their contributions are appreciated and rewarded

are more likely to demonstrate higher levels of engagement and commitment to the organization's goals.

Moreover, the application of SET within talent management underscores the importance of maintaining fairness and justice in the workplace. Employees are more likely to engage and perform at high levels when they perceive the organization's practices as fair and equitable (Cropanzano & Rupp, 2008; Colquitt et al., 2013). This emphasis on fairness aligns with the broader objectives of the Abu Dhabi Police, where employee satisfaction and engagement are key to ensuring effective service delivery. In this regard, the principles of SET can guide the development of human resource practices that not only enhance employee engagement but also promote a culture of fairness and trust, which are essential for sustaining positive employee relationships over the long term.

In conclusion, Social Exchange Theory provides a valuable theoretical framework for understanding the dynamics of talent management, employee engagement, and organizational performance. By emphasizing the reciprocal nature of the employer-employee relationship, SET helps organizations, including the Abu Dhabi Police, to recognize the importance of creating a work environment where employees feel respected and valued. Through strategic investments in talent management, organizations can foster employee engagement, enhance commitment, and ultimately improve performance outcomes. The integration of business analytics further strengthens this relationship by providing data-driven insights that enable organizations to tailor their talent management practices more effectively. Ultimately, the application of SET in talent management offers a path toward cultivating a motivated and committed workforce, which is essential for achieving organizational success and driving innovation in the public sector.

2.7.2 The Dynamic Capability Theory

Strategic management plays a pivotal role in organizations' ability to adapt, integrate, and reconfigure their capabilities, resources, and functional competencies to meet the evolving demands of a dynamic environment (Teece et al., 1997). According to the dynamic capability, companies can enhance the value of their products and services over time by excelling in specific activities that differentiate them from their competitors (Zapata-Cantu et al., 2016). It suggests that companies that continuously innovate and refine their capabilities can secure a sustained competitive advantage. Dynamic capabilities specific skills and processes that allow firms to sense opportunities, seize them, and reconfigure resources are key to achieving long-term performance (Teece, 2007).

Furthermore, dynamic capabilities enable organizations to renew their operational capacities and enhance flexibility in response to market changes, leading to systematic transformation (Wilden et al., 2013). These capabilities encompass three key activities: sensing new opportunities and threats, capturing opportunities through business model design and strategic investments, and reconfiguring business models and strategies to maintain competitiveness (Teece, 2018). Within this framework, business analytics serves as a powerful tool for organizations to gain a competitive edge in volatile and rapidly changing environments, thereby supporting the dynamic capability theory (Conboy et al., 2020). The integration of business analytics into corporate strategy helps illuminate the internal and external factors that facilitate or hinder dynamic capabilities, which in turn can shape an organization's ability to respond effectively to environmental challenges.

Specifically, an organization's capacity to leverage business analytics tools is critical to its ability to engage in value-creating activities and stay ahead of competitors (Majhi et

al., 2023). Business analytics tools help organizations consolidate data from diverse sources, analyze it, and extract actionable insights, which can enhance dynamic capabilities such as opportunity sensing and resource reconfiguration (O'Neil & Brabazon, 2019). This ability to effectively process and use data is increasingly seen as a vital component of an organization's dynamic capabilities, influencing decision-making and strategic positioning.

In the context of talent management, dynamic capabilities are also crucial. Talent management involves the strategic process of attracting, developing, retaining, and deploying talent to meet an organization's long-term goals (Harsch & Festing, 2020). Talent management, as a dynamic capability, requires organizations to continuously assess and reconfigure their talent pool in response to changes in both the internal and external environments (Kongrode et al., 2023). This process involves a proactive approach to human resource management, which aligns employee skills with the evolving strategic objectives of the organization. The dynamic capabilities posits that organizational performance is inextricably linked to employee performance, as the reconfiguration of resources, operational practices, and skills directly impacts the outcomes achieved by employees (Kareska, 2023).

The integration of dynamic capabilities in talent management is particularly important as organizations strive to stay competitive and responsive to the changing demands of the labor market. By utilizing dynamic capabilities, organizations can ensure that their talent pool remains aligned with their strategic needs, allowing them to adapt to environmental changes and achieve better performance outcomes (Kareska, 2023). However, not all organizations are able to fully capitalize on dynamic capabilities, as their effectiveness can vary depending on factors such as organizational culture, leadership, and external conditions.

The application of dynamic capabilities theory in this study will examine how organizations, specifically in the public sector like the Abu Dhabi Police, can leverage business analytics to sense opportunities and threats, reconfigure their resources, and foster innovation. By applying dynamic capabilities theory, the study will explore how talent management can be developed as a dynamic capability that enhances organizational agility, performance, and competitiveness. It will focus on how talent management practices can be strategically aligned with long-term organizational goals and how these practices can be continuously adjusted to meet the evolving demands of the workplace. This research will contribute to the understanding of how talent management can be integrated into the broader dynamic capability framework, thereby improving employee performance and driving organizational success in the face of rapid environmental change.

2.7.3 Employee Engagement Theory

Employee engagement is a multidimensional concept that plays a crucial role in understanding how employees' attitudes and behaviors directly influence organizational success (Kwon & Park, 2019). As defined by Aon Hewitt, employee engagement encompasses the extent to which employees demonstrate cognitive thinking, emotional investment, behavioral commitment, and a strong intention to contribute to the organization (Hewitt, 2012). According to Hewitt's framework, the "*Say, Stay, Strive*" model is central to employee engagement. It posits that an employee is truly engaged when they: (1) speak favorably about the organization to colleagues, potential recruits, and customers, (2) exhibit a profound sense of belonging and a genuine desire to work for the organization, and (3) dedicate significant effort towards contributing to the company's success (Merry, 2013). The model emphasizes the importance of these three interconnected behaviors in determining the level of engagement and commitment an employee has towards their employer.

Aon Hewitt's model further categorizes employee engagement outcomes into the "3s" framework: "*Say*," representing positive communication about the organization; "*Stay*," reflecting a strong commitment and sense of belonging; and "*Strive*," which signifies the willingness to work diligently and achieve organizational goals (Azzahra & Putranto, 2023). According to Aon Hewitt (2012), key organizational drivers of engagement include staffing, customer focus, diversity and inclusion, enabling infrastructure, and communication. These drivers, in turn, are shaped by aspects such as benefits, job security, workplace safety, and work-life balance, as well as the organization's reputation, employee value proposition, and corporate responsibility (Bello et al., 2024). The primary drivers influencing engagement are collaboration, empowerment, autonomy, and task-related elements, which collectively affect various business outcomes, such as talent retention, absenteeism, wellness, productivity, customer satisfaction, and financial performance.

In practical terms, employee engagement is a tool for fostering a positive company culture, gaining a competitive edge, and enhancing employee satisfaction (Al-Harthy & Yusof, 2022). According to Hinzmann et al. (2019), employee engagement can also be defined as the degree of psychological attachment an individual has to an organization. Factors such as job resources, social support from colleagues and managers, performance evaluation, skill diversity, flexibility, and the learning environment contribute to job satisfaction, enhancing employees' likelihood of forming a strong psychological connection with their roles. This connection leads to enhanced performance, which is a key outcome of employee engagement.

In a nutshell, employee engagement theory, as articulated by Aon Hewitt, is foundational to this study because it provides a clear framework for understanding how

employees' psychological and behavioral states impact organizational performance. The “*Say, Stay, Strive*” model is particularly relevant as it allows for the measurement of engagement outcomes that directly affect talent retention, productivity, customer satisfaction, and financial performance. By integrating this model, my study will explore the drivers of employee engagement, such as diversity, communication, and workplace environment, to understand how they correlate with and contribute to business outcomes. Aon Hewitt’s model, with its focus on organizational antecedents and outcomes, offers a comprehensive perspective on employee engagement, which is critical for improving performance and driving competitive advantage in a dynamic business environment.

2.8 Conceptual Framework and Hypotheses Development

The framework of this study is developed to examine key relationships within the context of talent management practices and employee engagement in the Abu Dhabi Police force. Specifically, it includes four independent variables under the label of talent management practices: talent attraction, talent retention, learning and development, and career management. These variables are investigated for their effect on employee engagement, which serves as a dependent variable in the study.

The proposed model introduces these four key process perspective factors in talent management practices as antecedent variables. These variables encompass "*talent attraction, talent retention, learning and development, and career management,*" which are expected to have a direct influence on employee engagement. Employee engagement is conceptualized as the cognitive, emotional, and behavioral commitment that employees exhibit towards their organization.

Additionally, business analytics is introduced as a moderating variable in the framework to assess whether it strengthens the relationship between talent management practices and employee engagement. This approach is particularly significant given the inconsistent findings in previous studies regarding this relationship. By including business analytics, the study aims to provide a more robust and evidence-based understanding of how technology and data-driven decision-making can influence employee engagement. Business analytics plays a crucial role by enabling organizations to sense and shape opportunities, making it a valuable tool in improving talent management practices and enhancing employee engagement. It is posited that the effective application of business analytics can support talent management initiatives, leading to better employee outcomes and, ultimately, improved organizational performance.

Furthermore, the study explores the direct relationship between employee engagement (now considered an independent variable) and employee performance. This relationship is critical to understanding how engaged employees can directly influence performance outcomes within the Abu Dhabi Police. Employee engagement is expected to positively impact various performance metrics, such as productivity, job satisfaction, and organizational commitment, thereby enhancing the overall performance of the force.

The framework reflects a comprehensive approach to addressing gaps in the literature by integrating business analytics into the study of talent management and employee engagement. It provides a novel perspective on how these constructs interact, while also offering actionable insights for organizational improvement. The study's model aims to advance our understanding of the variance in employee engagement and its subsequent impact on performance outcomes through a more detailed and evidence-based approach.

Figure 2.1 illustrates the proposed conceptual framework, offering a visual representation of the relationships between the variables and highlighting the role of business analytics as a moderating factor.

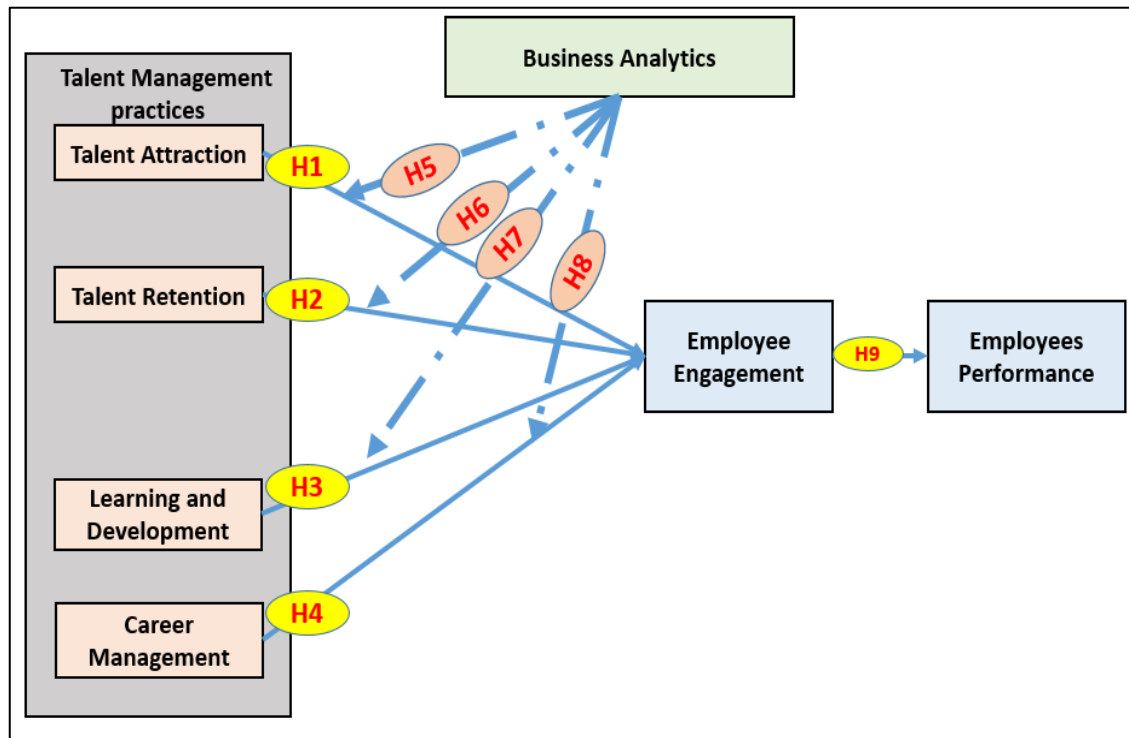


Figure 2.1: Conceptual Framework

2.8.1 Talent Attraction and Employee Engagement

Within the realm of human resources and talent acquisition, the term "*talent attraction*" refers to the strategic process of drawing highly qualified, often passive, candidates to an organization, motivating them to apply for open positions based on perceived benefits, organizational culture, and rewards that align with their professional aspirations (Pandita & Ray, 2018; Alrowwad et al., 2018). Effective talent attraction strategies are fundamental to the long-term success and competitive advantage of an organization, as they ensure the recruitment of individuals who not only possess the required skills but also align with the

organizational values and goals (Kareska, 2023). The ability to attract top talent is critical, as it provides the foundation for building a high-performing workforce that can contribute to the organization's overall success.

Employee engagement, on the other hand, is a pivotal concept for understanding the nature of the interaction between a company and its employees, particularly in how employees' emotional commitment, cognitive investment, and behavioral intent to contribute positively influence organizational outcomes (Gupta & Sharma, 2016). It refers to the extent to which employees are willing to exert discretionary effort toward achieving organizational objectives. Engaged employees tend to demonstrate higher levels of productivity, creativity, and job satisfaction, all of which directly impact the organization's success and ability to achieve its strategic goals (Riyanto et al., 2021). As such, organizations invest significant resources in developing programs and strategies aimed at fostering high levels of employee engagement, understanding that it is essential for retaining talent, improving overall job satisfaction, and driving organizational performance (Hakro et al., 2022).

Employees are widely regarded as the backbone of organizations, possessing the potential to either strengthen or weaken them (Hamidi et al., 2020). As organizations face growing competition and the pressures of the dynamic global market, the ability to attract and retain skilled individuals becomes even more critical. Consequently, businesses must seek innovative ways to engage employees so that they contribute positively to organizational growth rather than undermine it. This becomes particularly relevant in sectors like law enforcement, where both employee engagement and talent retention are paramount

for ensuring high levels of service delivery, organizational stability, and long-term success (Darko et al., 2024).

The quest for the right individuals to build an organization is of paramount importance, not only because they bring in the necessary skills but also because their level of engagement significantly influences their performance, organizational commitment, and retention. An effective talent attraction strategy plays a crucial role in this process, as it enables organizations to identify and bring in individuals who are not only capable of fulfilling the organization's immediate needs but also align with its long-term goals and vision (Ngozi & Edwinah, 202). Furthermore, organizations that successfully attract and retain talent can create an environment where employees are motivated to engage actively, take on challenges, and demonstrate high levels of job satisfaction, all of which contribute to a positive organizational culture and improved performance outcomes.

Social Exchange Theory provides a theoretical framework to understand the relationship between talent attraction and employee engagement. According to this theory, individuals engage in relationships that are based on a cost-benefit analysis, where they weigh the potential rewards they may receive from the organization in exchange for their time, effort, and commitment (Tkalac Verčič et al., 2023). When organizations invest in attracting talented individuals, it fosters a sense of reciprocity, where employees feel valued and are more likely to engage with the organization (Nguyen & Nguyen, 2023). This relationship between organizational investment in talent attraction and employee engagement is supported by the principles of Social Exchange Theory, which suggests that when employees perceive positive exchanges in the form of attractive job offers, supportive

work environments, and opportunities for growth, they are more likely to exhibit higher levels of engagement.

Empirical evidence has further reinforced the significant positive correlation between talent attraction and employee engagement (Hakro et al., 2022). Studies have shown that organizations with effective talent attraction strategies tend to have a more engaged workforce (Hongal & Kinange, 2020). Engaged employees, in turn, contribute positively to organizational outcomes, such as higher productivity, improved customer satisfaction, and better organizational performance (Nguyen & Nguyen, 2023). These findings align with the tenets of Social Exchange Theory, which emphasize that the quality of the exchange between the organization and its employees plays a significant role in determining the level of employee engagement. In light of the preceding discourse, this study hypothesizes that talent attraction has a significant positive impact on employee engagement among employees in the Abu Dhabi Police Force. Given the crucial role of employee engagement in driving organizational performance, the hypothesis posits that effective talent attraction strategies will foster higher levels of engagement, leading to enhanced job satisfaction, motivation, and ultimately improved performance within the force.

H1: Talent attraction has a positive relationship with employee engagement among the employees in the police of Abu Dhabi - UAE.

2.8.2 Talent Retention and Employee Engagement

Talent retention, particularly in highly skilled or specialized sectors, is not just about preventing turnover but about ensuring that the organization retains its most valuable employees those who possess the skills, knowledge, and experience essential for long-term organizational success (Ngozi & Edwinah, 2022; Chopra et al., 2024). High-performing

employees are crucial to the success of an organization, and therefore, retention strategies must focus on engaging these employees and providing them with opportunities to grow professionally, receive recognition, and feel a sense of belonging within the organization (Urme, 2023).

An organization's ability to retain employees is significantly influenced by several factors, including job satisfaction, career development opportunities, and employee-manager relationships (Suknunan & Bhana, 2022). For instance, one of the main reasons employees leave an organization is a lack of commitment to the employer or role, which can stem from dissatisfaction with organizational culture, lack of career advancement, or perceived inequity in compensation (Faeq & Ismael, 2022). Interestingly, studies have shown that while compensation is often viewed as a primary factor influencing retention, it may not always be the most important (Sorn et al., 2023). Instead, intrinsic motivators such as career growth, recognition, and meaningful work are often more influential in determining whether an employee stays or leaves an organization (Mardanov, 2021).

The importance of talent retention becomes even more pronounced in industries and sectors where specialized knowledge and skills are required, such as the police force (Wilson et al., 2023). In these sectors, retaining employees who are not only highly skilled but also deeply engaged with the organization's mission is critical for achieving long-term success and ensuring effective service delivery (Hilal & Litsey, 2020). As a result, organizations like the Abu Dhabi Police must develop strategies tailored to retaining their most valuable personnel, ensuring that their employees are engaged, motivated, and committed to their roles.

Social Exchange Theory (SET) provides a robust framework for understanding the relationship between talent retention and employee engagement (Narayanan et al., 2019). According to SET, relationships are built on reciprocal exchanges where employees, in return for the organization's investment in their development, compensation, and overall work experience, are more likely to remain engaged and committed to the organization (Simbula et al., 2023). The theory suggests that when organizations make an effort to create a supportive and engaging environment, employees reciprocate by becoming more committed, loyal, and engaged in their work. Several studies have demonstrated a significant positive relationship between talent retention and employee engagement, underscoring the importance of fostering an organizational culture that values employee contribution and well-being (Nagpal, 2022; Narayanan et al., 2019). These findings support the notion that effective retention strategies, which focus on providing opportunities for professional growth, recognition, and a positive work environment, lead to higher levels of employee engagement.

The significance of talent retention in fostering employee engagement is particularly important in the context of the Abu Dhabi Police Force. As the police force seeks to enhance operational effectiveness and improve service delivery, retaining experienced, highly skilled, and motivated officers is essential. Engaged officers who feel supported and valued by the organization are more likely to contribute positively to organizational goals, leading to improved performance and organizational outcomes. In light of the discussion above, this study hypothesizes that talent retention has a significant positive influence on employee engagement among Police Officers in Abu Dhabi. The hypothesis suggests that effective talent retention strategies, which focus on creating a supportive work environment and

providing opportunities for career development, will lead to higher levels of employee engagement, ultimately contributing to improved performance within the police force.

H2: Talent retention has a positive relationship with employee engagement among the employees in the police of Abu Dhabi - UAE.

2.8.3 Learning and Development and Employee Engagement

Learning and development (L&D) represent a strategic organizational function that not only enhances employees' skills and competencies but also plays a pivotal role in fostering employee engagement (Bhakuni & Saxena, 2023). In today's dynamic and knowledge-based work environments, particularly in public service sectors like policing, continuous development is essential to maintaining operational efficiency and employee motivation (Lin & Wu, 2024). Engaged employees are those who are emotionally invested in their work and consistently demonstrate proactive behaviors that contribute to organizational performance (Nguyen et al., 2021). By offering robust L&D opportunities, organizations empower employees to grow professionally, develop new capabilities, and align their personal goals with the strategic objectives of the institution (Mustafa & Lleshi, 2024).

The availability of learning and career development paths signals to employees that the organization values their contributions and is committed to their long-term success (Kumar, 2022). This perceived organizational support significantly enhances employees' emotional connection, commitment, and job satisfaction all of which are key dimensions of engagement (Sadaf et al., 2022). In return, engaged employees tend to be more productive, demonstrate greater initiative, and contribute to a positive workplace culture, ultimately driving superior organizational outcomes (Pougajendy et al., 2024).

From a theoretical standpoint, Social Exchange Theory (SET) provides a valuable lens to understand the link between learning and engagement (Yin, 218). According to SET, when employees perceive that their organization invests in their development through meaningful learning initiatives, they feel obligated to reciprocate through heightened loyalty, dedication, and work engagement (Malik & Garg, 2020). This reciprocal relationship reinforces mutual trust and long-term commitment between the employee and employer.

Empirical studies have shown that L&D initiatives significantly enhance employee engagement by boosting competence, confidence, and a sense of purpose (Bhakuni & Saxena, 2023; Schmidt, 2022). Furthermore, in high-responsibility professions such as policing, where adaptability, judgment, and technical skills are critical, a continuous learning culture contributes not only to individual growth but also to institutional readiness and resilience.

In the context of the Abu Dhabi Police Force, where high performance and public accountability are imperative, investing in structured L&D programs is vital. Such investments ensure that officers remain current in their knowledge, motivated in their roles, and committed to the organization's vision and values. Well-developed learning systems can enhance engagement by aligning personal development with the evolving demands of public safety, law enforcement, and community service.

H3: Learning and development is positively related to employee engagement among the employees in the police of Abu Dhabi - UAE.

2.8.4 Career Management and Employee Engagement

Career management is increasingly recognized as a strategic human resource practice aimed at supporting employees in identifying, developing, and achieving their long-term

professional goals (Retno et al., 2024). It encompasses various organizational initiatives such as career planning, performance appraisals, mentoring, training, and succession planning. These efforts collectively help employees gain clarity about their career trajectory, enhance their skills, and build confidence in their future prospects within the organization (Zhao et al., 2022). From an organizational perspective, career management is not merely about individual advancement but is a deliberate process to ensure workforce alignment, engagement, and retention (Yildiz et al., 2024).

The significance of career management in relation to employee engagement has gained increasing attention in both academic literature and practice (Korankye, 2020). Employee engagement refers to a positive, fulfilling, and work-related state of mind characterized by vigor, dedication, and absorption (Turner & Turner, 2020). Engaged employees are emotionally and cognitively connected to their organization's mission and goals. Employees who perceive opportunities for growth and advancement within their organizations are more likely to demonstrate commitment, enthusiasm, and proactive behaviors that benefit both themselves and their employers.

Career management supports engagement by fostering a culture of progression and personal achievement (Korankye, 2020). When employees perceive a clear link between their efforts and career outcomes, they are more likely to be motivated, productive, and emotionally invested in their roles (Riyanto et al., 2021). This perception of career growth builds trust between the employee and the organization, fostering a sense of reciprocal obligation. Employees are likely to respond to developmental support with greater loyalty, effort, and involvement in their tasks (Lee et al., 2018). These outcomes align with the principles of Social Exchange Theory (SET), which suggests that when organizations

demonstrate support and commitment to their employees' career growth, employees reciprocate through heightened engagement and organizational citizenship behaviors (Meira & Hancer, 2021; Yin, 2018).

Empirical evidence strongly supports the positive association between career development opportunities and employee engagement (Kim et al., 2017; Jia-Jun & Hua-Ming, 2022). Career advancements are more likely to maintain a motivated and high-performing workforce (Malhotra & Singh, 2016). These findings underscore the importance of structured career management as a strategic lever for sustaining engagement, particularly in knowledge-intensive and service-driven environments.

In the context of the Abu Dhabi Police Force, the need for effective career management is particularly relevant. The police force operates in a high-stakes environment where the quality of service, operational efficiency, and employee morale are of paramount importance. By providing career development opportunities, the organization can ensure that its officers are not only highly skilled but also highly motivated and engaged with their work. The implementation of career management strategies within the police force would likely result in a workforce that is more committed to the organization's objectives and more engaged in their daily duties, ultimately enhancing the overall effectiveness of the force. Based on the discussion above, this study hypothesizes that career management has a significant positive impact on employee engagement among Police Officers in Abu Dhabi. By offering structured career development opportunities, the police force can foster a more engaged workforce, ultimately improving both individual and organizational performance.

H4: Career development is positively related to employee engagement among the employees in the police of Abu Dhabi - UAE.

2.8.5 The Moderating Role of Business Analytics Between Talent Management Practices and Employee Engagement

In the evolving landscape of human resource management, organizations increasingly recognize the value of integrating business analytics to enhance talent management outcomes. Business analytics, defined as the systematic analysis of data to guide decision-making and strategic planning, has emerged as a pivotal tool in moderating the effectiveness of talent management practices on employee engagement (Power et al., 2018; Delen & Ram, 2018). Within this context, this study explores the moderating role of business analytics across four critical dimensions of talent management (namely talent attraction, talent retention, learning and development, and career management) and their impact on employee engagement among police officers in Abu Dhabi.

First, talent attraction and employee engagement. Talent attraction refers to an organization's capability to identify, attract, and acquire high-quality candidates who align with its culture, mission, and future objectives (Van Hoa & Van Thu, 2024). An effective talent attraction strategy is directly linked to higher levels of employee engagement, as employees who are well-matched to their roles are more likely to demonstrate commitment, motivation, and satisfaction (Ngozi & Edwinah, 2022). Business analytics can enhance this linkage by enabling organizations to leverage real-time labor market insights, refine recruitment strategies, and assess candidate-organization fit more accurately (Magdalenic & Lusic, 2025). The integration of data analytics in recruitment processes enables precise targeting, personalized communication, and predictive hiring, which in turn supports better onboarding experiences and long-term engagement (Nguyen & Nguyen, 2023).

Second, talent retention and employee engagement. Retaining top talent is equally critical for maintaining a stable and engaged workforce (Ngozi & Edwinah, 2022). Research suggests that organizations with robust retention strategies enjoy higher levels of employee engagement and reduced turnover (Mohammed, 2015; Pandita & Ray, 2018). Business analytics contributes to this dynamic by providing actionable insights into employee satisfaction, performance trends, and potential attrition risks (Alias et al., 20114). Such analytics allow organizations to tailor retention strategies to individual needs, ensuring a more personalized and engaging employee experience (Singh et al., 2023; Kaewnaknaew et al., 2022). For instance, predictive analytics can identify patterns associated with employee disengagement, allowing management to proactively intervene and enhance the retention-engagement nexus.

Third, learning and development and employee engagement. Learning and development initiatives equip employees with the knowledge and skills necessary to perform their duties effectively, thereby fostering a sense of purpose, competence, and engagement (Bhakuni & Saxena, 2023). When employees perceive that their organization invests in their professional growth, they are more likely to exhibit loyalty and higher work involvement (Kwon et al., 2024). Business analytics strengthens this relationship by offering data on learning effectiveness, participation rates, and competency gaps. These insights enable organizations to tailor L&D programs that resonate with employee goals and organizational priorities (Biswakarma & Subedi, 2025), thereby enhancing the effectiveness of L&D interventions on engagement outcomes.

Fourth, career management and employee engagement. Career management represents another key driver of employee engagement. Employees who perceive clear pathways for

advancement and personal growth within the organization are more committed, satisfied, and motivated (Muchibi et al., 2022; Susanto, 2022). Business analytics enhances this relationship by tracking individual career progression, performance metrics, and skill acquisition over time (Badhon et al., 2024). With these data, organizations can design customized development plans that align employee aspirations with organizational goals, thereby nurturing long-term engagement (Wolniak et al., 2024). The use of analytics in career development also ensures transparency and fairness, fostering a more supportive and engaging work environment.

Finally, the moderating role of business analytics across talent management practices is theoretically grounded in the Dynamic Capability Theory (Teece et al., 1997). This framework posits that organizations must develop capabilities to sense, seize, and transform resources in response to dynamic environments. Business analytics, as a dynamic capability, enables HR functions to adapt talent management practices to evolving organizational needs and workforce expectations (Majhi et al., 2023; Gao & Sarwar, 2024). By doing so, business analytics not only refines the operational efficiency of these practices but also strengthens their impact on employee engagement.

In conclusion, drawing from the empirical literature and the theoretical perspective of dynamic capabilities, it is evident that business analytics enhances the effectiveness of talent management practices in engaging employees. The capability to leverage data for strategic HR decisions can help organizations like the Abu Dhabi Police align their talent strategies with real-time insights, resulting in higher employee commitment and performance. Accordingly, this study hypothesizes the following:

H5: Business analytics significantly moderates the relationship between talent attraction and employee engagement among police officers in Abu Dhabi, UAE.

H6: Business analytics significantly moderates the relationship between talent retention and employee engagement among police officers in Abu Dhabi, UAE.

H7: Business analytics significantly moderates the relationship between learning and development and employee engagement among police officers in Abu Dhabi, UAE.

H8: Business analytics significantly moderates the relationship between career Management and employee engagement among police officers in Abu Dhabi, UAE.

2.8.6 Employee Engagement and Employee Performance

Employee engagement has emerged as a critical determinant of organizational performance, particularly in environments that demand high levels of efficiency, accountability, and service quality. It encompasses the psychological and emotional connection employees have with their work, which in turn influences their motivation, behavior, and willingness to go beyond formal job requirements. Numerous studies have demonstrated a positive relationship between employee engagement and various performance outcomes, such as productivity, quality of work, innovation, and employee retention (Achmada & Soetjipto, 2022; Abdelwahed & Doghan, 2023; Riyanto et al., 2021).

Empirical research has consistently found that engaged employees perform better than their disengaged counterparts (Riyanto et al., 2021; Noercahyo et al., 2021). They are more committed, focused, and aligned with the organization's goals, leading to enhanced individual and organizational performance (Jufrizen et al., 2023). In contrast, low levels of engagement are associated with reduced productivity, higher rates of absenteeism, increased turnover, and more frequent errors in job execution (Abdelwahed & Doghan, 2023).

The theoretical basis for this relationship lies in Social Exchange Theory (SET), which asserts that when employees feel valued and supported by their organization, they are more

likely to reciprocate with increased commitment and performance. Engagement, therefore, functions as a form of social exchange, where employees repay the organization's investment in them through higher levels of contribution and effectiveness (Yin, 2018; Nagpal, 2022).

Within the context of the Abu Dhabi Police Force, employee performance is a crucial operational factor, given the complexity, risks, and public accountability associated with policing. High levels of engagement among officers can lead to improved decision-making, faster response times, better public interactions, and greater adherence to organizational values and procedures. Thus, cultivating employee engagement within this setting is vital not only for individual success but also for organizational resilience and effectiveness. Based on the foregoing discussion, this study proposes the following hypothesis.

H9: Employee engagement has a significant positive effect on employee performance among the police of Abu Dhabi - UAE.

2.9 Conclusion

The Abu Dhabi Police Force is committed to delivering top-tier services to all citizens, residents, and visitors of the emirate, with the primary objective of ensuring public safety and security. In this context, optimizing the potential of its personnel is one of the force's highest priorities. The expectation is that all police officers must be capable of performing effectively under challenging and diverse circumstances. This study, therefore, investigates a model of talent management practices aimed at improving the job performance of police officers, with a particular focus on the role of business analytics as a moderating factor.

The framework proposed in this study integrates key talent management practices (specifically talent attraction, talent retention, learning and development, and career management) along with employee engagement as a central construct. Moreover, the model incorporates business analytics as a moderating variable, which contributes to the novelty of this research. By doing so, this study addresses a significant gap in the literature, offering new insights into how business analytics can influence the relationship between talent management practices and employee performance.

The study emphasizes that talent management practices play a pivotal role in shaping employee engagement, which, in turn, is a crucial determinant of employee performance. The inclusion of business analytics as a moderating variable further enhances the understanding of how these variables interact. By offering a comprehensive framework, this research not only contributes to the academic understanding of employee engagement and performance but also provides practical insights for the Abu Dhabi Police in refining their talent management strategies. Ultimately, the findings suggest that a more engaged workforce, supported by effective talent management practices and the strategic use of business analytics, can significantly elevate the performance of police officers in Abu Dhabi.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology adopted to examine the relationship between talent management practices and employee engagement among police officers in Abu Dhabi, with a particular emphasis on the moderating role of business analytics. The methodological design is grounded in quantitative research principles and is aimed at producing objective, replicable, and generalizable results that inform both academic theory and practical implementation within the context of the Abu Dhabi Police. The chapter is structured to cover the key methodological elements of the study. It begins by outlining the research philosophy and approach, followed by a comprehensive discussion on the research design, the population and sampling strategy, and the data collection methods. It also provides detailed information on the development and validation of the research instrument (survey questionnaire), and outlines the analytical techniques used to examine the relationships between the study's variables. Additionally, the chapter addresses the ethical considerations observed throughout the research process. This study is guided by a positivist paradigm, which supports the use of empirical observation and statistical analysis to understand phenomena. Within this framework, a deductive approach is employed, where hypotheses are developed based on established theories and tested through structured data collection and analysis. The central focus is to investigate how talent management practices (namely talent attraction, talent retention, learning and development, and career management) influence employee engagement, and to explore how business analytics moderates this relationship.

In summary, this chapter provides a methodological roadmap for investigating the proposed conceptual framework, which integrates talent management practices as independent variables, employee engagement as the dependent variable, and business analytics as a moderating variable. The forthcoming sections elaborate on the specific strategies and tools employed to collect, analyze, and interpret the data in alignment with the study's objectives.

3.2 Research Philosophy

This study is anchored in the positivist research philosophy, which is widely recognized for its emphasis on objectivity, empirical observation, and hypothesis testing. Positivism holds that reality is external and independent of the researcher and can be understood through careful measurement and analysis of observable phenomena. This ontological stance assumes that there are objective truths that exist outside human perception and can be discovered through rigorous scientific methods (Halkias et al., 2022).

Underpinning this philosophical approach is the belief that social phenomena, much like natural phenomena, can be studied through systematic and replicable processes, thereby enabling the discovery of causal relationships between variables (Kaluarachchi, 2025). This worldview is particularly appropriate for management research that seeks to test theoretical propositions and draw generalizable conclusions based on quantifiable data. In the context of this study, the positivist philosophy facilitates an unbiased examination of the relationship between talent management practices and employee engagement within the Abu Dhabi Police force, while also assessing the moderating role of business analytics in this relationship.

The adoption of a deductive reasoning approach further supports the positivist paradigm. Deductive reasoning begins with the formulation of hypotheses derived from a thorough review of the existing literature and theoretical models (Gilgun, 2019). These hypotheses are then subjected to empirical testing using data collected from the target population. In this study, the research model is developed based on well-established theories and prior empirical findings related to talent attraction, talent retention, learning and development, and career management, which are hypothesized to influence employee engagement. The inclusion of business analytics capabilities as a moderating variable addresses an emerging gap in the literature and adds a novel dimension to the research model (Khan et al., 2024).

Moreover, this study employs a quantitative research methodology, which is closely aligned with the positivist stance. Quantitative methods emphasize the use of structured tools such as questionnaires to collect numerical data that can be statistically analyzed to test hypotheses and evaluate relationships among constructs (Nardi, 2018). This methodological choice ensures consistency, reliability, and objectivity, allowing the findings to be generalized to the broader population of police officers in Abu Dhabi.

The research adopts a cross-sectional design, wherein data are collected from participants at a single point in time (Maier et al., 2023). This design is suitable for capturing the current perceptions and behaviors of the police officers regarding talent management practices, their levels of engagement, and the extent to which business analytics capabilities are leveraged within the organization. Although longitudinal studies offer insights into changes over time, cross-sectional studies are effective for exploring relationships between

variables and testing theoretical models when time and resource constraints are present (Maier et al., 2023).

To summarize, the philosophical foundation of this study rests on positivism, supported by a deductive logic of inquiry and implemented through a quantitative, cross-sectional research design. This philosophical and methodological alignment ensures that the study remains focused on producing valid, reliable, and generalizable findings regarding the impact of talent management practices on employee engagement, and how this relationship may be moderated by business analytics capabilities. The choice of this philosophical lens enhances the scientific rigor of the study and reinforces its contribution to both academic literature and practical organizational development within law enforcement institutions.

3.3 Research Design and Methodology

This study adopts a quantitative research design to examine the relationship between talent management practices and employee engagement among police officers in Abu Dhabi, with a particular emphasis on the moderating role of business analytics capabilities. The choice of a quantitative methodology is aligned with the positivist philosophy discussed earlier, which supports the use of structured data collection and statistical analysis to test theoretical propositions and infer causal relationships (Ali, 2024).

The research follows a deductive approach, beginning with the development of a conceptual framework and hypotheses grounded in existing theories and empirical literature (Varpio, 2020). The study aims to test these hypotheses by gathering and analyzing empirical data in a systematic, objective, and replicable manner. The key independent variable in this study is talent management practices, which is operationalized through four sub-constructs: talent attraction, talent retention, learning and development, and career management.

Employee engagement is treated as the dependent variable, while business analytics capabilities serve as the moderating variable that may influence the strength and direction of the relationship between talent management and engagement (Khan et al., 2024).

A cross-sectional research design is employed, where data are collected at a single point in time (Maier et al., 2023). This design is well-suited for capturing the current state of perceptions, practices, and outcomes among police officers without the need for longitudinal tracking. Although longitudinal designs offer insights into change over time, the cross-sectional approach provides a practical and efficient way to test the hypothesized model within the constraints of time and resources (Rindfleisch et al., 2008).

To gather primary data, a structured self-administered questionnaire was designed and distributed among police officers serving in various departments of the Abu Dhabi Police. The survey instrument was developed based on validated measurement scales from the existing literature and adapted to the local context to ensure relevance and clarity. Prior to full-scale data collection, the questionnaire was subjected to expert review and pilot testing to verify its content validity, construct clarity, and language appropriateness.

3.4 Research Site

This study was conducted among police officers in Abu Dhabi and focused on the influence of talent management practices and business analytics on employee engagement. The United Arab Emirates is a federation of seven emirates, bordered by Saudi Arabia to the west and south, Oman to the east, and the Arabian Gulf to the north. As the UAE's capital, Abu Dhabi constitutes approximately 90% of the country's total land area. The Abu Dhabi police force, with a strength of 48,500 employees, operates across 67,440 square kilometers.

The Abu Dhabi Police are committed to contributing to the country's progress, guided by the Deputy Supreme Commander of the UAE Armed Forces, His Highness Sheikh Mohammed Bin Zayed. His Highness has tirelessly endeavored to enhance various facets of national development. The population under study includes all police officers in the Abu Dhabi region, with a sample representing a subset of this population. The sample serves to reflect and typify the broader police officer community within the region for research purposes. This approach allows for an investigation into the perceptions and phenomena relevant to the Abu Dhabi police by analyzing the selected sample's characteristics and insights. The choice of an appropriate sample size and sampling method is crucial to ensure the sample accurately mirrors the population in composition and type, as noted by (Oribhabor & Anyanwu, 2019).



Figure 3.1: UAE - Abu Dhabi Map

The population for this analysis comprises employees working as police officers in Abu Dhabi, UAE. The organizational structure of the Abu Dhabi Police includes nine primary sectors in addition to the office of the Commander-in-Chief. These sectors are further divided into 53 distinct departments, as depicted in Figure 3.2.

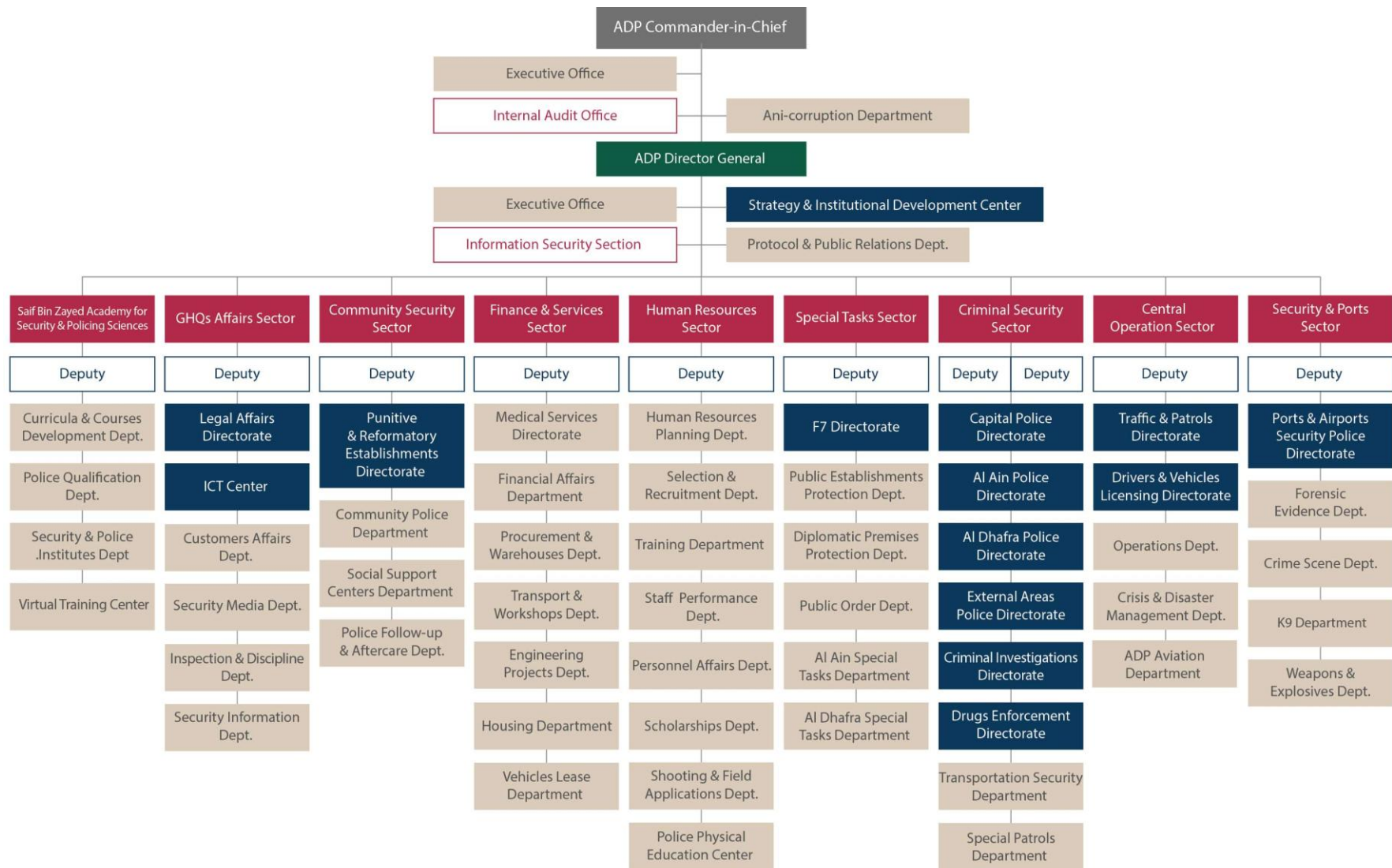


Figure 3.2: Structure of Abu Dhabi Police (Source: The UAE government website)

3.5 Sampling

The sampling strategy employed in this study is designed to ensure representativeness, rigor, and practicality in the context of conducting research (Ludwig, 2022) within a high-security and hierarchical institution such as the Abu Dhabi Police. The study specifically targets senior officers (including Lieutenant Generals, Brigadiers, Lieutenant Colonels, and Captains) across ten distinct police sectors, which collectively form the core structure of the Abu Dhabi Police Force.

Due to institutional limitations and the absence of a publicly accessible sampling frame (primarily because of operational confidentiality and the sensitive nature of police work) a non-probability sampling approach is adopted. This approach enables flexibility while still supporting stratified representation of officers across the organization.

3.5.1 Sample Selection Technique

The target population for this study comprises senior police officers currently serving in the Abu Dhabi Police, drawn from ten distinct sectors across the police force (Barton et al., 2016). These officers occupy strategic and leadership positions, including ranks such as Lieutenant General, Brigadier, Lieutenant Colonel, and Captain. Based on internal records and estimates, the total number of employees in the Abu Dhabi Police force is approximately 48,500, with senior officers accounting for an estimated 20%, yielding a study population of around 9,700 individuals (Mansoori, 2015) (see Table 3.1).

Given the high-security nature of the research context and the absence of publicly available personnel lists, it was neither feasible nor appropriate to employ probability-based sampling methods. Furthermore, logistical constraints and confidentiality

considerations prevent the inclusion of all 53 departments or the entire senior staff. In light of these limitations, the study adopts a non-probability sampling approach, specifically purposive sampling, which is both pragmatic and suitable for studies involving specific, expert-driven populations (Bryman, 2016).

Purposive sampling was employed to intentionally select participants based on their professional roles, ranks, and relevance to the research objectives (Campbell et al., 2020). This technique enabled the researcher to target individuals with direct experience in talent management systems, employee engagement practices, and performance management frameworks (key themes under investigation). Senior officers were chosen because of their involvement in both strategic and operational dimensions of human resource and organizational performance policies.

The selection process began with formal requests to the Commander-in-Chief's Office, seeking permission to conduct research within approved police stations and sectors. Upon approval, a list of accessible stations was generated, from which suitable locations were identified. The researcher then coordinated with key administrative contacts in each sector to identify eligible senior officers and schedule data collection sessions.

The purposive sampling process allowed for targeted engagement with officers across a broad spectrum of operational and support units (Campbell et al., 2020), including sectors such as Criminal Security, Central Operations, Human Resources, Finance and Services, and Community Security. The study ensured a degree of sectoral diversity, not by strict quota allocation, but by selecting officers from various departments whose expertise and organizational roles align with the core constructs of the research.

Given the sensitive and hierarchical nature of law enforcement environments, it was imperative to foster trust and ensure ethical compliance. Survey administrators (comprising the principal researcher and four trained assistants) were present on-site to explain the study's purpose, ensure anonymity, and offer clarification on the questionnaire items. All participants were explicitly informed that their involvement was voluntary and that their responses would remain confidential, thus upholding the highest standards of ethical research.

This sampling strategy is justified by the study's aim to gather insights from experienced and informed individuals whose roles directly intersect with the domains of talent management, employee engagement, and data-driven performance evaluation within the Abu Dhabi Police. By leveraging purposive sampling, the study was able to overcome access challenges while still obtaining a relevant and information-rich sample, appropriate for the quantitative analytical procedures employed in the subsequent stages of the research.

Table 3.1: List of the Police Stations in Abi Dhabi

No	Sector	Employees	Population (Senior Positions)
1	Commander-In-Chief of Abu Dhabi Police	3900	780
2	Saif Bin Zayed Academy for Security & Policing Sciences	3800	760
3	General Headquarters Sector	6000	1200
4	Community Security Sector	4600	920
5	Finance & Services Sector	3800	760
6	Human Resources Sector	3500	700
7	Special Tasks Sector	5200	1040
8	Criminal Security Sector	7500	1500
9	Central Operations Sector	6200	1240
10	Security & Ports Sector	4000	800
	Total	48500	9700

3.5.2 Sample Size

The determination of an appropriate sample size is a critical aspect of research design, especially in quantitative studies where statistical validity, representativeness, and generalizability of findings are essential. In this study, the target population comprises approximately 9,700 senior police officers employed across ten key sectors of the Abu Dhabi Police. This subset represents the upper echelon of the police force, encompassing officers in strategic leadership positions such as Lieutenant Generals, Brigadiers, Lieutenant Colonels, and Captains, all of whom are expected to have insight into talent management practices, employee engagement initiatives, and organizational performance outcomes. To determine the minimum recommended sample size for this population, the study refers to the widely used Krejcie and Morgan (1970) sample size determination table. This table provides a scientific basis for identifying sample sizes required for given population sizes with a 95% confidence level and a margin of error of 5%. According to Krejcie and Morgan's table, for a population of 9,700 individuals, the minimum required sample size is approximately 370 respondents see Figure 3.3.

Table for Determining Sample Size of a Known Population									
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384

Note: N is Population Size; S is Sample Size

Source: Krejcie & Morgan, 1970

Figure 3.3: Krejcie and Morgan's Table

Accordingly, this study adopts 370 as the operational sample size, ensuring that it satisfies the minimum threshold for statistical power and accuracy. This sample size is sufficient to enable reliable analysis of the relationships among key variables, including talent management practices, employee engagement, and the moderating influence of business analytics, using structural equation modeling (SEM) and other multivariate statistical techniques. A sample of this size enhances the study's ability to draw valid inferences and ensures robustness in hypothesis testing.

Furthermore, to safeguard against non-response bias, incomplete responses, or outliers, the study proactively distributed a total of 555 questionnaires, representing 150% of the required sample size (Lund, 2023). This oversampling strategy is consistent with best practices in survey-based research, particularly in high-security or hierarchical settings such as law enforcement institutions, where participant availability may vary and response rates may be affected by institutional protocols and operational commitments.

In parallel, the sample size was also cross-validated through a power analysis using the G*Power 3.1 Figure 3.4 application, following the guidelines of Cohen (1988) and Dattalo (2008). This statistical power analysis confirmed that a minimum of 138 participants would be sufficient to detect medium effect sizes ($f^2 = 0.15$) with a power level of 0.95, $\alpha = 0.05$, and an F-test for linear multiple regression with a fixed model and R^2 deviation from zero. Therefore, the actual sample size of 370 not only exceeds the minimum requirements set by Krejcie and Morgan but also offers a statistically well-powered base for the analysis.

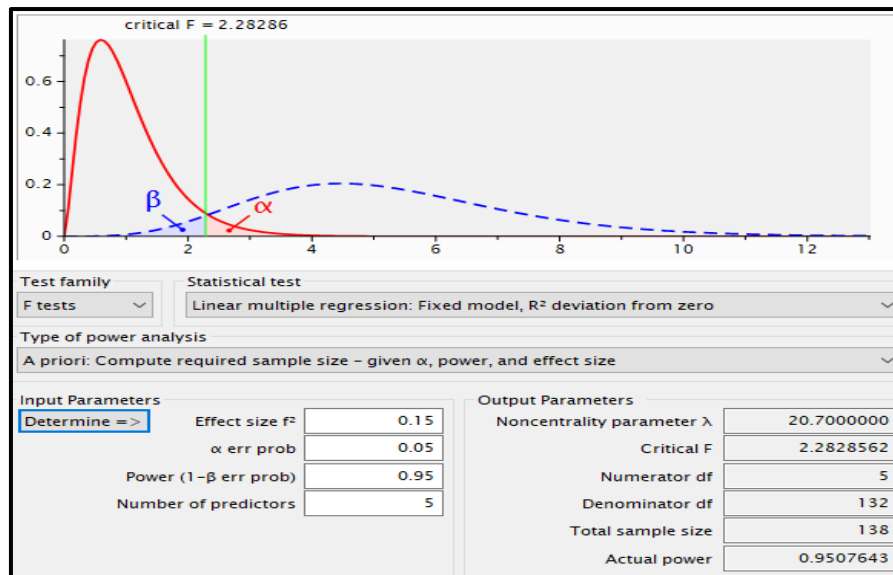


Figure 3.4: G*Power Screenshot of the Applied Setting

In summary, the final sample size of 370 senior police officers is justified by both theoretical sampling guidelines (Krejcie & Morgan, 1970) and empirical power analysis (Cohen, 1988). This methodological rigor enhances the reliability of the findings and ensures that the results are reflective of the broader population of senior police officers within the Abu Dhabi Police.

3.5.3 Data Collection Procedure

The data collection procedure for this study was conducted in alignment with ethical research practices and institutional protocols, taking into account the sensitive and high-security nature of the law enforcement environment in Abu Dhabi. A quantitative research methodology was employed, and structured survey questionnaires were utilized as the primary data collection instrument. The decision to use survey questionnaires is grounded in their effectiveness for capturing standardized responses and enabling statistical analysis across large and diverse populations, especially within structured organizational hierarchies such as the police force.

Prior to the distribution of questionnaires, formal approval was obtained from the relevant authorities, including the Commander-in-Chief's Office of the Abu Dhabi Police, which facilitated access to selected police sectors and units. The researcher, in coordination with authorized administrative personnel, identified appropriate data collection sites within the ten organizational sectors of the Abu Dhabi Police.

Given the sensitive nature of the participants' roles and the organizational protocols in place, purposive sampling was employed to identify and select respondents who hold senior officer ranks, including Lieutenant Generals, Brigadiers, Lieutenant Colonels, and Captains. These individuals were selected based on their strategic involvement in talent management, leadership responsibilities, and engagement in operational decision-making, thus ensuring relevance and depth in the data collected (Khoreva & Vaiman, 2021).

The actual administration of the questionnaires took place over a three-month period in 2023. To facilitate smooth and efficient data collection, the researcher was assisted by a team of four trained field assistants, all of whom were briefed on confidentiality protocols and procedural consistency. Each potential participant was approached individually and provided with a detailed explanation of the research objectives, the voluntary nature of participation, and assurances regarding the anonymity and confidentiality of their responses.

Respondents were given adequate time to complete the survey independently. In cases where clarification was requested, assistants provided neutral, non-directive guidance to avoid introducing any bias into the participants' responses. Completed questionnaires were collected immediately or within a short time frame to minimize data attrition and maintain data integrity.

To strengthen ethical rigor, the study ensured that all participants signed informed consent forms, and all procedures were conducted in accordance with institutional ethical guidelines and international standards for research involving human subjects. The participants were explicitly informed that they could withdraw at any point without consequence.

The researcher took additional measures to secure the data by storing physical copies in a locked facility and digital data in encrypted formats accessible only to the principal investigator. This approach ensured full compliance with ethical standards, institutional data security requirements, and respect for participant confidentiality.

In total, 555 questionnaires were distributed, yielding 383 usable responses, which met the predefined sample size threshold based on the Krejcie and Morgan (1970) table and G*Power statistical analysis. The data collected through this procedure formed the empirical foundation for the subsequent statistical analysis and hypothesis testing phases of the study.

3.6 Questionnaire Development, Validity, and Reliability

This section outlines the development of the questionnaire used in this research, which serves as the primary data collection instrument. It also details the steps taken to ensure the validity and reliability of the instrument in alignment with academic and methodological standards.

3.6.1 Questionnaire Design

The questionnaire for this study was designed to measure the seven major constructs of the research model: talent attraction, talent retention, learning and development, career management, employee engagement, business analytics (as a

moderating variable), and employee performance. To ensure conceptual clarity and alignment with the research objectives, the development of the questionnaire was informed by an extensive review of prior literature in the fields of human resource management, employee engagement, and performance measurement (Sekaran & Bougie, 2016; Hair et al., 2019).

Items were adapted from validated instruments in previous empirical studies to maintain content relevance and theoretical robustness. Modifications were made to ensure cultural and organizational appropriateness for the Abu Dhabi Police context. The questionnaire was structured in two main parts:

Section A: Demographic and Background Information

This section gathered data on respondents' personal and professional characteristics, such as age, gender, rank, years of service, sector, and educational background.

Section B: Construct Measurement

This section contained items designed to measure the independent variables (talent management practices: talent attraction, talent retention, learning and development and career management), the dependent variable (employee engagement), the moderating variable (business analytics), and the outcome variable (employee performance). Each item was measured on a 5-point Likert scale ranging from 1 = "*Strongly Disagree*" to 5 = "*Strongly Agree*," (Gunderman & Chan, 2013) which is commonly used in behavioral research for its ease of interpretation and statistical compatibility. The structure and format of the questionnaire were kept concise and

respondent-friendly to facilitate comprehension, reduce response fatigue, and enhance data quality (Zimba & Gasparyan, 2023).

3.6.2 Questionnaire Development

The emphasis of this study is on identifying the key factors influencing employee performance among police officers in Abu Dhabi. In alignment with the research objectives and conceptual framework, the questionnaire was developed by adapting validated items from previous studies. The development process focused on ensuring content relevance, measurement precision, and contextual fit with the Abu Dhabi Police. The questionnaire comprises constructs that represent the core dimensions of the study, including talent attraction, talent retention, learning and development, career management, employee engagement, employee performance, and business analytics.

To enhance consistency and comparability, all questionnaire items were measured using a five-point Likert scale. The scale ranged from 1 (Strongly Disagree) to 5 (Strongly Agree), which is widely recognized for its utility in behavioral and organizational research due to its ease of administration and interpretation (Sekaran & Bougie, 2016). The items related to each construct, along with their respective sources and codes, are presented in the tables below.

Table 3.2: Scale for Talent Attraction (TA)

Code	Description
TA1	My organization is actively involved in the implementation of employer branding
TA2	My organization has good working conditions and fair wages that enabled it to attract the right talents
TA3	My organization values a talent search matrix during selection to get experienced, qualified, expertise, potential, and qualified employees
TA4	My organization strives to build a good brand image to attract talented employees
TA5	My organization assures employees job security to attract the right talent.
TA6	My organization supports the employee training and career progression

TA7	Work-life balance, as well as social networking facilities in my organization, is a motivating factor for the employees
TA8	My organization ensures a good organizational climate to attract the right talents

Source: Adapted from Lyria (2015)

Table 3.3: Scale for Talent Retention (TR)

Code	Description
TR1	My organization uses an effective leadership style and the organization is careful about how employee issues are handled
TR2	My organization ensures our image remains good all the time to retain our talented employees
TR2	My organization has an internal recruitment policy that helps to raise the loyalty and morale of our employees
TR3	My organization has flexible working hours that encourage employee's retention
TR4	My organization offers training opportunities to enhance career growth hence retain talented employees
TR5	In my organization, there is an effective performance assessment that enhances employee confidence
TR6	My organization offers attractive non-monetary rewards to the employees
TR7	My organization uses an effective leadership style and the organization is careful about how employee issues are handled

Source: Adapted from Lyria (2015).

Table 3.4: Scale for Learning and Development (LD)

Code	Description
LD1	My organization puts in place appropriate learning and development strategies
LD2	My organization identifies the employees who need learning and development before conducting training
LD3	My organization organized training materials that mapped to every employee's needs for learning and development
LD4	In my organization, employees are continuously acquiring new knowledge and skills and mastering new ways of doing things
LD5	In my organization, on the job training is performed by the senior staff
LD6	In my organization, the development of leadership skills has a great interest
LD7	The training for the development of teamwork skills has a high priority in my organization
LD8	My organization developed many electronic training materials that fit different employees' need

Source: Adapted from Lyria (2015).

Table 3.5: Scale for Career Management (CM)

Code	Description
CM1	My organization offers career counseling
CM2	My organization has established career centers where employees can access useful materials and advice on career growth and development
CM3	My organization believes career planning facilitates the expansion and growth of the organization
CM4	This organization encourages job rotation across departments to increase employees' value
CM5	My organization plans on employee growth and progression
CM6	My organization strives to establish career paths and ladders in every department
CM7	In my organization, programs and initiatives that enhance employee development are developed
CM8	My organization has established succession planning
CM9	My organization has the provisions for career mentors
CM10	In my organization, there are retirement preparation programs

Source: Adapted from Lyria (2015).

Table 3.6: Scale for Employee Engagement (EE)

Code	Description
EE1	I know what is expected of me at work
EE2	I have the materials and equipment I need to do my work right
EE3	At work, I have the opportunity to do what I do best every day
EE4	Recently, I have received recognition or praise for doing good work
EE5	My supervisor, or someone at work, seems to care about me as a person
EE6	My manager at work encourages my development
EE7	At work, my opinions are counted
EE8	The mission or purpose of my organization makes me feel that my job is important.
EE9	My associates and fellow employees are committed to doing quality work
EE10	In the last six months, someone at work has talked to me about my progress
EE11	I have the opportunities at work to learn and grow.

Adapted from: Van Allen (2013); Crnogaj and Rozman (2017).

Table 3.7: Scale for Employees Performance (EP)

Code	Description
EP1	I complete my work within the time allocated
EP2	I work overtime to complete my tasks
EP3	My performance is measured against the productivity
EP4	I attend to my work with speed and accuracy
EP5	My performance has continually improved
EP6	I take time to listen to the clients to ensure I attend to them effectively
EP7	I do my work effectively without complaining
EP8	I combine the available resources very well to provide quality services
EP9	I usually take time to follow up with customers to ensure that they are satisfied with the services
EP10	I record down a number of my activities to-do list before starting the day's work
EP11	My job is in line with my interests, skills, and attitude

Source: Adapted from Koopmans et al. (2014)

Table 3.8: Scale for Business Analytics (BA)

Code	Description
BA1	In my organization, we predict and prepare for the future by proactively evaluating scenarios or potential trade-offs.
BA2	In my organization, decision-making is based on rigorous analytic approaches (e.g., quantitative modelling, simulation).
BA3	In my organization, we manage data to enable the ability to share and aggregate data across departments or business units
BA4	In my organization, business information and analytics differentiate us within the industry
BA5	In my organization, we improve our information and analytics capability is a top priority

Source: Adapted from Ashrafi et al. (2019)

3.6.3 Validity and Reliability

Ensuring the validity and reliability of the questionnaire was a critical phase of this study, especially given the empirical nature of the research and the complex organizational environment in which it was conducted.

3.6.3.1 Validity

Validity refers to the degree to which the instrument measures what it intends to measure (Bryman & Bell, 2015). In this study, several forms of validity were addressed:

Content Validity: Subject-matter experts from both academic and policing backgrounds reviewed the questionnaire to evaluate its relevance, clarity, and coverage (Asher et al., 2023). Their feedback led to the refinement of several items to better align with the operational language and roles of senior police officers in Abu Dhabi.

Construct Validity: This was established through a thorough review of established scales in prior literature (Flake et al., 2022). Each construct's items were selected based on their prior validation and alignment with the theoretical framework of this study (Hair et al., 2019).

Face Validity: A pilot test was conducted with 30 respondents from various departments within the Abu Dhabi Police to assess clarity, appropriateness, and response time (Johnson, 2021). Their feedback ensured that the items were interpreted as intended and culturally sensitive.

3.6.3.2 Reliability

Reliability refers to the consistency and stability of the measurement instrument (Saunders et al., 2016). The internal consistency of the questionnaire was tested using Cronbach's alpha during the pilot phase. All constructs yielded Cronbach's alpha coefficients above the minimum acceptable threshold of 0.70 (Izah, 2023), indicating satisfactory internal consistency. Furthermore, the full dataset will undergo further

reliability analysis using statistical software (e.g., SPSS or SmartPLS) to validate the findings during the main data analysis phase.

3.6.4 Pre-Testing of Items

To ensure the content validity and clarity of the survey instrument, a pre-testing process was conducted involving both expert review and a subsequent field test. The pre-testing served three primary purposes: (1) evaluating the relevance and representativeness of the survey items in measuring the constructs of interest, (2) assessing the face validity of the instrument, and (3) identifying potential areas for linguistic or structural improvement.

First, expert panel consultation and justification, an expert panel comprising three professionals was selected based on their academic and practical expertise relevant to the research context. Specifically, the panel included (i) a university professor with a specialization in human resource management and organizational behavior, (ii) a senior officer from the Abu Dhabi Police Department with executive leadership responsibilities, and (iii) a talent management consultant with extensive experience in workforce analytics and training development in the public sector. This diverse representation ensured that the instrument could be critically evaluated from theoretical, operational, and strategic perspectives.

The selection of these experts was strategic and justified based on the following criteria: (a) alignment of expertise with the core constructs under study talent management, employee engagement, and business analytics; (b) familiarity with the organizational context of the Abu Dhabi Police; and (c) prior involvement in empirical research or applied workforce development initiatives in the public sector. Their input was thus critical to ensuring the instrument's contextual and conceptual relevance.

Second, distinction between content validity, face validity, and reliability, it is important to clarify that the initial expert review was focused on content validity, which refers to the extent to which the items adequately capture the theoretical constructs as defined in the literature (Almanasreh et al., 2019). Feedback from the panel was systematically integrated into a revised version of the questionnaire. Modifications included refining item wording, improving terminology precision, and ensuring that the questions corresponded logically and semantically to their intended dimensions. For instance, vague or redundant expressions were replaced with more precise phrasing to eliminate ambiguity.

Subsequently, face validity was assessed by administering the revised questionnaire to a group of ten volunteer respondents from Abu Dhabi, representing the target population. Face validity pertains to how appropriate and understandable the survey items appear to be at first glance to potential respondents (Gaber & Gaber, 2010). This field test also served as an informal indicator of the instrument's practical reliability specifically, its clarity, usability, and respondent engagement. However, formal statistical reliability was addressed separately during the pilot study phase (see Section 3.6.5).

Third, questionnaire development and role of experts, while Table 3.9 presents expert-reviewed modifications, it is essential to clarify that the original questionnaire was developed by the researcher based on a thorough literature review of validated scales. The expert panel did not create the items; instead, they provided critical feedback to enhance the accuracy, clarity, and contextual suitability of the researcher-developed instrument. Thus, Table 3.9 should be interpreted as a record of iterative

improvements and refinements made in consultation with the experts, rather than as a demonstration of item authorship by the panel.

Table 3.9: Questionnaire Development by Experts

No	Expert 1	Expert 2	Expert 3
Talent Attraction (TA)			
TA1	My company is actively involved in communication and implementation of employer branding	My company is actively involved in communication and implementation of employer branding	My organization is actively involved in the implementation of employer branding
TA2	This company's good working conditions and fair wages has enabled it to attract the right talents	This company's good working conditions and fair wages has enabled it to attract the right talents	My organization has good working conditions and fair wages that enabled it to attract the right talents
TA3	This company values talent search matrix during selection in order to get experienced, qualified, expertise, potential and qualified employees	This company values talent search matrix during selection in order to get experienced, qualified, expertise, potential and qualified employees	My organization values a talent search matrix during selection to get experienced, qualified, expertise, potential, and qualified employees
TA4	My organization strives to build a good brand image to attract talented employees	My organization strives to build a good brand image to attract talented employees	My organization strives to build a good brand image to attract talented employees
TA5	This company assures employees job security, in order to attract the right talent.	This company assures employees job security, in order to attract the right talent.	My organization assures employees job security to attract the right talent.
TA6	In this company, we support employee training and career progression	In this company, we support employee training and career progression	My organization supports the employee training and career progression
TA7	Work-life balance as well as social networking facilities in this company is a motivating factor to our employees	Work-life balance as well as social networking facilities in this company is a motivating factor to our employees	Work-life balance, as well as social networking facilities in my organization, is a motivating factor for the employees
TA8	I ensure good organizational climate in order to attract the right talents	I ensure good organizational climate in order to attract the right talents	My organization ensures a good organizational climate to attract the right talents
Talent Retention (TR)			
TR1	We use effective leadership style and we are careful on how we handle employee issues	We use effective leadership style and we are careful on how we handle employee issues	My organization uses an effective leadership style and the organization is careful about how employee issues are handled
TR2	This company ensures our company image remains good all the time in order to retain our talented employees	This company ensures our company image remains good all the time in order to retain our talented employees	My organization ensures our image remains good all the time to retain our talented employees

TR3	My company has competitive compensation system in comparison to other organizations in the same industry which is a motivating factor to our employees	We have internal recruitment policy that helps to raise the loyalty and morale of our employees	My organization has an internal recruitment policy that helps to raise the loyalty and morale of our employees
TR4	We have internal recruitment policy that helps to raise the loyalty and morale of our employees	My company flexible working hours is a motivating factor to our employees	My organization has flexible working hours that encourage employee's retention
TR5	My company flexible working hours is a motivating factor to our employees	This company offers training opportunities to enhance career growth hence retain talented employees	My organization offers training opportunities to enhance career growth hence retain talented employees
TR6	This company offers training opportunities to enhance career growth hence retain talented employees	In my company there is effective performance assessment which enhances the employee confidence.	In my organization, there is an effective performance assessment that enhances employee confidence
TR7	In my company there is effective performance assessment which enhances the employee confidence.	My company offers attractive non-monetary rewards to employees	My organization offers attractive non-monetary rewards to the employees
TR8	My company ensures Employee are satisfied and motivated all the time	My company ensures Employee are satisfied and motivated all the time	My organization uses an effective leadership style and the organization is careful about how employee issues are handled
Learning and Development (LD)			
LD1	In my company appropriate learning and development strategies have been put in place	In my company appropriate learning and development strategies have been put in place	My organization puts in place appropriate learning and development strategies
LD2	My company identifies the employees who need learning and development and the level of learning and development they need before conducting	My company identifies the employees who need learning and development and the level of learning and development they need before conducting training.	My organization identifies the employees who need learning and development before conducting training
LD3	In our company in house development program is commonly used	In our company in house development programme is commonly used	My organization organized training materials that mapped to every employee's needs for learning and development
LD4	In my organization employees are continuously acquiring new knowledge and skills, and mastering new ways of doing things	In my organization employees are continuously acquiring new knowledge and skills, and mastering new ways of doing things	In my organization, employees are continuously acquiring new knowledge and skills and mastering new ways of doing things

LD5	There is Coaching by the line managers in this company	There is Coaching by the line managers in this company	In my organization, on the job training is performed by the senior staff
LD6	In my company we take Leadership skills development very seriously	In my company we take Leadership skills development very seriously	In my organization, the development of leadership skills has a great interest
LD7	In my company we value business skill development	In my company we value business skill development	The training for the development of teamwork skills has a high priority in my organization
LD8	We believe E – learning is of great importance in our company	We believe E – learning is of great importance in our company	My organization developed many electronic training materials that fit different employees' need
Career Management (CM)			
CM1	My company offers career counselling	My company offers career counselling	My organization offers career counseling
CM2	We have established career centres where employees can access useful materials and advice on career growth and development	We have established career centres where employees can access useful materials and advice on career growth and development	My organization has established career centers where employees can access useful materials and advice on career growth and development
CM3	This company believes career planning facilitates expansion and growth of this company	This company believes career planning facilitates expansion and growth of this company	My organization believes career planning facilitates the expansion and growth of the organization
CM4	This company encourages job rotation and transfer people across departments laterally to increase their value for themselves	This company encourages job rotation and transfer people across departments laterally to increase their value for themselves	This organization encourages job rotation across departments to increase employees' value
CM5	My company plans on employee growth and progression	My company plans on employee growth and progression	My organization plans on employee growth and progression
CM6	My company strives to establish career paths and families of jobs in every department	My company strives to establish career paths and families of jobs in every department	My organization strives to establish career paths and ladders in every department
CM7	In my company, we develop programs and initiatives that enhance employee development	In my company, we develop programs and initiatives that enhance employee development	In my organization, programs and initiatives that enhance employee development are developed
CM8	We have established succession planning in my company	We have established succession planning in my company	My organization has established succession planning
CM9	My company has provision of career mentors	My company has provision of career mentors	My organization has the provisions for career mentors
CM10	In my company we have retirement preparation programmes	In my company we have retirement preparation programmes	In my organization, there are retirement preparation programs

Employee Engagement (EE)			
EE1	I know what is expected of me at work.	I know what is expected of me at work.	I know what is expected of me at work
EE2	I have the materials and equipment I need to do my work right.	I have the materials and equipment I need to do my work right.	I have the materials and equipment I need to do my work right
EE3	At work, I have the opportunity to do what I do best every day.	At work, I have the opportunity to do what I do best every day.	At work, I have the opportunity to do what I do best every day
EE4	In the last seven days, I have received recognition or praise for doing good work.	In the last seven days, I have received recognition or praise for doing good work.	Recently, I have received recognition or praise for doing good work
EE5	My supervisor, or someone at work, seems to care about me as a person.	My supervisor, or someone at work, seems to care about me as a person.	My supervisor, or someone at work, seems to care about me as a person
EE6	There is someone at work who encourages my development.	There is someone at work who encourages my development.	My manager at work encourages my development
EE7	At work, my opinions seem to count.	At work, my opinions seem to count.	At work, my opinions are counted
EE8	The mission or purpose of my organization makes me feel my job is important.	The mission or purpose of my organization makes me feel my job is important.	The mission or purpose of my organization makes me feel that my job is important.
EE9	My associates or fellow employees are committed to doing quality work.	My associates or fellow employees are committed to doing quality work.	My associates and fellow employees are committed to doing quality work
EE10	In the last six months, someone at work has talked to me about my progress	In the last six months, someone at work has talked to me about my progress	In the last six months, someone at work has talked to me about my progress
EE11	This last year, I have had opportunities at work to learn and grow.	This last year, I have had opportunities at work to learn and grow.	I have the opportunities at work to learn and grow.
Employees Performance (EP)			
EP1	I complete my work with in the time allocated.	I complete my work with in the time allocated.	I complete my work within the time allocated
EP2	I work overtime to complete my tasks	I work overtime to complete my tasks	I work overtime to complete my tasks
EP3	My performance is measured against the productivity.	My performance is measured against the productivity.	My performance is measured against the productivity
EP4	I attend to my work with speed and accuracy.	The degree to which I do my work meets our customers requirements	I attend to my work with speed and accuracy
EP5	My performance has continually improved.	My performance has continually improved.	My performance has continually improved
EP6	I take time to listen to my clients to ensure I attend to them effectively	I take time to listen to my clients to ensure I attend to them effectively	I take time to listen to the clients to ensure I attend to them effectively
EP7	I do my work effectively without complaining.	I do my work effectively without complaining.	I do my work effectively without complaining

EP8	I combine the available resources very well to provide quality services.	I combine the available resources very well to provide quality services.	I combine the available resources very well to provide quality services
EP9	I usually take time to follow up with clients to ensure that they are satisfied with my services.	I usually take time to follow up with clients to ensure that they are satisfied with my services.	I usually take time to follow up with customers to ensure that they are satisfied with the services
EP10	I record down a number of activities in my to do list before starting on the day's work	I record down a number of activities in my to do list before starting on the day's work	I record down a number of my activities to-do list before starting the day's work
EP11	My job is in line with my interests, skills and attitudes.	My job is in line with my interests, skills and attitudes.	My job is in line with my interests, skills, and attitudes
Business Analytics (BA)			
BA1	In my organization, we predict and prepare for the future by proactively evaluating scenarios or potential trade-offs.	In my organization, we predict and prepare for the future by proactively evaluating scenarios or potential trade-offs.	In my organization, we predict and prepare for the future by proactively evaluating scenarios or potential trade-offs.
BA2	In my organization, decision-making is based on rigorous analytic approaches (e.g., quantitative modelling, simulation).	In my organization, decision-making is based on rigorous analytic approaches (e.g., quantitative modelling, simulation).	In my organization, decision-making is based on rigorous analytic approaches (e.g., quantitative modelling, simulation).
BA3	In my organization, we manage data to enable the ability to share and aggregate data across departments or business units	In my organization, we manage data to enable the ability to share and aggregate data across departments or business units	In my organization, we manage data to enable the ability to share and aggregate data across departments or business units
BA4	In my organization, business information and analytics differentiate us within the industry	In my organization, business information and analytics differentiate us within the industry	In my organization, business information and analytics differentiate us within the industry
BA5	In my organization, we improve our information and analytics capability is a top priority	In my organization, we improve our information and analytics capability is a top priority	In my organization, we improve our information and analytics capability is a top priority

Table 3.9 showcases the comparative revisions suggested by the three experts across all measurement domains, including Talent Attraction, Talent Retention, Learning and Development, Career Management, Employee Engagement, Employee Performance, and Business Analytics. A detailed content analysis of their feedback revealed convergence in several key areas. Firstly, experts emphasized the importance of terminology alignment, recommending consistent organizational phrasing (such as replacing generic references like *“this company”* with *“my organization”*) to better reflect the respondents’ context. Secondly, grammatical precision was a focal point, with numerous suggestions aimed at refining subject-verb agreement and sentence structure to improve the clarity of items; for instance, statements like *“We value business skill development”* were revised to specify the types of skills being prioritized. Thirdly, conceptual relevance was addressed through the identification and revision of redundant or misaligned items, such as refining the terminology from *“training materials”* to the more encompassing *“training programs.”* In addition, cultural and contextual fit was thoroughly considered, with adjustments made to ensure the terminology and constructs were familiar and appropriate for the Abu Dhabi Police environment this included the integration of formal rank structures and team dynamics that resonate with the organizational culture. Overall, these revisions led to the development of a more polished and contextually grounded instrument, ensuring that the survey items were not only theoretically robust but also practically meaningful to the target population. In conclusion, the pre-testing phase provided valuable insights into the clarity, contextual suitability, and comprehensiveness of the survey instrument. The expert panel’s input significantly enhanced the refinement of survey items, while the face validity testing with potential respondents reinforced the practical usability of the instrument. This process reflects a rigorous and methodologically sound approach

to instrument development, thereby supporting the overall validity and contextual relevance of the research.

3.6.5 Pilot Study

To evaluate the internal consistency and reliability of the measurement instrument (Bujang et al., 2024), a pilot study was conducted with a sample of 30 participants drawn from the Abu Dhabi Police Department. This preliminary test was essential to ensure that the instrument exhibited acceptable psychometric properties prior to its deployment in the full-scale data collection phase. The pilot participants were selected using convenience sampling but met the same inclusion criteria as the main study respondents, thereby providing a suitable basis for reliability testing.

The statistical reliability of each construct was measured using Cronbach's alpha (α), a coefficient that assesses the extent to which items within a scale are interrelated, thereby indicating the degree of internal consistency (Izah, 2023). A Cronbach's alpha value of 0.70 or higher is generally considered acceptable for exploratory research in the social sciences (Žukauskas et al., 2018).

The results, as presented in Table 3.10, indicate that all constructs exhibited satisfactory to excellent levels of reliability. Notably, Employee Engagement and Learning & Development achieved the highest internal consistency ($\alpha = 0.915$ and $\alpha = 0.901$, respectively), while all other constructs also exceeded the acceptable threshold.

Table 3.10: Pilot-study Test

Construct	Number of Items	Cronbach's Alpha (α)
Talent Attraction	8	0.811
Talent Retention	7	0.842
Learning & Development	8	0.901
Career Management	10	0.879
Employee Engagement	11	0.915
Employee Performance	11	0.866
Business Analytics	5	0.833

These findings validate the reliability of the survey instrument and support its suitability for use in the main data collection phase. The strong Cronbach's alpha values provide evidence that the items within each construct are cohesively measuring the same underlying dimension, thereby strengthening the methodological rigor of the study. For detailed discussions on item analysis and construct validity.

3.7 Data Analysis Procedure

The data analysis process in this study is structured to ensure a comprehensive and accurate evaluation of the research questions. In line with the objectives of the study, which focus on the relationships between talent management practices and employee engagement, the analysis will be conducted using advanced statistical methods. Two primary software packages will be used for the analysis: SPSS 27 and Smart PLS 3.3.9.

3.7.1 Overview of the Data Analysis Process

The data analysis begins with data cleaning and preparation, followed by the calculation of descriptive statistics to understand the sample characteristics. This initial

phase utilizes SPSS 27, which is commonly used in management research for preliminary data examination (Pallant, 2020). The initial analysis includes checking for missing values, outliers, and inconsistent responses. Descriptive statistics will provide an overview of the demographic profile of respondents and general trends in the data, including measures of central tendency (mean, median) and dispersion (standard deviation).

Following the preliminary data examination, more advanced analysis will be conducted using Smart PLS 3.3.9, which facilitates the use of Partial Least Squares Structural Equation Modeling (PLS-SEM), a robust method for analyzing complex relationships involving latent variables (Hair et al., 2019). PLS-SEM is particularly suited for this study due to its ability to handle small sample sizes, non-normal data distributions, and complex model structures (Hair et al., 2019). This technique allows for the evaluation of both the measurement model (which assesses the validity and reliability of the constructs) and the structural model (which tests the hypothesized relationships between the constructs).

3.7.2 Justification for Using PLS-SEM

The choice of PLS-SEM is grounded in its flexibility and effectiveness in addressing the complexities of the research model. Specifically, PLS-SEM allows for the simultaneous assessment of multiple relationships between latent variables, making it ideal for understanding the impact of talent management practices on employee engagement. Furthermore, PLS-SEM is suitable for exploratory analysis involving both formative and reflective constructs (Hair et al., 2019). This is crucial for accurately representing the multidimensional nature of constructs such as Talent Attraction, Employee Engagement, and Business Analytics.

An additional reason for selecting PLS-SEM is its ability to handle small to moderate sample sizes, which aligns with this study's sample of 150 respondents. PLS-SEM is less restrictive in terms of sample size requirements compared to other techniques like Covariance-Based SEM (CB-SEM), making it a more appropriate choice for this study (Hair et al., 2019).

3.7.3 PLS-SEM Analysis Stages

PLS-SEM analysis will proceed in two main stages: the Measurement Model Evaluation and the Structural Model Evaluation.

3.7.3.1 Measurement Model Evaluation (Outer Model)

The first stage involves testing the measurement model, which assesses the relationships between observed indicators (items) and latent variables (constructs). The following reliability and validity tests will be performed:

Indicator Reliability (Outer Loading): Indicator reliability evaluates the strength of the relationship between each item and its associated latent variable. A loading greater than 0.708 is considered acceptable (Hair & Alamer, 2022). Items with loadings below 0.4 will be considered weak and removed from the model. Items with loadings between 0.4 and 0.708 are retained based on expert judgment.

Internal Consistency Reliability: Cronbach's alpha will be calculated for each latent variable to assess internal consistency. Values greater than 0.7 are considered reliable, with values approaching 1.0 indicating high reliability (Hair & Alamer, 2022).

Convergent Validity: Convergent validity is assessed using the Average Variance Extracted (AVE). An AVE value greater than 0.5 indicates sufficient convergent

validity, meaning the latent variable explains more than half of the variance in its indicators (Fornell & Larcker, 1981).

Discriminant Validity: Discriminant validity ensures that constructs are distinct from each other. The Fornell-Larcker criterion and HTMT ratio will be used to assess discriminant validity. The square root of the AVE for each construct should be greater than the correlations between constructs.

3.7.3.2 Structural Model Evaluation (Inner Model)

The second stage involves testing the structural model, which examines the hypothesized relationships between the latent variables. This stage includes the following evaluations:

Coefficient of Determination (R^2): R^2 represents the variance explained by the exogenous variables for the endogenous variables. Values of 0.67, 0.33, and 0.19 indicate significant, moderate, and weak explanatory power, respectively (Cohen, 1988). For this study, R^2 values above 0.26 will indicate substantial explanatory power (Hair & Alamer, 2022).

Predictive Relevance (Q^2): The Stone-Geisser Q^2 measure will be used to assess the model's predictive validity. Q^2 values above 0.02, 0.15, and 0.35 will indicate small, medium, and large predictive relevance, respectively (Tenenhaus et al., 2004).

Hypothesis Testing: Hypotheses will be tested using the path coefficients obtained from the structural model. The significance of the coefficients will be assessed using bootstrapping techniques. Path coefficients with t-statistics greater than 1.96 ($p < 0.05$) will be considered significant, indicating strong relationships between the constructs (Hair et al., 2019).

3.7.4 Statistical Software and References

For the preliminary analysis steps, SPSS 27 will be used to conduct data cleaning, frequency analysis, and descriptive statistics. This software is widely used in social sciences research and provides a user-friendly interface for performing basic statistical analyses (Nunes et al., 2015). For the advanced analysis, Smart PLS 3.3.9 will be employed to conduct the PLS-SEM technique. This software is known for its ability to handle complex models with latent variables and has been widely used in management and organizational research (Hair et al., 2019).

3.8 Conclusion

Chapter 3 has outlined the research methodology, providing a detailed description of the philosophical underpinnings, research approach, sampling strategies, and data analysis procedures employed to address the research questions. The methodological framework is grounded in a positivist philosophy, which is appropriate for this study due to the quantitative and measurable nature of the constructs under investigation. The use of a deductive approach supports the testing of hypotheses derived from existing theories, while the quantitative methodology ensures that the research is both objective and statistically rigorous.

The chapter begins by discussing the philosophical foundation of the study, emphasizing the deductive approach and quantitative methods used to test the relationships between talent management practices and employee engagement, with a specific focus on the moderating role of business analytics. This approach ensures that the research is robust and grounded in theory, with clear operationalization of variables.

The population for the study consists of senior police officers in Abu Dhabi, distributed across ten sectors, representing a workforce of 48,500 employees, of which

approximately 20% (9,700 officers) are in leadership positions. This provides a clear understanding of the study's target group, which is both specialized and significant in the context of talent management within public sector organizations. A key component of the research design is the sample size and sampling strategy. The study justifies a sample of 370 respondents, adhering to established standards for quantitative research. This ensures that each sector is adequately represented, allowing for a more comprehensive and accurate assessment of the relationships between the study's key variables.

Furthermore, the chapter outlines the data analysis procedures, which involve a two-stage process using both SPSS 27 and Smart PLS 3.3.9. Initially, SPSS 27 is used for data cleaning, frequency analysis, and descriptive statistics, providing a clear understanding of the sample's demographic characteristics. The more advanced analysis is conducted using Smart PLS 3.3.9, specifically employing Partial Least Squares Structural Equation Modeling (PLS-SEM). This technique is particularly suited for the study due to its ability to handle small sample sizes and complex relationships involving latent variables. PLS-SEM is employed in two stages: the measurement model, which evaluates the validity and reliability of the constructs, and the structural model, which tests the hypothesized relationships between these constructs. Finally, the chapter highlights the rationale for using PLS-SEM, explaining its flexibility in handling complex models, small to moderate sample sizes, and both formative and reflective constructs. The justification for this choice is supported by existing literature on the advantages of PLS-SEM in management and organizational research.

In conclusion, Chapter 3 provides a comprehensive and well-structured outline of the research methodology. The methodological approach, encompassing the research

philosophy, sampling strategy, data collection methods, and data analysis procedures, ensures that the study is robust, valid, and reliable. The careful selection of methods and tools lays a strong foundation for the subsequent empirical analysis, ensuring that the findings will be both meaningful and relevant to the research objectives. This chapter ensures the integrity of the study by providing a clear, systematic approach to addressing the research questions, making it well-equipped to deliver valuable insights into the influence of talent management practices on employee engagement within the context of the Abu Dhabi Police.

CHAPTER 4

FINDINGS AND DATA ANALYSIS

4.1 Introduction

This chapter presents a comprehensive overview of the findings derived from the primary data collected in this study. The primary objective of this chapter is to provide a detailed analysis of the steps taken to ensure the accuracy of the data and the results related to the hypotheses. It begins by offering a detailed description of the target participants, focusing on their demographic characteristics, which are crucial for understanding the context of the study. These characteristics include details about their professional background, rank, and experience, which directly relate to the objectives of examining the influence of talent management practices on the employee engagement of police officers in Abu Dhabi, particularly the moderating effect of business analytics.

The chapter is structured into several key sections. First, it discusses data screening and preparation, outlining the procedures used to ensure data integrity. This includes checks for missing values, outliers, and any inconsistencies in the data, ensuring that only valid responses are considered for analysis. Next, the demographic analysis is presented, offering an overview of the respondents' characteristics to provide context for the sample population. Following this, the descriptive statistics section presents measures of central tendency and dispersion, which help in understanding the general trends and distribution of the data.

Subsequently, the chapter covers reliability and validity assessments, where the focus is on evaluating the measurement model's reliability and validity. This includes examining the internal consistency of the constructs and assessing their convergent and

discriminant validity. Afterward, the chapter moves into relationship and effectiveness assessments, analyzing the direct and indirect relationships between the study's constructs. Finally, the moderation effect assessments are discussed, where the role of business analytics in moderating the relationship between talent management practices and employee engagement is tested.

To conduct the analysis, two statistical software packages are employed. SPSS is used for the initial data analysis stages, including data screening and descriptive statistics, while Smart PLS is used for more advanced analysis using Partial Least Squares Structural Equation Modeling (PLS-SEM). This approach enables a thorough evaluation of both the measurement and structural models, offering a comprehensive understanding of the relationships between the constructs under investigation.

4.2 Sample Integrity and Respondent Demographic

This section presents a comprehensive overview of the processes undertaken to ensure the integrity of the dataset and provides a detailed demographic profile of the respondents. Establishing data quality is a foundational step in any empirical research, as it directly affects the reliability and validity of the analysis and subsequent interpretations. Accordingly, this section is divided into two subsections: (1) data screening and cleaning procedures and (2) the demographic composition of the final sample. These efforts not only demonstrate methodological rigor but also offer essential context for understanding the nature of the population under study namely, officers from the Abu Dhabi Police.

4.2.1 Data Screening and Cleaning

Before conducting any statistical analysis, it was critical to perform a robust data screening process to identify and rectify inconsistencies, missing data, and outliers. This process ensures that only high-quality data are included, enhancing the validity of the findings (DeSimone, 2015). The screening procedure began by checking for incomplete, inconsistent, or careless responses. Responses that showed straight-lining patterns, contradictory answers, or minimal engagement with the questionnaire were flagged for removal.

Univariate analysis using Z-scores was applied to detect outliers in single variables, while multivariate outliers were identified using Mahalanobis D^2 scores, following established methodological recommendations (Mellenbergh & Mellenbergh, 2019). Missing data were also evaluated using appropriate thresholds to determine whether imputation or case-wise deletion was necessary.

The data collection phase for this study initially yielded a total of 455 responses from participants. However, to ensure the integrity and suitability of the dataset for rigorous statistical analysis, a comprehensive data screening and cleaning procedure was implemented. In the first stage of this process, a total of 56 cases (equivalent to 12.31% of the total responses) were excluded due to various forms of inconsistency and incompleteness. Specifically, these cases included responses with missing answers on key questionnaire items, particularly those related to the core constructs of the study such as Talent Management Practices, Employee Engagement, and Business Analytics. In addition, several responses were identified as exhibiting engagement issues, such as straight-lining (i.e., selecting the same response across all items), contradictory

answers, or illogical response patterns. These issues were deemed to undermine the internal consistency and reliability of the data and thus warranted exclusion.

Following the initial screening, a refined dataset of 399 cases remained. However, to further enhance the robustness of the dataset, a univariate outlier analysis was conducted to identify any statistically abnormal or illogical data points. This process involved assessing individual responses based on z-scores and detecting any values that deviated significantly from the normal distribution. As a result, 16 additional cases accounting for 3.52% of the previously retained responses (were identified as outliers) due to anomalies such as extreme scores or conflicting demographic and perceptual data. These cases were subsequently removed to eliminate potential distortions in the analysis.

After these systematic and rigorous screening procedures, the final dataset comprised 383 valid and reliable responses, representing 84.18% of the initially collected sample. This multi-tiered data cleaning process was essential not only to enhance the reliability and validity of the dataset but also to ensure that the subsequent analyses and interpretations were based on high-quality and representative data. By meticulously addressing issues such as missing data, response inconsistency, and statistical outliers, the study upholds the methodological standards necessary for empirical research, particularly within the context of behavioral and organizational studies. Ultimately, this process contributes significantly to the credibility of the findings and supports the generalizability of the conclusions drawn regarding the influence of Talent Management Practices and Business Analytics on Employee Engagement within the Abu Dhabi Police Force.

4.2.2 Demographic Profile of Respondents

The demographic characteristics of the respondents are summarized in Table 4.1. In terms of gender, the sample consisted of 307 males (80.2%) and 76 females (19.8%), which aligns with the official gender distribution in the Abu Dhabi Police, thus supporting the representativeness of the sample. Regarding age, 3.1% of respondents were between 18 and 24 years old, 19.8% were between 25 and 30 years, 35.8% were between 31 and 40 years, 33.7% were between 41 and 50 years, 5.7% were between 51 and 60 years, and 1.8% were above 60 years. These figures reflect a wide age range, providing a diverse sample for the study.

The academic qualifications of the respondents revealed that 77.3% held a Bachelor's degree, 18% had a Master's degree, 3% had a Diploma, and 1.8% held a PhD. A small proportion (2.6%) reported having other qualifications. Regarding their positions, 60.3% of the respondents were Captains, 23.8% were Lt. Colonels, 14.4% were Brigadiers, and 1.6% were Lt. Generals, indicating a diverse range of ranks within the sample. The respondents' income levels varied, with 5.5% earning between 10,000 and 15,000 AED, 18% earning between 15,000 and 20,000 AED, and 24.3% earning between 20,000 and 25,000 AED, among other categories. Finally, in terms of experience, 7% of the respondents had 5–10 years of service, 15.1% had 10–15 years, 43.3% had 15–20 years, 25.8% had 20–25 years, 7% had 25–30 years, and 1.6% had over 30 years of service. A complete demographic profile of the respondents is presented in Table 4.1, offering a detailed breakdown of the sample population.

The demographic data presented in Table 4.1 is highly significant for contextualizing the results of this study. The dominance of middle-aged respondents (particularly those between 31 and 50 years) suggests that the study captures the

perspectives of experienced and active-duty officers who are likely to be deeply involved in talent management practices and operational decision-making. The majority having bachelor's and master's degrees also suggests a relatively educated workforce, which may be more receptive to talent development initiatives and more capable of evaluating their engagement with organizational policies. The wide distribution of ranks and income levels enhances the generalizability of the findings, as it allows for the examination of how talent management practices and business analytics affect engagement across different leadership levels. Similarly, the high percentage of respondents with 15 to 25 years of experience indicates that the sample is composed of personnel who are well-versed in the organizational culture, structure, and strategic priorities of the Abu Dhabi Police. This enhances the validity of their input regarding how talent management and analytical practices influence their engagement and performance.

Table 4.1: Gender Characteristics Distribution

Demographic Variable	Category	Frequency	Percentage
Gender	Male	307	80.2
	Female	76	19.8
Age	18 - 24 Years	12	3.1
	25 - 30 Years	76	19.8
	31 - 40 Years	137	35.8
	41 - 50 Years	129	33.7
	51 - 60 Years	22	5.7
	Above 60 Years	7	1.8
Qualification	Diploma	1	0.3
	Bachelor	296	77.3
	Master	69	18.0
	PhD	7	1.8
	Other	10	2.6
Position	Captain	231	60.3
	Lt Colonel	91	23.8

	Brigadier	55	14.4
	Lt General	6	1.6
Income (United Arab Emirates Dirham)	10K-15K	21	5.5
	15K-20K	69	18.0
	20K-25K	93	24.3
	25K-30K	73	19.1
	30K-35K	60	15.7
	35K-40K	37	9.7
	40K-45K	16	4.2
	45K-50K	9	2.3
	Above 50K	5	1.3
Experience	5-10 Years	27	7.0
	10-15 Years	58	15.1
	15-20 Years	166	43.3
	20-25 Years	99	25.8
	25-30 Years	27	7.0
	Above 30 Years	6	1.6

4.3 Descriptive Statistics

Descriptive statistical analysis plays a crucial role in summarizing and interpreting the characteristics of survey data before proceeding to more complex inferential statistics. In this study, mean values and standard deviations are calculated for each item associated with the key constructs: talent attraction, talent retention, learning and development, career management, employee engagement, employee performance, and business analytics. The purpose of presenting the mean and standard deviation at the item level is to offer detailed insights into how each individual statement was perceived by the respondents, which allows for the identification of specific strengths and weaknesses within each variable. This approach also facilitates better interpretation of the measurement quality and response patterns, which is essential for validating the construct under investigation (Hair et al., 2022).

Table 4.2 provides the descriptive statistics including the number of responses (N), minimum and maximum scores, mean values, and standard deviations for all questionnaire items. It is important to note that all variables were measured using a 5-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The note in the original table has been corrected to ensure consistency across all scales. All independent and dependent variables utilized the same 5-point scale, which enhances interpretability and comparability among constructs.

The results indicate a generally positive perception across all independent variables. Talent Retention ($M = 4.16$, $SD = 0.798$) received the highest average score among the independent constructs, suggesting that respondents perceive retention efforts within the Abu Dhabi Police as notably effective. Specifically, "*Talent Retention Item 1*" ($M = 4.45$) and "*Talent Retention Item 3*" ($M = 4.28$) were most favorably evaluated, indicating satisfaction with specific retention policies or incentives in place. Conversely, "*Talent Retention Item 2*" scored relatively lower ($M = 3.96$), though still within a positive range.

Talent Attraction was also positively evaluated ($M = 3.93$, $SD = 0.809$), with "*Item 7*" ($M = 4.02$) and "*Item 6*" ($M = 3.97$) receiving the highest approval. These results suggest that recruitment efforts are generally seen as favorable, though there is room for enhancement in specific areas, such as in the perception of initial job offers or promotional strategies, as indicated by lower ratings for "*Item 2*" ($M = 3.82$).

Learning and Development ($M = 3.91$, $SD = 0.836$) demonstrated positive results, with "*Item 3*" ($M = 4.06$) and "*Item 7*" ($M = 4.02$) reflecting respondents' strong approval of training and knowledge enhancement initiatives. The close clustering of

mean values also indicates consistency in satisfaction across different learning dimensions.

Career Management scored an overall mean of 4.04 (SD = 0.751), denoting strong endorsement from the participants. Items such as "*Career Management Item 10*" (M = 4.29) and "*Item 8*" (M = 4.44) indicate strong support for career development initiatives, suggesting structured career pathways and advancement opportunities are effectively in place.

Employee Engagement received a lower overall mean (M = 3.22, SD = 0.508), with a wider range of item scores, indicating mixed perceptions. While "*Item 11*" (M = 4.34) was highly rated (possibly reflecting strong alignment with organizational values or recognition) other items such as "*Item 8*" (M = 2.95) and "*Item 2*" (M = 3.03) highlight potential weaknesses in motivational or participatory aspects of engagement.

Similarly, Employee Performance (M = 3.60, SD = 0.516) shows a mix of strong and moderate evaluations. Items like "*Item 11*" (M = 4.38) and "*Item 10*" (M = 4.34) demonstrate high self-reported productivity or work outcomes, whereas lower-scoring items suggest that performance may not be uniform across different roles or performance indicators.

Finally, Business Analytics (M = 3.87, SD = 0.865) was rated positively, with "*Item 4*" (M = 4.09) and "*Item 3*" (M = 3.99) showing that respondents value the role of data and analytics in decision-making processes. However, slightly lower ratings for "*Item 1*" and "*Item 2*" suggest that awareness or accessibility of analytics tools could be improved.

In the context of this study, these descriptive findings provide foundational insights that help contextualize the inferential analysis to follow. Specifically, the generally high mean scores for Talent Management practices (e.g., retention and career development) support the hypothesized relationship with Employee Engagement and Performance. However, the moderate evaluations for engagement highlight the necessity for a closer examination of how engagement is being fostered on the ground and whether analytics tools effectively moderate the dynamics between talent strategies and employee outcomes.

Table 4.2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Talent Attraction (TA)	383	1.63	5.00	3.925	.809
Talent Attraction Item 1	383	1	5	3.88	1.016
Talent Attraction Item 2	383	1	5	3.82	1.111
Talent Attraction Item 3	383	1	5	3.96	1.003
Talent Attraction Item 4	383	1	5	3.90	.972
Talent Attraction Item 5	383	1	5	3.91	.954
Talent Attraction Item 6	383	1	5	3.97	.951
Talent Attraction Item 7	383	1	5	4.02	.967
Talent Attraction Item 8	383	1	5	3.95	.981
Talent Retention (TR)	383	1.71	5.00	4.164	.798
Talent Retention Item 1	383	1	5	4.45	.928
Talent Retention Item 2	383	1	5	3.96	1.037
Talent Retention Item 3	383	1	5	4.28	.972
Talent Retention Item 4	383	1	5	4.03	1.010
Talent Retention Item 5	383	1	5	4.01	1.022
Talent Retention Item 6	383	1	5	4.27	1.019
Talent Retention Item 7	383	1	5	4.16	.964
Learning and Development (LD)	383	1.38	5.00	3.911	.836
Learning and Development Item 1	383	1	5	3.83	1.009
Learning and Development Item 2	383	1	5	3.85	1.014
Learning and Development Item 3	383	1	5	4.06	1.022
Learning and Development Item 4	383	1	5	3.88	1.047
Learning and Development Item 5	383	1	5	3.95	1.015
Learning and Development Item 6	383	1	5	3.87	1.035
Learning and Development Item 7	383	1	5	4.02	.985
Learning and Development Item 8	383	1	5	3.85	1.056

Career Management (CM)	383	1.90	5.00	4.037	.751
Career Management Item 1	383	1	5	4.26	.985
Career Management Item 2	383	1	5	3.90	.958
Career Management Item 3	383	1	5	3.86	1.042
Career Management Item 4	383	1	5	3.80	1.019
Career Management Item 5	383	1	5	3.85	.993
Career Management Item 6	383	1	5	3.87	1.026
Career Management Item 7	383	1	5	3.85	1.020
Career Management Item 8	383	1	5	4.44	.819
Career Management Item 9	383	2	5	4.25	.842
Career Management Item 10	383	1	5	4.29	.814
Employee Engagement (EE)	383	1.64	4.55	3.224	.508
Employee Engagement Item 1	383	1	5	3.10	.669
Employee Engagement Item 2	383	1	5	3.03	.717
Employee Engagement Item 3	383	1	5	3.23	.689
Employee Engagement Item 4	383	1	5	3.15	.685
Employee Engagement Item 5	383	1	5	3.16	.676
Employee Engagement Item 6	383	1	5	3.21	.586
Employee Engagement Item 7	383	2	5	3.22	.446
Employee Engagement Item 8	383	1	5	2.95	.716
Employee Engagement Item 9	383	1	5	3.01	.661
Employee Engagement Item 10	383	1	5	3.04	.702
Employee Engagement Item 11	383	1	5	4.34	.819
Employees Performance (EP)	383	1.82	4.36	3.598	.516
Employees Performance Item 1	383	1	4	3.22	.570
Employees Performance Item 2	383	1	4	3.08	.729
Employees Performance Item 3	383	1	4	2.92	.771
Employees Performance Item 4	383	1	5	3.10	.792
Employees Performance Item 5	383	1	5	3.19	.711
Employees Performance Item 6	383	1	4	3.12	.626
Employees Performance Item 7	383	1	5	3.32	.661
Employees Performance Item 8	383	1	5	4.29	.884
Employees Performance Item 9	383	1	5	4.23	.979
Employees Performance Item 10	383	1	5	4.34	.966
Employees Performance Item 11	383	1	5	4.38	.869
Business Analytics (BA)	383	1.40	5.00	3.866	.865
Business Analytics Item 1	383	1	5	3.67	1.016
Business Analytics Item 2	383	1	5	3.83	1.077
Business Analytics Item 3	383	1	5	3.99	1.044
Business Analytics Item 4	383	1	5	4.09	.974
Business Analytics Item 5	383	1	5	3.75	1.083

Notes: TA=Talent Attraction, TR =Talent Retention, LD = Learning and Development, CM = Career Management, EE =Employee Engagement, EP = Employees Performance, BA = Business Analytics. Notes: Scale for independent variables used 1=Strongly Disagree, 5=strongly Agree; Scale for dependent variables used 1=Strong Disagree, 5=Strong Agree.

4.4 Measurement Model Assessment

Before advancing to structural model evaluation, it is imperative to conduct a comprehensive reliability and validity assessment of the measurement model. This step ensures that the constructs used in the study are both psychometrically sound and statistically adequate, thereby confirming that the observed measurements accurately and consistently reflect the theoretical constructs being studied. As outlined by Hair et al. (2022), this assessment is a foundational prerequisite for structural equation modeling (SEM), particularly in partial least squares (PLS-SEM), as it validates the appropriateness of the measurement instrument and the data collected.

The objective of this subsection is to evaluate the measurement model through a multi-step process, encompassing both reliability and validity metrics. Each of these metrics serves a distinct purpose in confirming that the constructs and items used in the questionnaire are suitable for subsequent hypothesis testing. The process begins with the assessment of indicator reliability, which examines the outer loadings of each observed variable on its corresponding latent construct. Ideally, factor loadings should exceed the threshold of 0.70 to indicate that each item significantly contributes to the construct it is intended to measure (Hair et al., 2019). Items with loadings below 0.40 are typically removed, while those between 0.40 and 0.70 are retained if they improve other model fit indicators.

The second step involves evaluating internal consistency reliability. Unlike Cronbach's alpha, which assumes equal factor loadings, composite reliability (CR) accounts for differing loadings and is thus a more appropriate metric in the context of SEM. Composite reliability values above 0.70 are considered acceptable, reflecting that

the items consistently measure the same construct. This step ensures that the latent variables are internally coherent and free from measurement error.

Thirdly, convergent validity is assessed using the Average Variance Extracted (AVE), which determines the extent to which the items within a construct share a high proportion of variance. An AVE value greater than 0.50 is recommended, indicating that more than half of the variance is captured by the construct rather than by error. A high AVE further reinforces that the items collectively represent the same underlying dimension.

The fourth critical step pertains to discriminant validity, which establishes that each construct is empirically distinct from the others in the model. One common method for assessing discriminant validity is the Fornell-Larcker criterion, which compares the square root of each construct's AVE with its correlations with other constructs. Discriminant validity is established when the AVE square root is greater than the correlations with other latent variables, suggesting that each construct shares more variance with its own indicators than with those of other constructs. Another method often used in conjunction is the Heterotrait-Monotrait ratio (HTMT), which also provides robust evidence for discriminant validity when values remain below the threshold of 0.85 or 0.90 depending on the stringency of the criterion.

Lastly, the model undergoes a collinearity assessment using the Variance Inflation Factor (VIF). VIF values below 3.3 are generally acceptable, indicating that there is no significant multicollinearity among the predictor constructs. High multicollinearity can distort regression estimates and compromise the interpretability of path coefficients, making this test essential for ensuring model stability.

In the context of this study, where the structural model aims to examine the influence of Talent Management Practices on Employee Engagement (moderated by Business Analytics) the reliability and validity assessment is essential to affirm the integrity of the relationships tested. Ensuring that each construct is both reliable and valid reinforces the credibility of subsequent analytical findings and supports the generalizability of the results to broader managerial and organizational settings.

Thus, this subsection lays the groundwork for the structural model testing by confirming that all constructs and indicators are robust, valid, and appropriately measured. Without this rigorous preliminary assessment, the interpretability of the hypothesized relationships in the structural model would be questionable.

4.4.1 Indicator Reliability of Research Variables

To ensure the robustness of the measurement model, it is essential to evaluate the indicator reliability of each item. Indicator reliability refers to the strength of the association between an observed variable (i.e., questionnaire item) and its underlying latent construct. This is typically assessed through the outer loadings of items, where higher values indicate a stronger contribution of the item to its respective construct.

According to Hair et al. (2022) and Hulland (1999), an item is considered to have acceptable reliability if its outer loading exceeds the threshold of 0.708. Loadings above this value suggest that the item shares at least 50% of its variance with the underlying construct, which is deemed sufficient for inclusion in the model. Items with loadings between 0.40 and 0.70 fall into a “*gray area*.” These items may be retained if they contribute positively to the composite reliability or average variance extracted (AVE) of the construct. However, if an item’s removal leads to a significant improvement in

model fit or reliability, it may be excluded. Items with loadings below 0.40 are generally regarded as weak indicators and are typically removed from further analysis.

In addition to examining individual outer loadings, cross-loadings were also assessed to ensure discriminant validity at the item level. An item must load more strongly on its assigned construct than on any other constructs in the model. This step helps confirm that the item is uniquely measuring the intended dimension, not overlapping with others.

As displayed in Table 4.3, several items were removed due to low factor loadings or poor contribution to internal consistency. For instance, Career Management Item 1, Employee Engagement Item 6, Employees Performance Items 7 and 11, among others, demonstrated outer loadings below the 0.60 threshold and were therefore excluded from the final measurement model. This step was taken to enhance the overall reliability and clarity of the constructs.

The refined list of retained items showed improved outer loadings, all exceeding the minimum acceptable threshold, which supports the robustness and internal coherence of the measurement model. This refinement process is a critical step to ensure that each latent construct is accurately and consistently measured before proceeding with higher-order analyses.

Table 4.3: Outer Model Loading of Research Items

	Outer Loading Before Cleaning	Outer Loading After Cleaning
Career Management Item 1	0.570	Removed due to low factor loading
Career Management Item 2	0.748	0.748
Career Management Item 3	0.793	0.791
Career Management Item 4	0.777	0.773
Career Management Item 5	0.856	0.865

	Outer Loading Before Cleaning	Outer Loading After Cleaning
Career Management Item 6	0.897	0.907
Career Management Item 7	0.849	0.853
Career Management Item 8	0.730	0.738
Career Management Item 9	0.799	0.799
Career Management Item 10	0.870	0.874
Employee Engagement Item 1	0.715	0.724
Employee Engagement Item 2	0.716	0.710
Employee Engagement Item 3	0.759	0.752
Employee Engagement Item 4	0.760	0.753
Employee Engagement Item 5	0.734	0.729
Employee Engagement Item 6	0.646	Removed due to low factor loading
Employee Engagement Item 7	0.761	0.761
Employee Engagement Item 8	0.753	0.764
Employee Engagement Item 9	0.840	0.843
Employee Engagement Item 10	0.937	0.939
Employee Engagement Item 11	0.737	0.743
Employees Performance Item 1	0.744	0.746
Employees Performance Item 2	0.815	0.834
Employees Performance Item 3	0.761	0.778
Employees Performance Item 4	0.830	0.845
Employees Performance Item 5	0.750	0.773
Employees Performance Item 6	0.723	0.721
Employees Performance Item 7	0.605	Removed due to low factor loading
Employees Performance Item 8	0.770	0.764
Employees Performance Item 9	0.769	0.761
Employees Performance Item 10	0.784	0.769
Employees Performance Item 11	0.588	Removed due to low factor loading
Learning and Development Item 1	0.786	0.787
Learning and Development Item 2	0.810	0.811
Learning and Development Item 3	0.793	0.794
Learning and Development Item 4	0.813	0.813

	Outer Loading Before Cleaning	Outer Loading After Cleaning
Learning and Development Item 5	0.841	0.840
Learning and Development Item 6	0.858	0.857
Learning and Development Item 7	0.828	0.829
Learning and Development Item 8	0.807	0.808
Talent Attraction Item 1	0.793	0.792
Talent Attraction Item 2	0.775	0.775
Talent Attraction Item 3	0.830	0.830
Talent Attraction Item 4	0.822	0.821
Talent Attraction Item 5	0.827	0.826
Talent Attraction Item 6	0.823	0.825
Talent Attraction Item 7	0.835	0.836
Talent Attraction Item 8	0.806	0.807
Talent Retention Item 1	0.775	0.777
Talent Retention Item 2	0.852	0.852
Talent Retention Item 3	0.783	0.783
Talent Retention Item 4	0.800	0.799
Talent Retention Item 5	0.844	0.844
Talent Retention Item 6	0.805	0.806
Talent Retention Item 7	0.762	0.761

Notes: TA=Talent Attraction, TR =Talent Retention, LD = Learning and Development, CM = Career Management, EE =Employee Engagement, EP = Employees Performance, BA = Business Analytics.
Notes: Scale for independent variables used 1=Strongly Disagree, 5=strongly Agree; Scale for dependent variables used 1=Strong Disagree, 5=Strong Agree.

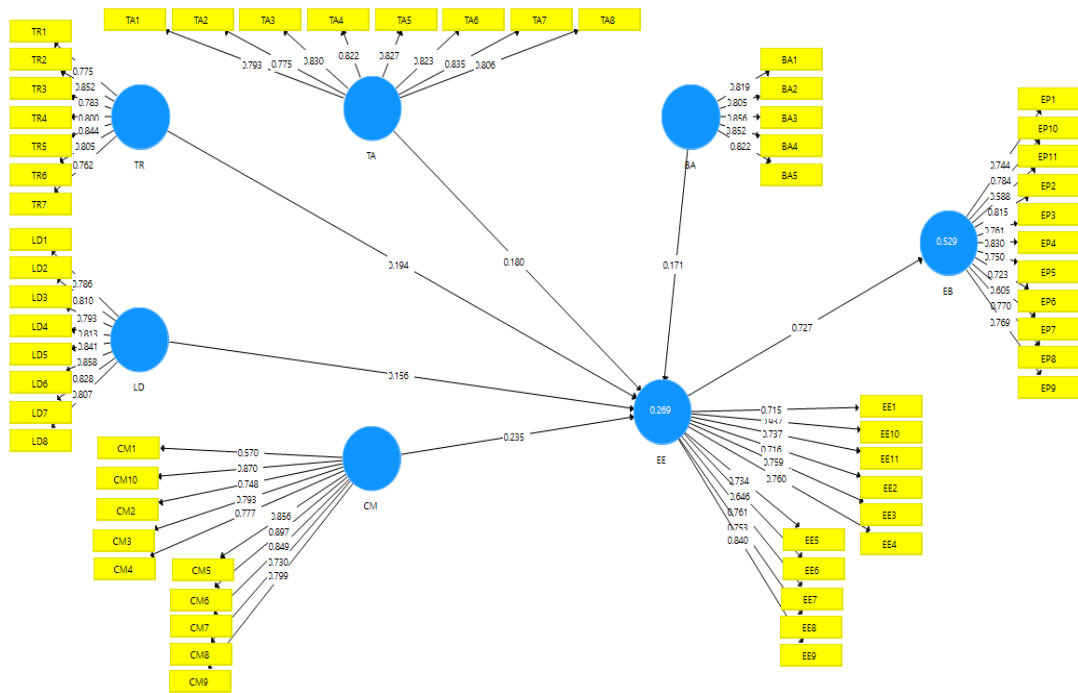


Figure 4.1: Structural Model Outer Loading Estimates

4.4.2 Internal Consistency of Research Variables

Internal consistency refers to the degree to which the items within a given construct are homogenous and collectively measure the same underlying concept. Establishing internal consistency is a critical step in validating the reliability of the measurement model, as it ensures that all indicators attributed to a construct are interrelated and conceptually aligned (Hair et al., 2019).

Two widely recognized statistical indices are commonly used to assess internal consistency: Cronbach's Alpha and Composite Reliability (CR). Cronbach's Alpha evaluates the average inter-item correlation and is often applied as a traditional metric in psychometric testing. Composite Reliability, on the other hand, is considered a more rigorous and precise estimate in the context of structural equation modeling (SEM),

particularly in PLS-SEM, as it accounts for the actual outer loadings of items (Hair et al., 2019).

The acceptable threshold for both indicators is generally 0.70 or above, indicating adequate reliability. However, for exploratory studies or early-stage theory development, values between 0.60 and 0.70 may still be considered tolerable (Hair et al., 2019). Values above 0.90 are interpreted as indicative of excellent internal consistency, though extremely high values (e.g., > 0.95) may occasionally signal item redundancy.

As displayed in Table 4.4, the composite reliability values of the constructs in this study range from 0.918 to 0.944, which substantially exceed the recommended minimum and reflect a robust internal coherence among the measurement items. Similarly, Cronbach's Alpha scores fall within the range of 0.889 to 0.933, further confirming the consistency and reliability of the scales. These results affirm that the constructs employed in this study (namely Talent Management dimensions (Talent Attraction, Talent Retention, Career Management, Learning and Development) Business Analytics, Employee Engagement, and Employee Performance) exhibit sound measurement reliability and are statistically appropriate for subsequent structural modeling.

Table 4.4: Internal Consistency Assessments of Research Variables

	Composite Reliability	Cronbach's Alpha
Business Analytics (BA)	0.918	0.889
Career Management (CM)	0.944	0.933
Employees Performance (EP)	0.931	0.918
Employee Engagement (EE)	0.938	0.928
Learning and Development (LD)	0.942	0.929
Talent Attraction (TA)	0.940	0.927
Talent Retention (TR)	0.927	0.909

4.4.3 Convergent Validity of Research Variables

Convergent validity assesses the degree to which multiple items that purport to measure the same construct are indeed related and share a high proportion of variance in common. It ensures that indicators within a construct exhibit internal convergence, thereby confirming that they collectively represent the intended latent variable (Fornell & Larcker, 1988; Hair et al., 2019).

The primary metric used to evaluate convergent validity is the Average Variance Extracted (AVE), which measures the average amount of variance captured by a construct's indicators relative to the amount of variance attributable to measurement error. An AVE value of 0.50 or higher is generally accepted as the threshold, indicating that a construct explains at least 50% of the variance in its observed indicators (Hair et al., 2014). Values below this threshold may suggest poor item convergence or issues with item specification.

As presented in Table 4.5, all constructs in the current study demonstrate AVE values exceeding the minimum acceptable threshold, ranging from 0.553 to 0.691. This provides compelling evidence of adequate convergent validity for each variable. Specifically: Business analytics reports the highest AVE (0.691), suggesting strong shared variance among its items. Employee performance shows the lowest AVE (0.553), though still above the 0.50 benchmark, indicating acceptable convergence. The remaining constructs (talent management dimensions, employee engagement, and learning and development) all fall comfortably above the threshold.

These results confirm that the measurement model effectively captures the latent constructs it is intended to measure, allowing the study to proceed to discriminant validity and structural assessments with confidence.

Table 4.5: Convergent Validity Assessment of Research Variables

	AVE
Business Analytics (BA)	0.691
Career Management (CM)	0.630
Employees Performance (EP)	0.553
Employee Engagement (EE)	0.583
Learning and Development (LD)	0.668
Talent Attraction (TA)	0.663
Talent Retention (TR)	0.646

4.4.4 Discriminant Validity of Research Variables

Discriminant validity is a critical measure in construct validation, ensuring that each construct in the measurement model is conceptually and statistically distinct from others. It indicates the degree to which a construct diverges from other constructs in the model, thereby avoiding redundancy and enhancing the validity of theoretical interpretations (Fornell & Larcker, 1988; Hair et al., 2019). To assess discriminant validity, two established criteria were applied:

a. Fornell and Larcker Criterion

The Fornell and Larcker approach evaluates discriminant validity by comparing the square root of the Average Variance Extracted (AVE) for each construct with its inter-construct correlations. Discriminant validity is supported when the square root of the AVE is greater than the construct's correlations with all other constructs in the model.

As shown in Table 4.6, the diagonal values represent the square roots of the AVE for each construct and are notably higher than the corresponding off-diagonal values (i.e., inter-construct correlations) in their respective rows and columns. For example,

the square root of AVE for Career Management (CM) is 0.818, which exceeds its correlations with Employee Performance (0.390), Employee Engagement (0.311), and other constructs. Similar patterns are observed for all remaining variables.

This finding confirms that the constructs used in this study are sufficiently distinct from one another, thereby meeting the Fornell and Larcker criterion for discriminant validity.

Table 4.6: Discriminant Validity of Constructs

	CM	EP	EE	LD	TA	TR
Career Management (CM)	0.818					
Employees Performance (EP)	0.390	0.778				
Employee Engagement (EE)	0.311	0.733	0.774			
Learning and Development (LD)	0.097	0.278	0.256	0.818		
Talent Attraction (TA)	0.134	0.357	0.281	0.059	0.814	
Talent Retention (TR)	0.147	0.428	0.339	0.270	0.173	0.804

b. Cross-Loading Analysis

In addition to the Fornell and Larcker criterion, discriminant validity was further evaluated using cross-loadings. This method compares the loading of each indicator on its intended latent variable with its loadings on other constructs. For adequate discriminant validity, the factor loading of each item should be higher on its associated construct than on any other construct (Chin, 1998).

Table 4.7 provides the cross-loading matrix for all constructs and their respective items. The data indicate that each item loads most strongly on its designated construct, with substantially lower loadings on unrelated constructs. For example, items under Career Management load between 0.738 to 0.907 on the CM construct, while their loadings on other constructs remain relatively low. Likewise, Employee Engagement

Item 9 loads at 0.939 on its construct but exhibits lower loadings (ranging between 0.221 and 0.355) on all others.

This pattern is consistently observed across all constructs (learning and development, talent attraction, talent retention, employee performance, and employee engagement) thereby reinforcing the evidence of discriminant validity.

Table 4.7: Cross Loading Assessment of Research Variables

	CM	EE	EB	LD	TA	TR
Career Management Item 2	0.748	0.256	0.272	0.103	0.152	0.127
Career Management Item 3	0.791	0.182	0.270	0.124	0.110	0.084
Career Management Item 4	0.773	0.279	0.308	0.093	0.105	0.084
Career Management Item 5	0.865	0.240	0.301	0.089	0.129	0.135
Career Management Item 6	0.907	0.256	0.359	0.080	0.091	0.139
Career Management Item 7	0.853	0.282	0.341	0.055	0.102	0.139
Career Management Item 8	0.738	0.268	0.363	0.064	0.098	0.111
Career Management Item 9	0.799	0.248	0.308	0.017	0.100	0.129
Career Management Item 10	0.874	0.244	0.323	0.104	0.099	0.126
Employee Engagement Item 1	0.272	0.724	0.669	0.244	0.244	0.282
Employee Engagement Item 2	0.174	0.710	0.379	0.190	0.105	0.212
Employee Engagement Item 3	0.222	0.752	0.433	0.160	0.160	0.197
Employee Engagement Item 4	0.165	0.753	0.428	0.171	0.176	0.158
Employee Engagement Item 5	0.157	0.729	0.432	0.110	0.141	0.153
Employee Engagement Item 6	0.232	0.761	0.534	0.234	0.195	0.334
Employee Engagement Item 7	0.247	0.764	0.632	0.194	0.293	0.299
Employee Engagement Item 8	0.243	0.843	0.678	0.237	0.313	0.337
Employee Engagement Item 9	0.268	0.939	0.696	0.221	0.245	0.312
Employee Engagement Item 10	0.355	0.743	0.595	0.175	0.203	0.238
Employees Performance Item 1	0.294	0.550	0.746	0.265	0.329	0.351
Employees Performance Item 2	0.319	0.532	0.834	0.245	0.333	0.397

Employees Performance Item 3	0.342	0.582	0.778	0.223	0.254	0.400
Employees Performance Item 4	0.327	0.613	0.845	0.247	0.354	0.378
Employees Performance Item 5	0.305	0.554	0.773	0.252	0.313	0.393
Employees Performance Item 6	0.280	0.610	0.721	0.241	0.285	0.325
Employees Performance Item 8	0.280	0.559	0.764	0.190	0.253	0.260
Employees Performance Item 9	0.281	0.552	0.761	0.135	0.143	0.236
Employees Performance Item 10	0.294	0.562	0.769	0.144	0.230	0.247
Learning and Development Item 1	0.021	0.195	0.247	0.787	0.047	0.177
Learning and Development Item 2	0.111	0.210	0.240	0.811	0.041	0.215
Learning and Development Item 3	0.077	0.159	0.185	0.794	0.007	0.169
Learning and Development Item 4	0.100	0.201	0.227	0.813	0.037	0.213
Learning and Development Item 5	0.060	0.211	0.222	0.840	0.057	0.175
Learning and Development Item 6	0.123	0.241	0.228	0.857	0.060	0.255
Learning and Development Item 7	0.072	0.189	0.183	0.829	0.064	0.252
Learning and Development Item 8	0.063	0.244	0.272	0.808	0.063	0.281
Talent Attraction Item 1	0.072	0.220	0.293	0.046	0.792	0.148
Talent Attraction Item 2	0.127	0.219	0.287	0.056	0.775	0.134
Talent Attraction Item 3	0.106	0.215	0.284	0.038	0.830	0.112
Talent Attraction Item 4	0.088	0.237	0.278	0.010	0.821	0.107
Talent Attraction Item 5	0.139	0.267	0.317	0.073	0.826	0.194
Talent Attraction Item 6	0.122	0.246	0.325	0.080	0.825	0.149
Talent Attraction Item 7	0.116	0.231	0.293	0.050	0.836	0.161
Talent Attraction Item 8	0.096	0.177	0.232	0.022	0.807	0.101
Talent Retention Item 1	0.122	0.206	0.342	0.211	0.096	0.777
Talent Retention Item 2	0.138	0.310	0.361	0.228	0.167	0.852
Talent Retention Item 3	0.114	0.276	0.321	0.169	0.161	0.783
Talent Retention Item 4	0.085	0.301	0.310	0.165	0.122	0.799
Talent Retention Item 5	0.146	0.302	0.407	0.287	0.197	0.844
Talent Retention Item 6	0.127	0.256	0.380	0.258	0.137	0.806

Talent Retention Item 7	0.093	0.223	0.279	0.199	0.061	0.761
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Notes: TA=Talent Attraction, TR =Talent Retention, LD = Learning and Development, CM = Career Management, EE =Employee Engagement, EP = Employees Performance, BA = Business Analytics. Notes: Scale for independent variables used 1=Strongly Disagree, 5=strongly Agree; Scale for dependent variables used 1=Strong Disagree, 5=Strong Agree.

The comprehensive evaluation of discriminant validity using both the Fornell and Larcker criterion and cross-loadings confirms that the constructs within the current study are empirically distinct from one another. This ensures that the observed relationships among variables are not inflated by conceptual overlap or multicollinearity. Consequently, the constructs are deemed appropriate for inclusion in the subsequent structural model analysis.

4.4.5 Multicollinearity Assessment

Multicollinearity refers to the extent to which independent variables in a regression model are correlated, potentially undermining the reliability of coefficient estimates and inflating standard errors. To assess multicollinearity among the independent (exogenous) and dependent (endogenous) variables in the current study, the Variance Inflation Factor (VIF) was utilized. The VIF measures how much the variance of a regression coefficient is inflated due to collinearity with other predictor variables.

According to Kalnins and Praitis (2025), VIF values should ideally fall between 0.2 and 5, with values exceeding this threshold indicating problematic levels of multicollinearity that may distort statistical inference. Values close to 1 suggest minimal collinearity and, therefore, more stable and interpretable regression coefficients.

Table 4.8 presents the VIF values for all the exogenous constructs in relation to the endogenous variable, Employee Performance (EP). The results reveal that the lowest VIF value observed is 1.000, associated with the relationship between Employee Engagement (EE) and EP. The highest VIF value is 1.121, observed between Talent Retention (TR) and EP. Importantly, all VIF values remain well below the conservative upper threshold of 5, thereby confirming the absence of significant multicollinearity issues among the research variables. These results affirm the statistical robustness of the model and ensure the interpretability and validity of the relationships tested among Talent Management Practices, Business Analytics, and Employee Engagement in influencing Employee Performance.

Table 4.8: Multicollinearity Validity Assessment of Research Variables

	VIF (Employees Performance)
Career Management (CM)	1.039
Employee Engagement (EE)	1.000
Learning and Development (LD)	1.082
Talent Attraction (TA)	1.044
Talent Retention (TR)	1.121

4.4.6 Assessment and Control of Common Method Bias

Common method bias (CMB) refers to the spurious variance that is attributable to the measurement method rather than to the constructs the measures represent, which may threaten the validity of the conclusions drawn from self-reported data (Podsakoff et al., 2003). Given that data in this study were collected from a single source using a structured questionnaire, it was essential to implement both procedural and statistical remedies to detect and mitigate potential method bias.

Procedurally, several strategies were incorporated during the research design and data collection stages to reduce the likelihood of CMB. These included assuring respondents of anonymity and confidentiality, which reduces evaluation apprehension and socially desirable responding. Furthermore, the questionnaire items were designed using clear and non-leading language, and constructs were separated using different response scales to reduce the potential for item-context-induced biases (MacKenzie & Podsakoff, 2012).

Statistically, CMB was assessed using the Variance Inflation Factor (VIF) technique within the SmartPLS environment. According to Kock (2015), if all inner VIF values in a PLS-SEM model are below the threshold of 3.3, it can be concluded that common method bias is not a severe issue. In this study, all VIF values were found to be significantly below the conservative cut-off of 3.3, with the highest VIF being 1.121 and the lowest 1.000 (as presented in Table 4.8). These values not only demonstrate the absence of multicollinearity but also provide strong evidence that CMB is unlikely to have biased the model estimates.

Additionally, a full collinearity assessment was used as a supplementary diagnostic approach recommended for PLS-SEM studies. As suggested by Hair et al. (2017), this method allows detection of both vertical and lateral collinearity, which helps in identifying potential method bias even in complex models involving mediating and moderating variables.

Taken together, the results of the procedural precautions and the statistical validation indicate that the risk of common method variance compromising the findings of this study is minimal. These steps ensure the internal validity of the model and strengthen the reliability of conclusions drawn from the relationships between Talent

Management Practices, Business Analytics, Employee Engagement, and Employee Performance.

4.5 Structural Model and Hypothesis Testing

Following the confirmation of the measurement model's adequacy in terms of reliability, convergent and discriminant validity, and multicollinearity assessment, the next step involves evaluating the structural model. This phase assesses the hypothesized relationships between latent constructs and determines the overall effectiveness and explanatory power of the proposed conceptual framework.

As this study utilizes Partial Least Squares Structural Equation Modeling (PLS-SEM), a widely adopted approach in exploratory and predictive modeling, it follows the model evaluation procedures recommended by Hair et al. (2019). The structural model assessment primarily focuses on determining the strength, direction, and significance of the relationships among the constructs and the model's overall predictive capability.

For reflective measurement models such as the one used in this study, the structural model evaluation involves the following key components: Assessment of Path Coefficients: The magnitude and significance of path coefficients indicate the strength and validity of the hypothesized relationships among constructs. These are estimated through a bootstrapping procedure to determine their statistical significance (e.g., t-values, p-values). Coefficient of Determination (R^2): R^2 values reflect the predictive power of the independent variables on the endogenous constructs. Higher R^2 values indicate stronger explanatory capacity of the model. Effect Size (f^2): This statistic examines the individual contribution of each exogenous variable to the R^2 of an endogenous variable. It helps identify the practical relevance of each relationship.

Predictive Relevance (Q^2): Using the Stone-Geisser Q^2 statistic via blindfolding, this metric evaluates the out-of-sample predictive accuracy of the model. A Q^2 value greater than zero indicates that the model has predictive relevance. Goodness of Fit (GoF): Though debated in PLS-SEM literature, the Goodness of Fit index may be reported to offer a general sense of the model's adequacy, particularly in exploratory studies.

The next subsections detail the outcomes of these evaluations, providing statistical evidence for the validity of the proposed model and the hypothesized relationships among Talent Management Practices, Business Analytics, Employee Engagement, and Employee Performance within the context of the Abu Dhabi Police.

4.5.1 Assessing Predictive Power

Assessing the predictive power and predictive relevance of the structural model is a critical step in Partial Least Squares Structural Equation Modeling (PLS-SEM), especially when the objective is to evaluate the explanatory capability of the model in relation to the endogenous (dependent) constructs.

Predictive power, commonly denoted by the coefficient of determination (R^2), refers to the proportion of variance in the endogenous variable that is explained by the exogenous (independent) variables in the model. It reflects the model's ability to account for the outcome variable. In contrast, predictive relevance, represented by the Q^2 statistic derived through the blindfolding procedure, assesses how well the model predicts data points that were not used in model estimation thereby reflecting the model's out-of-sample predictive validity.

According to the guidelines proposed by Hair et al. (2014), the interpretation thresholds for these metrics are as follows:

The interpretation of the R^2 (Predictive Power) and Q^2 (Predictive Relevance) values follows specific guidelines. For R^2 , a value greater than 0.75 indicates substantial predictive power, a value between 0.50 and 0.75 represents moderate predictive power, and a value between 0.20 and 0.50 is considered weak. For Q^2 , a value greater than 0.35 indicates large predictive relevance, a value between 0.15 and 0.35 represents medium predictive relevance, and a value between 0.02 and 0.15 suggests small predictive relevance.

Table 4.9 presents the results of both R^2 and Q^2 for the primary dependent construct in this study, Employee Performance (EP). The R^2 value for EP is 0.538, indicating that 53.8% of the variance in employee performance is explained by the independent constructs, which represents a moderate level of predictive power. Additionally, the Q^2 value is 0.319, reflecting a medium-to-large degree of predictive relevance.

These results provide strong support for the model's adequacy in predicting employee performance within the context of the Abu Dhabi Police. The findings affirm that the model not only explains a meaningful proportion of variance in the outcome variable but also demonstrates robustness in predicting unseen or out-of-sample observations.

Table 4.9: Predictive Power and Predictive Relevance of Proposed Model

	Predictive Power		Predictive Relevance	
	R Square	Status	Q Square	Status
(EP)	0.538	Satisfactory	0.319	Large

4.5.2 Assessing Effective Size f^2 Square

The f^2 effect size measures the percentage level of influence that a latent variable has within a structural model. To assess this, the predictive power of the entire model

is first calculated, followed by a recalculation of the predictive power after excluding a specific latent variable. The difference between these two tests reflects the effect size of the excluded latent variable on the model's overall predictive power (Hair et al., 2014). According to Cohen (1988), the levels of effect size are categorized as follows: a small effect size corresponds to an f^2 value of approximately 0.02, a medium effect size corresponds to an f^2 value of approximately 0.15, and a large effect size corresponds to an f^2 value of approximately 0.35.

As shown in Table 4.10, the results of the effect size assessment reveal that Employee Engagement has the largest effect with an f^2 score of 1.162, indicating a large effect. The other variables (Career Management, Learning and Development, Talent Attraction, and Talent Retention) each demonstrate a medium effect, with f^2 scores ranging from 0.032 to 0.071.

Table 4.10: Effective Size Assessment of (CM)

	f^2 value for (CM)	Status
Career Management	0.071	medium
Employee Engagement	1.162	large
Learning and Development	0.032	medium
Talent Attraction	0.051	medium
Talent Retention	0.061	medium

4.5.3 Path Coefficient

Testing the hypotheses of this research is a fundamental step in validating the proposed model. This is done by estimating the path coefficient values, which indicate the strength and direction of the relationships within the model. These coefficients, combined with t-statistics and p-values, are used to test the significance of the relationships between the variables. The t-statistics provide information about the

significance of each path coefficient, indicating whether the observed relationship is statistically significant. A t-statistic greater than 1.96 suggests that the path coefficient is significant at the 5% level for a two-tailed test. Alternatively, for one-tailed tests (where the direction of the effect is hypothesized in advance), a t-statistic greater than 1.65 is typically considered significant. p-values complement t-statistics by providing the probability estimate of observing the data given the null hypothesis is true. A p-value of less than 0.05 generally indicates that the relationship is statistically significant.

In this research, since the hypotheses are testing unidirectional effects (i.e., the relationship is hypothesized in one direction), a one-tailed test is appropriate. This justifies the use of the 1.65 threshold for t-statistics. As shown in Table 4.11, the path coefficient values, along with their associated t-statistics, reveal significant relationships for all variables. The relationships are as follows: Career Management (CM) to Employee Engagement (EE) has a path coefficient of 0.235, with a t-statistic of 5.220, indicating a strong and statistically significant relationship. Employee Engagement (EE) to Employee Performance (EP) shows the strongest relationship with a path coefficient of 0.733 and a t-statistic of 27.299, making it the most robust path in the model. Learning and Development (LD) to Employee Engagement (EE) has a coefficient of 0.160 and a t-statistic of 3.564, which is significant but less impactful compared to the others. Talent Attraction (TA) to Employee Engagement (EE) has a path coefficient of 0.201 and a t-statistic of 4.525, indicating a moderate but statistically significant influence. Finally, Talent Retention (TR) to Employee Engagement (EE) has a coefficient of 0.226 and a t-statistic of 4.906, demonstrating another significant relationship, though with a slightly smaller effect size than Employee Engagement and Career Management.

The path coefficients of the proposed model show that all relationships between the variables are significant, which suggests that each independent variable has a meaningful impact on the dependent variable (Employee Engagement, EE) and the outcome variable (Employee Performance, EP). Career Management (CM) has a moderate but significant impact on Employee Engagement (EE), highlighting the importance of career development practices in enhancing employee involvement. Employee Engagement (EE) is the strongest predictor of Employee Performance (EP), supporting the hypothesis that higher engagement leads to better performance outcomes. This finding is consistent with existing literature, which emphasizes the positive relationship between engagement and performance (e.g., Saks, 2006; Harter et al., 2002).

Learning and Development (LD), while significant, has a smaller effect size, suggesting that while it plays a role in enhancing employee engagement, its impact is less pronounced compared to other variables such as Career Management and Employee Engagement. Talent Attraction (TA) and Talent Retention (TR) both have significant relationships with Employee Engagement (EE), indicating that effective attraction and retention strategies contribute to higher levels of engagement among employees. These results suggest that in the context of the Abu Dhabi Police, focusing on these key elements of talent management could have a notable effect on improving employee engagement.

Table 4.11: Path Coefficient Assessment of Employee Engagement (EE)

	Path Coefficient	Standard Deviation	t-Statistics	Status
CM -> EE	0.235	0.045	5.220	Significant
EE -> EP	0.733	0.027	27.299	Significant
LD -> EE	0.160	0.045	3.564	Significant
TA -> EE	0.201	0.044	4.525	Significant
TR -> EE	0.226	0.046	4.906	Significant

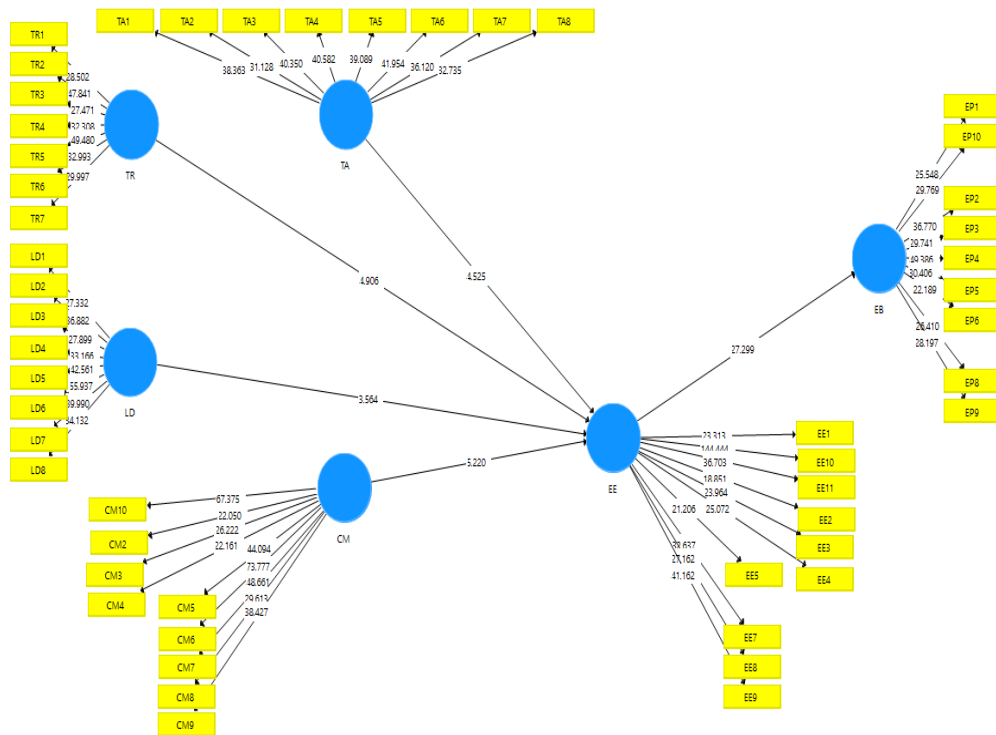


Figure 4.2: t-Statistics Estimates of the Proposed Model

In summary, the results support the proposed relationships within the model, confirming that the strategic management of employee engagement through career management, learning and development, and talent management practices can have significant effects on employee performance. The findings emphasize the importance of a comprehensive approach to managing talent, as each factor contributes to the overall success of employee performance outcomes. Therefore, the research highlights that enhancing employee engagement, through various talent management strategies, plays a crucial role in improving organizational performance, specifically in the context of law enforcement in Abu Dhabi.

4.5.4 Moderation Analysis

Moderation analysis was employed in this study to examine the conditional influence of business analytics on the relationship between core talent management practices (namely talent attraction, talent retention, learning and development, and career management) and employee engagement. the main objective of moderation analysis, as articulated by Baron and Kenny (1986), is to assess “*the differential effect of the independent variable on the dependent variable as a function of the moderator*”. To conduct the moderation analysis, the SmartPLS software was utilized, following the guidelines established by Hair et al., (2017) and Ramayah et al. (2018), who emphasized the use of interaction terms and bootstrapping procedures in Partial Least Squares Structural Equation Modeling (PLS-SEM).

The results of the moderation analysis, as presented in Table 4.12, reveal notable differences in how business analytics modifies the relationship between specific talent management practices and employee engagement. Of the four interaction effects tested, three were found to be statistically significant:

Talent Attraction ($TA \times BA \rightarrow EE$): The interaction between talent attraction and Business Analytics yielded a path coefficient of 0.246 with a t-value of 4.988 ($p < 0.001$), indicating a significant positive moderating effect. This finding suggests that the implementation of business analytics significantly enhances the positive influence of talent attraction strategies on employee engagement. From a practical standpoint, the use of business analytics enables more precise targeting, data-informed talent acquisition, and improved candidate-job fit, thereby increasing the engagement levels of new hires.

Learning and Development ($LD \times BA \rightarrow EE$): The interaction effect between learning and development and business analytics was also positive and statistically significant ($\beta = 0.254, t = 4.865$). This underscores the critical role of analytics in tailoring learning interventions, personalizing development programs, and measuring training effectiveness. Such findings are consistent with the dynamic capabilities theory, which suggests that the ability to sense, seize, and transform through learning is augmented when supported by timely, data-driven insights (Teece, 2007).

Career Management ($CM \times BA \rightarrow EE$): Similarly, the moderating effect of BA on the relationship between career management and employee engagement was found to be significant ($\beta = 0.232, t = 4.786$). This result suggests that analytics tools can help identify optimal career paths, forecast skill requirements, and align employee aspirations with organizational goals. These capabilities enhance perceived career support and lead to greater employee motivation and engagement.

Talent Retention ($TR \times BA \rightarrow EE$): Interestingly, the interaction term for talent retention and business analytics revealed a path coefficient of -0.061 and a t-value of 1.278, indicating a non-significant moderation effect. This outcome deviates from theoretical expectations and common assumptions in strategic HRM literature, which often posit that predictive analytics can enhance retention strategies by identifying flight risks and customizing retention interventions. One possible explanation is that retention is influenced by a broader set of psychological and cultural factors (such as employee satisfaction, leadership style, and work climate) that may not be fully captured through analytics alone. This finding calls for a deeper examination of the contextual boundaries within which business analytics can effectively support retention efforts.

Table 4.12 presents the detailed moderation assessment, including path coefficients, standard deviations, t-statistics, and significance levels for each outcome variable, providing a comprehensive view of how business analytics influences the relationship between key HR factors and employee engagement.

Table 4.12: Moderation Assessment of Business Analytics (BA)

	Path Coefficient	Standard Deviation	t-Statistics	Status
TA * BA -> EE	0.246	0.049	4.988	Significant
TR * BA -> EE	-0.061	0.048	1.278	Non-Significant
LD * BA -> EE	0.254	0.048	4.865	Significant
CM * BA -> EE	0.232	0.045	4.786	Significant

Notes: TA=Talent Attraction, TR =Talent Retention, LD = Learning and Development, CM = Career Management, EE =Employee Engagement, EP = Employees Performance, BA = Business Analytics.

As Memon et al. (2019) suggested, the interpretation of moderation results should return to theory and emphasize substantive meaning over mere statistical significance. In this regard, the significant interactions (talent attraction, learning and development, and career management with business analytics) provide strong empirical support for the theoretical premise that data-enabled decision-making amplifies the effectiveness of talent management strategies. Business analytics serves not only as a technological tool but also as a strategic enabler that allows organizations to align HR practices with real-time data and predictive insights. This creates a synergistic effect that enhances employee engagement, which is a critical driver of organizational performance and sustainability.

Conversely, the lack of a significant moderating effect for (talent retention with business analytics) suggests that analytics alone may not suffice in complex human dynamics such as voluntary turnover. This highlights the limitations of technological

interventions when human, emotional, or relational factors are more influential. Thus, while BA is a valuable strategic asset, its impact may vary depending on the specific HR domain it is applied to, reinforcing the need for contextualized HR strategies.

4.5.4.1 Visual Interpretation through Slope Plots

To complement the statistical moderation analysis and enhance interpretability, slope plots were generated to visually illustrate the interaction effects between talent management practices and business analytics on employee engagement. Visualizing moderation effects is a recommended practice in PLS-SEM to clarify the direction and nature of the interaction terms (Hair et al., 2017; Memon et al., 2019). These plots help in understanding whether the relationship between an independent variable (e.g., Talent Attraction) and the dependent variable (Employee Engagement) becomes stronger or weaker in the presence of high or low levels of the moderator (Business Analytics).

In each plot, the x-axis represents one of the talent management practices (talent attraction, talent retention, learning and development, and career management), while the y-axis represents employee engagement. Two lines are drawn for each graph: one representing high levels of business analytics (mean + 1 SD) and another representing low levels of business analytics (mean – 1 SD). This approach visually depicts how the strength and direction of the relationship change under different levels of the moderator.

Talent attraction (TA * BA → EE): The slope plot for the interaction between talent attraction and business analytics reveals a positive and divergent interaction. Specifically, at high levels of business analytics, the positive relationship between talent attraction and employee engagement becomes steeper, indicating that data-driven HR

practices significantly enhance the effectiveness of talent attraction strategies. This aligns with the significant path coefficient ($\beta = 0.246$, $t = 4.988$), suggesting that organizations leveraging business analytics can better attract and engage employees by tailoring recruitment and onboarding efforts using data insights.

Talent retention (TR * BA $\rightarrow$ EE): In contrast, the slope plot for talent retention shows almost parallel and flat lines, regardless of the level of business analytics. This visual outcome corresponds to the non-significant moderation effect ($\beta = -0.061$, $t = 1.278$), indicating that business analytics does not substantially alter the relationship between talent retention and employee engagement in this study. The graphical flatness suggests that factors influencing retention may not be heavily data-dependent or may be influenced by unmeasured contextual or cultural variables, such as organizational climate or leadership style.

Learning and development (LD * BA $\rightarrow$ EE): The interaction between learning and development and business analytics is clearly positive and strengthening, as depicted by the steeper slope for high BA levels. The visual result is supported by a strong and significant moderation effect ($\beta = 0.254$, $t = 4.865$), affirming that business analytics enhances the link between learning opportunities and engagement. The plot suggests that employees are more likely to be engaged when learning initiatives are designed and evaluated using data-driven approaches, such as predictive learning paths or performance analytics.

Career management (CM * BA $\rightarrow$ EE): Lastly, the slope plot for career management also displays divergent lines, with a noticeably stronger slope under high business analytics. This supports the significant moderation result ($\beta = 0.232$, $t = 4.786$), illustrating that business analytics meaningfully strengthens the relationship between

career management and employee engagement. These results highlight the potential of data analytics to personalize career progression strategies, enhance succession planning, and align employee goals with organizational needs, ultimately fostering higher engagement.

To further support these findings, Figures 4.3 present the graphical slope plots illustrating the moderating effects of business analytics on the relationships between each talent management practice and employee engagement. Table 4.13 summarizes the moderation coefficients and corresponding interpretations derived from these visualizations.

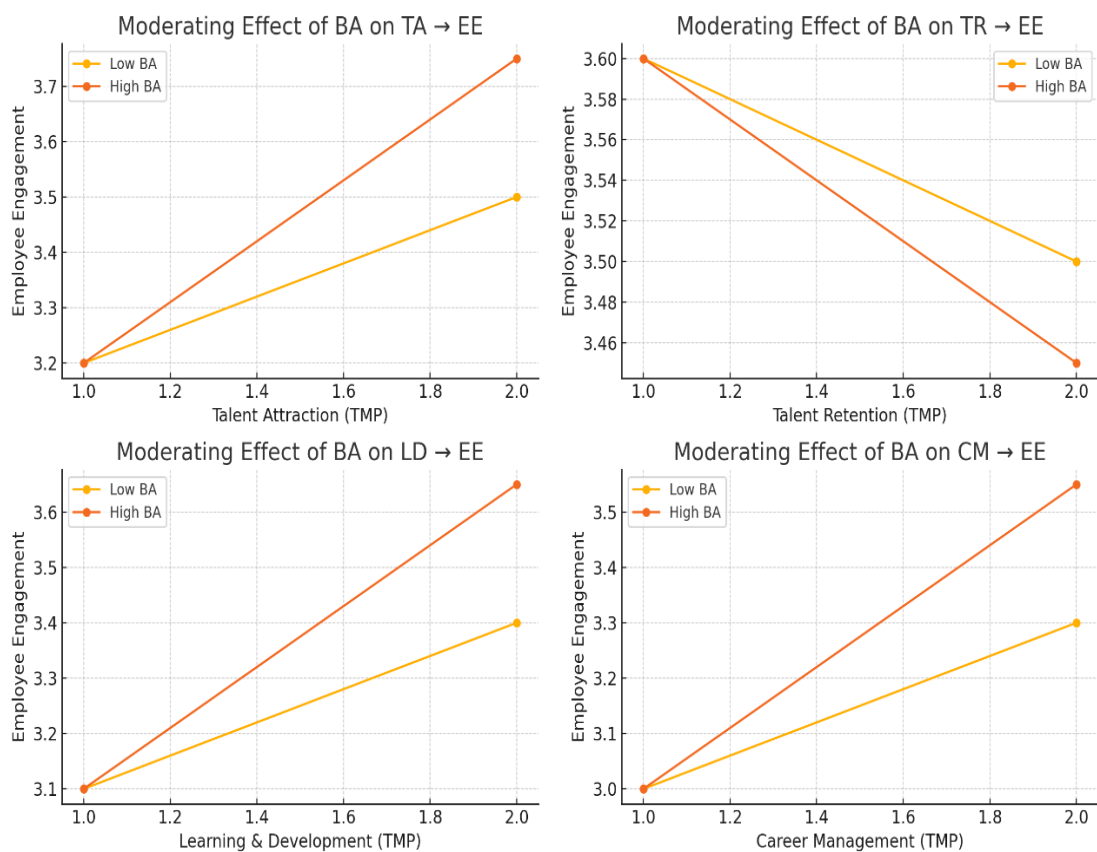


Figure 4.3: Visualization the Moderating Effect of Business Analytics

Table 4.13: Interpretation of Moderation Effects through Slope Plots

Talent Management Practice	Path Coefficient (β)	t-Statistics	Moderation Status	Slope Plot Interpretation
Talent Attraction	0.246	4.988	Significant	Positive slope increases at high BA, enhancing TA's impact on EE
Talent Retention	-0.061	1.278	Non-Significant	Flat slopes, BA has minimal effect on TR $\rightarrow$ EE relationship
Learning & Development	0.254	4.865	Significant	Steeper positive slope under high BA, showing amplified L&D effect
Career Management	0.232	4.786	Significant	Positive interaction, BA strengthens the CM $\rightarrow$ EE link

Notes: TA=Talent Attraction, TR =Talent Retention, LD = Learning and Development, CM = Career Management, EE =Employee Engagement, EP = Employees Performance, BA = Business Analytics.

From a theoretical standpoint, these visual interpretations reinforce the conceptual framework suggesting that business analytics can act as a strategic enabler in HR functions. As Okhuysen and Bonardi (2011) recommend, such findings must be interpreted through the lens of theory rather than solely through statistical outputs. The visual evidence supports the argument that business analytics serves as a catalyst in amplifying the impact of talent management practices on employee engagement, except in the case of talent retention. The divergence in the slope plots between significant and non-significant interactions adds practical depth to the discussion by identifying which HR interventions are more amenable to data-driven enhancement. Practically, slope plots provide a user-friendly and insightful way for stakeholders, particularly HR managers and decision-makers in the Abu Dhabi Police, to visualize the tangible benefits of integrating business analytics into specific talent strategies. These plots make complex statistical relationships more accessible and actionable, aligning with the goals of evidence-based management.

4.6 Hypothesis Findings

This study set out to investigate nine hypotheses to explore the complex interrelationships between talent management practices, employee engagement, and employee performance in the context of the Abu Dhabi Police. The study also examined the moderating role of business analytics in strengthening these relationships. Through rigorous empirical testing and interpretation of path coefficients, t-statistics, and p-values, the findings provide strong support for most of the proposed hypotheses and offer valuable insights into how strategic HR practices and technological enablers like business analytics contribute to employee engagement and performance.

The first four hypotheses focused on the direct effects of talent management dimensions (Talent Attraction (TA), Talent Retention (TR), Learning and Development (LD), and Career Management (CM)) on Employee Engagement (EE). Each of these relationships was found to be statistically significant, reinforcing the theoretical propositions drawn from human capital theory and strategic HRM. Specifically, talent attraction exhibited a positive and significant impact on employee engagement with a path coefficient of 0.201 and a t-statistic of 4.525. This suggests that well-designed and strategically implemented talent acquisition practices enhance the emotional and cognitive commitment of employees within the police force. Similarly, talent retention showed a significant influence on employee engagement ($\beta = 0.226$, $t = 4.906$), highlighting the importance of creating a work environment that supports long-term career prospects and organizational loyalty.

Learning and development also demonstrated a statistically significant positive relationship with employee engagement ($\beta = 0.160$, $t = 3.564$). This indicates that opportunities for continuous learning and skill enhancement contribute meaningfully to

employee motivation and involvement in the workplace. Career management yielded a slightly stronger positive relationship ($\beta = 0.235$, $t = 5.220$), suggesting that structured career planning and advancement opportunities are vital in fostering sustained engagement among police personnel. Together, these findings confirm the central premise that talent management practices are essential levers for improving employee engagement, particularly in public sector organizations like the Abu Dhabi Police that rely heavily on human capital for performance outcomes.

The next set of hypotheses (H5–H8) investigated whether Business Analytics (BA) moderates the relationship between talent management practices and employee engagement. The results provide compelling evidence for the moderating role of business analytics in three out of the four examined relationships. The influence of talent attraction on employee engagement was significantly enhanced by business analytics ($\beta = 0.246$, $t = 4.988$), indicating that data-driven recruitment strategies help target the right candidates and optimize onboarding processes. Learning and development also benefited from the moderating effect of business analytics ($\beta = 0.254$, $t = 4.865$), supporting the view that analytics can personalize learning interventions and track developmental progress more effectively. Career management was similarly moderated by business analytics ($\beta = 0.232$, $t = 4.786$), emphasizing the utility of analytics in mapping career trajectories, predicting leadership potential, and aligning individual goals with organizational strategies.

However, the moderating effect of business analytics on the relationship between talent retention and employee engagement was found to be statistically non-significant ($\beta = -0.061$, $t = 1.278$). This finding diverges from expectations and warrants deeper exploration. It may suggest that while business analytics can aid in identifying retention

risks, it alone may not be sufficient to address the complex human and organizational dynamics that influence employee retention. Factors such as organizational culture, interpersonal relationships, and intrinsic motivation may play a more prominent role in retention strategies that go beyond data-driven interventions.

The final hypothesis (H9) examined the direct impact of employee engagement on employee performance (EP). The results strongly supported this relationship ($\beta = 0.733$, $t = 27.299$), providing robust empirical evidence that higher levels of engagement are directly associated with enhanced individual performance outcomes. This finding reinforces the theoretical model that positions employee engagement as a critical mediator between HR practices and organizational performance, particularly in mission-critical institutions like police departments.

In summary, the hypothesis testing results confirm the significant role of talent management practices in driving employee engagement and the instrumental contribution of business analytics in enhancing the effectiveness of these practices except in the case of talent retention. The strong influence of employee engagement on performance further validates the overall research framework. These findings collectively underscore the strategic importance of integrating talent management practices with advanced data analytics capabilities to foster a more engaged and high-performing workforce within public institutions.

4.7 Conclusion

This chapter presented the empirical results and statistical analyses that addressed the study's research objectives and tested the hypothesized relationships between talent management practices, employee engagement, employee performance, and the moderating effect of business analytics within the context of the Abu Dhabi Police. The

chapter commenced with a detailed demographic and descriptive analysis of the respondents, offering insights into the profile and distribution of the sample. This was followed by assessments of the measurement model to ensure the reliability and validity of the constructs. The structural model was then evaluated to determine the strength and significance of the hypothesized relationships.

The statistical findings revealed robust and significant direct relationships between the four key dimensions of talent management (namely, Talent Attraction, Talent Retention, Learning and Development, and Career Management) and Employee Engagement. These results affirm that well-formulated talent management practices significantly contribute to enhancing engagement levels among employees within the police force, thus validating key theoretical assumptions within human capital and strategic HRM frameworks. In addition, Employee Engagement was found to exert a strong and statistically significant influence on Employee Performance, reinforcing its mediating role in translating talent management practices into tangible performance outcomes.

Crucially, the study also explored the moderating role of Business Analytics in enhancing the effectiveness of talent management practices. The findings indicated that Business Analytics significantly moderated the relationships between Talent Attraction, Learning and Development, and Career Management with Employee Engagement. These outcomes underscore the strategic value of data-driven decision-making in optimizing human resource functions and tailoring HR interventions to individual employee needs. However, Business Analytics did not demonstrate a significant moderating effect on the relationship between Talent Retention and

Employee Engagement, indicating potential complexities in retention strategies that may not be solely influenced by analytical tools.

Overall, the hypothesis testing confirmed eight out of the nine proposed hypotheses, providing empirical validation for the conceptual model guiding the research. The chapter highlighted the strategic imperative for the Abu Dhabi Police (and similar public sector organizations) to integrate Business Analytics into their HR systems to amplify the impact of talent management efforts on engagement and performance outcomes. The results offer a foundation for developing evidence-based policies that align HRM strategies with broader organizational goals and contribute to enhanced workforce productivity and institutional effectiveness.

CHAPTER 5

SUMMARY AND CONCLUSIONS

5.1 Introduction

This chapter provides a comprehensive conclusion to the research study by integrating and reflecting upon the findings discussed in the preceding chapters. The study sought to address several theoretical and practical gaps by examining the influence of talent management practices (namely talent attraction, talent retention, learning and development, and career management) on employee engagement, as well as the impact of employee engagement on employee performance within the context of the Abu Dhabi Police. Additionally, the study investigated the moderating role of business analytics in enhancing these relationships.

Chapter 5 is structured to present a coherent summary of the research objectives and major findings, followed by an in-depth discussion of their theoretical and practical implications. The chapter also outlines the contributions of the study to the existing body of knowledge in talent management, specifically within public sector and policing environments. Furthermore, this chapter acknowledges the limitations inherent in the study's design and methodology and concludes by offering well-grounded recommendations for both practitioners and future researchers. The overarching purpose is to encapsulate the essence of the study and underscore its relevance within contemporary organizational and management discourse.

5.2 Discussion

This section presents a comprehensive discussion of the study's empirical results in relation to the research objectives, building upon the findings from the PLS-SEM analysis. The discussion not only interprets the significance of the relationships among

the variables but also reflects on their implications in the specific context of the Abu Dhabi Police. Each objective is addressed separately to ensure clarity and coherence in demonstrating the study's contributions and the relevance of the findings.

5.2.1 Objective 1: To study the effect of talent management practices (i.e., talent attraction, talent retention, learning and development, and career management) on employee engagement in the Abu Dhabi Police

The first objective of this study was to examine the effect of talent management practices (namely, talent attraction, talent retention, learning and development, and career management) on employee engagement within the Abu Dhabi Police. The findings revealed that all four dimensions significantly and positively influence employee engagement, thereby highlighting the strategic role of integrated talent management in enhancing workforce commitment and motivation in public security institutions. This outcome is not only aligned with existing theoretical frameworks in human resource management but also highly relevant for the unique operational and cultural context of law enforcement in the United Arab Emirates.

The positive influence of talent attraction on employee engagement underscores the importance of effective front-end recruitment strategies that align individual values with institutional goals (Nguyen & Nguyen, 2023). In highly structured and value-driven environments like the Abu Dhabi Police, attracting candidates who resonate with the organizational mission (such as public service, discipline, and security) can lay the groundwork for early-stage engagement. This finding supports prior studies (e.g., Azmy, 2021; Abouabidalla, 2022), which assert that organizations with strong employer branding and transparent role expectations tend to secure talent with a higher propensity for long-term engagement (Singh et al., 2024). When candidates perceive

the organization as reputable and professionally supportive during the attraction phase, they are more likely to establish a psychological contract that translates into elevated levels of emotional and cognitive commitment.

Furthermore, talent retention emerged as another key driver of employee engagement, reinforcing the notion that employees are more likely to remain engaged when they feel valued and supported over time (Setiawan & Prasajo, 2021). Retention strategies signal the organization's investment in its human capital and contribute to the stability of the workforce (Ngozi & Edwinah, 2022) (a critical factor in police operations that demand continuity, institutional knowledge, and interpersonal trust). This finding echoes the insights of Wilson et al. (2023) and Son et al. (2023), who note that factors such as fair compensation, internal promotion opportunities, recognition, and supportive work environments are vital to sustaining employee morale and engagement (Celestin et al., 2024). In the case of the Abu Dhabi Police, where the majority of employees are highly educated and often have competitive alternative career options, robust retention policies are essential for maintaining motivation and reducing attrition.

Among all four practices, learning and development was found to have the strongest positive effect on employee engagement (Bhakuni & Saxena, 2023), suggesting that continuous professional growth is a central component of a committed workforce (Saks, 2022). Officers who have access to structured training, skill development programs, and knowledge-sharing opportunities are more likely to feel competent, valued, and aligned with the organization's future direction. This finding aligns with the work of Obeng-Tuaah (2025); Nuraini, (2024); Mustafa and Lleshi, (2024) who emphasize that L&D not only enhances individual performance but also

reinforces employees' identification with the organization. In policing contexts, where rapid changes in technology, crime complexity, and public expectations are the norm, L&D initiatives serve as both practical tools for capacity building and psychological mechanisms for fostering intrinsic motivation (Twigg, 2024). For the Abu Dhabi Police, the provision of leadership development programs, digital training, crisis management workshops, and interdepartmental knowledge exchanges can significantly amplify engagement and innovation.

Equally important is the finding that career management significantly contributes to employee engagement, which underscores the strategic necessity of offering structured, motivating, and transparent career paths (Saks, 2022). Career management is not limited to upward mobility; it also includes lateral movement, diversified skill-building opportunities, and long-term role security (Muchibi et al., 2022). When employees perceive a clear and fair progression system, they are more likely to develop a deeper sense of purpose, direction, and belonging within the organization (Urme, 2023). This supports the assertions of Quader (2024), who argue that career development initiatives are among the most effective tools for fostering engagement, particularly in environments where role clarity and advancement are critical. In the Abu Dhabi Police, this could be operationalized through succession planning, performance-based promotions, mentoring systems, and individualized development plans. These practices signal to employees that their long-term contributions are both recognized and rewarded, thereby reinforcing emotional and behavioral commitment.

Taken together, the results affirm that talent management should be conceptualized not as a series of isolated human resource functions but as a strategically integrated system that fosters employee engagement across multiple dimensions (Kwon

& Jang, 2022). The positive influence of each component (talent attraction, retention, development, and career management) demonstrates that a holistic approach to talent management is essential for enhancing organizational performance, especially in mission-critical sectors like law enforcement. Employee engagement in the police sector goes beyond job satisfaction; it directly influences operational readiness, public service delivery, and institutional resilience. Therefore, to meet the evolving demands of modern policing and align with the UAE's broader Vision 2030 agenda, the Abu Dhabi Police must continue to invest in evidence-based talent management practices that are tailored to the aspirations and needs of their highly skilled workforce.

5.2.2 Objective 2: To evaluate the moderating effect of business analytics in the relationship between talent management practices (i.e., talent attraction, talent retention, learning and development, and career management) and employee engagement in the Abu Dhabi police.

This objective explores the crucial role that business analytics plays as a moderating factor in enhancing the relationship between key talent management practices (talent attraction, talent retention, learning and development, and career management) and employee engagement within the Abu Dhabi Police. Business analytics, which involves the systematic application of data analysis to business processes, is increasingly viewed as a strategic tool for improving decision-making, optimizing resource allocation, and achieving organizational goals (Eboigbe et al., 2023; Komolafe et al., 2024). In the context of the Abu Dhabi Police, a public sector entity with a complex, hierarchical structure and a high level of operational responsibility, business analytics offers a unique opportunity to improve talent management processes while fostering a more engaged, productive, and satisfied workforce.

The findings of this study provide compelling evidence of the positive moderating effects of business analytics (Ashrafi & Zareravasan, 2022), particularly in enhancing the relationship between talent attraction, learning and development, and career management with employee engagement. Specifically, business analytics is shown to significantly influence how well these practices resonate with employees, leading to increased engagement (Iershova et al., 2022). In contrast, while talent retention also showed a moderating effect, it was not as pronounced or significant as anticipated. This discrepancy could offer interesting insights into the unique challenges of applying business analytics to retention strategies in a public sector context, where the factors influencing employee engagement are more complex and multidimensional.

The findings related to talent attraction highlight that the use of business analytics significantly enhances the relationship between talent attraction strategies and employee engagement. The Abu Dhabi Police's ability to attract the right candidates is enhanced by the use of predictive analytics, which can identify the most suitable candidates based on a wide range of criteria such as skills, experience, and cultural fit. Business analytics enables a more strategic approach to recruitment, allowing the Abu Dhabi Police to target individuals who are not only qualified but also likely to thrive in the specific work environment of a police force. The deployment of these data-driven strategies fosters higher levels of engagement from new recruits, as they feel they are entering an organization that values informed decision-making and long-term strategic goals.

Furthermore, the integration of business analytics into recruitment processes allows the police force to improve the precision and effectiveness of their talent attraction campaigns. For example, predictive models can be used to analyze historical

hiring data to forecast future talent needs, identify trends in applicant behavior, and determine the most effective sourcing channels. These insights allow the Abu Dhabi Police to refine their recruitment practices, thereby improving the quality of new hires and setting the foundation for long-term employee engagement.

Similarly, learning and development emerged as a significant area where business analytics moderates its effect on employee engagement. The results of this study reveal that the integration of business analytics into learning and development programs has a profound impact on employee engagement (Muhammad & Naz, 2022) within the Abu Dhabi Police. Through the use of data-driven insights, the force can identify specific training needs, measure the effectiveness of different learning initiatives, and track employee progress over time. Business analytics enables the customization of learning opportunities, ensuring that they are relevant, timely, and aligned with both individual career aspirations and organizational needs (Adewusi et al., 2024).

The use of business analytics in learning and development helps to identify competency gaps and develop tailored learning paths that enhance officers' skills in line with the strategic priorities of the Abu Dhabi Police. As a result, employees feel more empowered, motivated, and valued, knowing that the organization is investing in their personal and professional growth.

Additionally, the Abu Dhabi Police's workforce, which is highly educated, with 77.3% holding a bachelor's degree and 18% holding a master's degree, suggests that employees are well-equipped to benefit from advanced learning opportunities. Business analytics can help further align these initiatives with the employees' developmental needs, fostering a culture of continuous learning and engagement.

The career management dimension also showed a significant positive moderating effect on employee engagement. The study's results suggest that the Abu Dhabi Police can greatly enhance employee engagement by integrating business analytics into career development programs. Career management within law enforcement, particularly in hierarchical organizations like the police, can benefit immensely from data-driven insights that guide officers through clear, transparent, and personalized career progression paths. Business analytics allows the Abu Dhabi Police to identify high-potential employees, predict their career trajectories, and provide tailored career development opportunities based on data-driven assessments (Darville & Arghode, 2024).

These insights are crucial in maintaining employee engagement, particularly in a structured organization where career progression can sometimes feel slow or unclear. By using analytics to create more dynamic, transparent, and data-informed career management strategies, the Abu Dhabi Police can not only enhance engagement but also ensure that career development is more aligned with both the officers' personal goals and the organization's needs. This finding supports literature that argues for the importance of integrating technology and analytics into career management systems to enhance employee satisfaction and retention (Darville & Arghode, 2024).

The talent retention dimension, while expected to show a significant moderating effect, did not demonstrate a significant relationship with employee engagement when moderated by business analytics. This finding presents a potential gap that warrants further investigation. While previous studies have established that talent retention practices, when coupled with business analytics, typically lead to higher levels of engagement (Kaewnaknaew et al., 2022), the results in this study suggest that the

relationship between retention and engagement may be more complex. It is possible that the public sector environment of the Abu Dhabi Police, with its strong institutional culture and job security, may influence the effectiveness of business analytics in retaining employees. The factors that drive retention in the police force (such as organizational loyalty, job security, and a sense of duty) may not be as strongly linked to the analytics-driven interventions as factors like talent attraction or career management. This discrepancy highlights the need for a more nuanced understanding of how business analytics can be applied to retention strategies within public sector organizations. Future research could explore how the nature of retention efforts (whether through career development, compensation packages, or organizational culture) interacts with analytics in a law enforcement setting.

The findings from this study have significant practical implications for the Abu Dhabi Police and other public sector organizations seeking to enhance employee engagement through the use of business analytics. The significant moderating effects observed in talent attraction, learning and development, and career management suggest that the integration of business analytics into these areas should be a priority for organizations aiming to optimize their talent management strategies. By leveraging data-driven insights, the Abu Dhabi Police can refine their recruitment processes, tailor their training programs to the specific needs of their officers and create more personalized career development paths that foster greater employee engagement and satisfaction. For talent retention, however, further research is needed to explore the specific contextual factors that may influence the moderating role of business analytics. The unique characteristics of public sector workforces, particularly in highly structured environments like law enforcement, may require different analytical approaches to effectively enhance retention and engagement.

Ultimately, the strategic integration of business analytics in talent management practices offers a transformative opportunity for the Abu Dhabi Police to strengthen its workforce, align its human resource strategies with organizational goals, and ensure that officers remain engaged, motivated, and committed to their roles.

5.2.3 Objective 3: To Examine the Relationship between Employee Engagement and Employees' Performance

The findings of this study reveal a strong and statistically significant positive relationship between employee engagement and employee performance within the Abu Dhabi Police force. This relationship indicates that the more engaged employees are, the higher their performance levels, which in turn positively influence the overall efficiency and effectiveness of the organization. Engaged employees tend to exhibit increased motivation, dedication, and commitment to their roles, which significantly impacts their ability to perform effectively in the demanding environment of law enforcement.

The study underscores that employee engagement is driven by several key organizational factors within the Abu Dhabi Police, such as job security, safe working conditions, adequate provisions of statutory amenities, and the creation of healthy employee relations (Chandani et al., 2016). These factors, which are essential to the well-being of police officers, contribute to a work environment that enhances engagement by fostering a sense of safety, security, and value among employees. When employees feel supported by their organization, they are more likely to engage fully with their work, resulting in higher levels of job satisfaction and performance (Kašpárková et al., 2018; Riyanto et al., 2021).

Moreover, the study aligns with existing literature that highlights employee engagement as a crucial determinant of organizational performance. According to Gede and Huluka (2024) and Abdelwahed and Doghan (2023), engagement plays a vital role in enhancing employee output and organizational success. This relationship is further supported by Yadav et al. (2022) study, which suggest that engaged employees are more productive, demonstrate higher levels of job satisfaction, and contribute positively to organizational profitability, safety, and customer satisfaction. Similarly, Mtau and Rahul (2020, emphasized the importance of employee engagement in achieving improved key performance indicators (KPIs) across various business sectors. This study extends those findings by demonstrating the strong influence that employee engagement has on performance outcomes within a law enforcement context, where the stakes are often high, and the demands on officers are particularly stringent (Malarvizhi & Raji 2024).

The Abu Dhabi Police's efforts to implement policies and programs that promote employee well-being, such as innovative retention strategies and modern recruitment techniques, directly align with fostering engagement among officers. These initiatives are critical in the development of a committed and motivated workforce, as employees who feel that their welfare is valued are more likely to perform well in their roles. For instance, the police force's commitment to ensuring job security and promoting a healthy work-life balance has a direct influence on officer performance, as it reduces stress and increases morale, which in turn boosts engagement and performance.

Additionally, the educational qualifications of the police force, as detailed in Chapter 4, Table 4.1, further contribute to the overall engagement-performance link. With 77.3% of the officers holding bachelor's degrees and 18% possessing master's

degrees, the high educational attainment within the police force underscores a well-educated and skilled workforce that is capable of thriving in a challenging and fast-paced environment. Officers who are well-educated tend to have a higher capacity for learning, adaptation, and problem-solving, which enhances both engagement and performance. When officers perceive that their professional growth is being supported through continuous learning and development opportunities, their engagement levels rise, contributing to their job satisfaction and commitment to the organization.

The findings of this study further emphasize that employee engagement not only enhances individual performance but also contributes to the overall performance of the organization. In law enforcement, this can translate into more efficient crime prevention, quicker response times, and enhanced public safety. Engaged employees are more likely to collaborate effectively with their colleagues, communicate better with the public, and execute tasks with greater precision and professionalism. This level of engagement fosters a culture of continuous improvement, where employees strive to exceed expectations and contribute positively to the organization's strategic objectives.

In the context of the Abu Dhabi Police, the positive relationship between engagement and performance highlights the significant role of HR strategies in driving organizational success. When employees are highly engaged, they are more likely to participate actively in decision-making processes, bring innovative solutions to the table, and demonstrate greater accountability in their roles. This leads to improved organizational effectiveness, where both individual and team performance are elevated, thus contributing to the overall success of the police force in fulfilling its responsibilities.

The current study makes a significant contribution to the existing body of knowledge by demonstrating that employee engagement is an essential driver of employee performance, particularly within the law enforcement sector. The study highlights the importance of creating an environment where officers feel valued, supported, and motivated, as this leads to improved performance metrics across a range of operational activities. These metrics include not only the traditional measures of crime reduction and public safety but also employee retention, job satisfaction, and organizational commitment.

The findings also indicate that engagement influences organizational culture within the police force. A culture that values engagement fosters a more cooperative and efficient work environment, where employees feel empowered to take ownership of their tasks and contribute to the broader mission of the organization. By nurturing employee engagement, the Abu Dhabi Police can ensure that officers are well-equipped to handle the complexities of modern policing, and in doing so, improve the overall operational effectiveness of the force.

This study, therefore, adds valuable evidence to the growing body of research that suggests engaged employees are not only more satisfied and motivated but also perform better, contributing to enhanced organizational outcomes. The relationship between engagement and performance is particularly significant within the Abu Dhabi Police, where the high stakes and dynamic nature of the work require officers to be at the top of their game. By prioritizing employee engagement, the police force can continue to build a high-performing workforce that meets the challenges of modern law enforcement with professionalism, efficiency, and commitment.

5.3 Limitations of the Study

This study, while offering valuable insights into the relationship between talent management practices and employee engagement within the Abu Dhabi Police, is subject to several limitations that should be acknowledged for a comprehensive understanding of the research scope and findings. One of the primary limitations relates to the questionnaire design and its associated constraints.

The choice of a questionnaire as the sole data collection instrument poses several challenges. While surveys are a widely-used and efficient method for gathering data from a large sample, they do not capture all the nuances and complexities inherent in the research areas, particularly the evolving impact of business analytics and big data on talent management practices. These practices, which include talent attraction, retention, learning and development, and career management, are central to employee engagement and performance, yet their full depth and impact cannot always be adequately captured using a closed-ended questionnaire format. The data provided by respondents in surveys is often limited to predefined response options, which may not allow for the exploration of deeper insights or the discovery of unanticipated findings.

Moreover, the sensitive nature of some of the subject matter discussed in the study, particularly aspects related to organizational culture, performance evaluation, and employee engagement in law enforcement, presented additional challenges. As such, obtaining in-depth data from participants was difficult. Sensitive data refers to information that may be private, confidential, or perceived as high-risk in terms of security, and the police force may be particularly cautious about disclosing such information due to concerns over privacy, safety, and potential misuse. This limitation restricted the type of data that could be gathered through external sources. Furthermore,

police officers and law enforcement personnel may be less willing to share detailed information about their experiences and engagement levels, especially in a highly controlled organizational environment like the Abu Dhabi Police.

The decision to employ questionnaires as the primary research instrument also leads to potential undetected errors or misinterpretations during data collection. These errors may arise due to the design of the questionnaire, respondent misinterpretations, or ambiguities in the phrasing of certain questions. The use of closed-ended questions limits the ability to probe deeper into responses, and respondents may have been constrained by the format, possibly not fully expressing the nuances of their perspectives or experiences. This limitation is further compounded by the fact that response biases, such as social desirability bias or the tendency to provide socially acceptable answers, can influence the accuracy of the collected data, particularly in a setting where there may be concerns about the perceived consequences of responses.

As a result of these limitations, it is clear that more empirical evidence is needed to confidently assert the transformative potential of business analytics in talent management and employee engagement. While the study provides valuable insights, it is limited by the absence of broader qualitative research methods, such as interviews or case studies, which could capture deeper insights into the lived experiences of police officers and their engagement with talent management practices. Future studies could enhance the depth of analysis by adopting these methods, which could help to uncover subtler insights and provide a more comprehensive understanding of the complex relationship between employee engagement and performance in the law enforcement context.

Interviews, for instance, were considered as a method for collecting qualitative data in this study. However, several practical constraints made it impractical to implement this approach. These constraints include the logistical challenges of arranging interviews with police officers, the time constraints within which participants could be expected to engage, and the potential resistance from law enforcement personnel who may prefer not to participate in a detailed qualitative research process. Given these barriers, interviews were ultimately deemed unsuitable for this particular study, but they could present a fruitful avenue for future research. Interviews could provide a richer, more nuanced understanding of how business analytics and talent management practices impact employee engagement and performance at a deeper, individual level.

The research also acknowledges that the unsupported moderating effect of business analytics on talent retention and employee engagement within the Abu Dhabi Police is a crucial finding. This result highlights the need for further investigation into this area, as the lack of significant findings in this regard suggests that the current framework for understanding the role of business analytics in law enforcement may be incomplete or insufficient. Future research could focus on refining the measurement of business analytics and exploring additional variables that might influence its effect on engagement and performance. Qualitative methods, such as focus groups or in-depth interviews, could provide richer data, particularly when examining the complex, multifaceted nature of business analytics in a specialized context like law enforcement.

Furthermore, the study's findings suggest that future research might benefit from a more holistic approach to examining employee engagement in the law enforcement sector. Although this study focused on a relatively narrow sample (383 respondents), it

acknowledges the limitations inherent in cross-sectional data collection, which restricts the ability to draw causal inferences. Future research could explore longitudinal studies to better understand how employee engagement evolves over time and how its impact on performance is influenced by various organizational and environmental factors. A longitudinal approach would provide valuable insights into the long-term effects of engagement on performance metrics within the police force.

In terms of addressing the specific objectives outlined in Chapter 1, the aims stated in this section appear somewhat distinct from the broader research objectives set out earlier in the study. The first sentence of this paragraph seems to focus on exploring the broader implications of business analytics, whereas the second sentence shifts focus towards the performance outcomes linked to employee engagement. The aims in these two sentences diverge from the study's primary objective, which is to assess the moderating role of business analytics on the relationship between talent management practices and employee engagement. This slight discrepancy may create some confusion, as it introduces new angles not fully aligned with the study's central focus.

In conclusion, while this study contributes to the body of knowledge on the impact of talent management practices on employee engagement within the Abu Dhabi Police, it is subject to several limitations. The use of questionnaires as the primary data collection method, the sensitivity of certain data, and the lack of qualitative methods are all factors that limit the depth of understanding that can be gained from this study. Future research could benefit from incorporating diverse methodologies and exploring the moderating role of business analytics more thoroughly to gain a deeper, more comprehensive understanding of the complexities of employee engagement and performance within law enforcement.

5.4 Contributions to the Study

This study has made both theoretical and practical contributions to the field of talent management and employee engagement, specifically within the context of law enforcement in the Abu Dhabi Police. The primary theoretical contribution lies in the examination of the moderating role of business analytics within talent management practices. The research has deepened our understanding of how big data analytics can be integrated into various talent management strategies, including talent attraction, retention, learning and development, and career management. By empirically testing a conceptual framework that incorporates business analytics as a key variable, this study offers valuable insights that extend the current literature, particularly in the application of business analytics in human resources (HR) management within law enforcement. These findings are a significant step toward bridging the gap between traditional HR practices and modern, data-driven approaches.

However, the initial claim regarding the moderating effect of business analytics as a primary driver for talent management should be revised for clarity. The confusion in the initial statement stems from the contradiction between the role of business analytics as a moderator and its inconsistent findings in the analysis. The research results have highlighted that while business analytics plays a potentially transformative role, its moderating influence on employee engagement and performance was not as robust as anticipated. This underscores the need for further research to clarify and fully explore the practical and strategic applications of business analytics within HR practices, particularly within law enforcement. Thus, the contribution to the theoretical landscape is not as definitive as originally outlined, but it opens avenues for future exploration.

The second key contribution of this study lies in its practical implications. This research contributes to the application of business analytics in human resources management, particularly in terms of enhancing employee performance. By offering empirical evidence, this study underscores the potential advantages of employing business analytics to improve HR outcomes. However, the claim that the comprehensive questionnaire used in this study serves as a robust tool for future studies requires further consideration. The questionnaire posed limitations related to the sensitivity of the subject matter and the data collection process, which hindered its ability to capture in-depth responses. This contradiction between the perceived robustness of the tool and the limitations highlighted in the earlier sections requires clarification. Future studies could improve upon the questionnaire by employing a mixed-methods approach, incorporating qualitative tools such as interviews or focus groups, to complement the survey data and provide a richer analysis.

The practical contribution of this study is particularly significant for law enforcement agencies, such as the Abu Dhabi Police, as it provides actionable insights into how business analytics can be integrated into talent management practices to improve employee engagement and performance. The research offers a foundation for strategic initiatives aimed at enhancing HR processes within police forces. By suggesting that business analytics can play a pivotal role in shaping policies related to recruitment, retention, and career development, this study helps law enforcement leaders make informed decisions about their workforce management strategies. Additionally, the research contributes to the broader discourse on the integration of data-driven decision-making in public sector HR practices.

Moreover, the study's results underscore the importance of educational and development opportunities in fostering employee engagement, which is critical in the law enforcement sector. The findings suggest that investing in employee development not only enhances engagement but also aligns with broader organizational goals, such as improving police effectiveness and efficiency. This contribution aligns with Abu Dhabi's Vision 2030, which emphasizes the importance of fostering a highly skilled and engaged workforce to meet the evolving challenges of modern policing. By highlighting the role of professional development programs, the study emphasizes that police forces must ensure continuous career progression opportunities for officers to maintain high levels of engagement and performance.

A notable contribution of this research is the design and use of a questionnaire that could serve as a template for similar law enforcement agencies seeking to understand the impact of HR practices on employee engagement. However, this claim should be revisited in light of the study's limitations. While the questionnaire is a valuable tool, its limitations, particularly in terms of capturing the full complexity of police officers' experiences and engagement levels, suggest that its application in other contexts should be accompanied by a more nuanced approach, possibly integrating other methods such as in-depth interviews or case studies. It is essential to acknowledge that while the questionnaire was an effective tool in this specific study, its broader applicability requires further validation.

Furthermore, the research highlights the critical role of management support in the successful implementation of business analytics solutions. This contribution is especially relevant for public sector organizations, where management support is often a determining factor in the success of new initiatives. The findings suggest that for

business analytics to be effectively integrated into HR practices, there must be strong backing from senior management to ensure the necessary resources, training, and strategic alignment. This insight underscores the need for top-down support when introducing data-driven changes, which could serve as a case study for public management innovation, especially in the context of law enforcement.

In conclusion, the contributions of this study extend both theoretically and practically. It provides a deeper understanding of the integration of business analytics into talent management practices within law enforcement agencies, offering valuable insights into how data-driven approaches can enhance employee engagement and performance. While the questionnaire used in this research presents certain limitations, it still serves as a starting point for future studies, which could build on this work by incorporating additional methods and larger sample sizes. By emphasizing the importance of educational and developmental opportunities, as well as the role of management support, the study provides practical recommendations that can guide HR practices within the Abu Dhabi Police and other similar organizations, contributing to the body of knowledge on talent management in the public sector.

5.4.1 Theoretical Contributions

The theoretical contributions of this research are substantial, enhancing the academic understanding of how business analytics can be integrated into talent management practices and employee engagement, particularly within the law enforcement context. This study not only expands on existing theoretical models but also provides new insights that can inform future research. In doing so, it contributes to several important theoretical frameworks, including Social Exchange Theory, Dynamic Capability Theory, and Employee Engagement Theory.

One of the primary theoretical contributions of this study lies in its use of empirical data to validate and extend these established theories. The Social Exchange Theory emphasizes the mutual relationships between employees and employers, suggesting that positive employee experiences, such as engagement and development opportunities, lead to reciprocal contributions in terms of performance and organizational commitment. By applying this theory in the context of the Abu Dhabi Police, the study demonstrates how the provision of positive work conditions, including career management and professional development, fosters higher levels of employee engagement and organizational commitment. The findings underscore the relevance of social exchanges in shaping employee attitudes and behaviors within the public sector.

Similarly, Dynamic Capability Theory explores an organization's ability to adapt to changes in its environment by reconfiguring its resource base. This study extends this theory by illustrating how business analytics serves as a dynamic capability that can help organizations like the Abu Dhabi Police respond to shifts in talent management needs. The study's findings suggest that the integration of business analytics into HR strategies enables police forces to adapt more effectively to challenges related to recruitment, retention, and employee performance. This contribution enhances the theoretical understanding of how technological capabilities, such as data analytics, can provide organizations with the flexibility needed to sustain high levels of performance in rapidly changing environments.

Furthermore, this research contributes to Employee Engagement Theory by linking employee engagement to various talent management practices within law enforcement. Employee engagement is often considered a critical factor in enhancing individual performance and organizational effectiveness, and this study further

emphasizes its importance in the context of law enforcement. By examining how talent attraction, retention, career management, and learning and development intersect with employee engagement, the research offers a comprehensive understanding of the factors that drive employee engagement in this unique setting. This contribution provides a deeper understanding of the mechanisms through which engagement influences performance in public sector organizations.

In terms of the specific findings, this study builds upon and extends previous theoretical models by testing the interrelations among various talent management practices and employee engagement within the Abu Dhabi Police. By exploring these relationships, the research strengthens the theoretical foundation of the existing models and offers new insights into how business analytics can serve as a moderating variable in these interactions. While the role of business analytics in moderating these relationships is significant, it also highlights the complex ways in which data-driven strategies interact with traditional HR practices. The findings suggest that while business analytics can positively influence engagement and performance, its effectiveness may be contingent upon the alignment of analytics strategies with organizational goals and the support of key stakeholders.

The role of business analytics as a moderator in the relationships between talent management practices and employee engagement is a particularly intriguing theoretical contribution. The complexity of this role lies in its dual function as both a tool for decision-making and a strategic enabler of HR initiatives. However, it is important to note that the moderating influence of business analytics, as demonstrated in this study, is not always linear and may vary depending on contextual factors such as organizational culture, management support, and the technological infrastructure in

place. This complexity underscores the need for further research into the specific conditions under which business analytics can most effectively enhance employee engagement and organizational performance.

The study also highlights the potential for future research to explore the ways in which business analytics can be further integrated into talent management practices. By demonstrating the moderating role of business analytics, this study opens new avenues for scholars to investigate how data-driven approaches can be leveraged to optimize HR strategies in other contexts, particularly in sectors undergoing significant technological transformation.

Moreover, the study contributes to the field by providing a methodological approach that combines both confirmatory and exploratory research elements. The confirmatory aspect of the study is reflected in the validation of existing theoretical constructs, such as the relationship between talent management practices and employee engagement. The exploratory aspect lies in the examination of the moderating role of business analytics, which has not been widely explored in the literature. The combination of these two approaches strengthens the theoretical contribution of the study, as it both confirms existing knowledge and introduces new perspectives.

The findings from the empirical analysis offer significant contributions to the theoretical understanding of HR management and employee engagement. In particular, the research confirms that talent management practices, such as career development, learning, and retention, play a crucial role in enhancing employee engagement, while also demonstrating the potential for business analytics to improve the effectiveness of these practices. By integrating these findings into the theoretical framework, this study

provides a richer understanding of how HR strategies can be optimized through data-driven decision-making.

In conclusion, the theoretical contributions of this study are both confirmatory and exploratory. The research validates and extends existing theories while also offering new insights into the role of business analytics in talent management. This study lays the groundwork for future research that could further explore the dynamic interaction between business analytics and HR practices in various organizational contexts, particularly in public sector settings like law enforcement. The study's findings provide a strong theoretical foundation for the continued integration of data-driven strategies in HR management and employee engagement, opening up new areas for academic exploration and practical application.

5.4.2 Practical Contributions

The practical implications of this study's findings are significant for practitioners and managers within the Abu Dhabi Police Force. The research sheds light on the relationship between employee performance and various talent management practices, offering actionable insights that can lead to substantial improvements within the organization. The findings highlight how leveraging business analytics and refining talent management practices can enhance the efficiency and effectiveness of the police force.

Managers within the Abu Dhabi Police Force, which includes senior officers and HR managers responsible for overseeing employee engagement, career development, and performance, can directly apply these findings to refine their current HR practices. This includes the implementation of strategies for recruitment, training, retention, and career progression. The study's emphasis on business analytics as a tool to guide these

decisions can assist these managers in optimizing their talent management processes. By doing so, they can enhance decision-making through more data-driven, objective assessments rather than relying solely on intuition or traditional practices.

The study underscores the critical importance of adopting a data-driven approach to talent management, which refers to the systematic use of data analytics to inform decisions related to recruitment, employee performance, learning and development, retention strategies, and overall career management. The integration of business analytics into these processes can significantly improve the strategic planning and decision-making efforts within the Abu Dhabi Police. By using data to evaluate and forecast the effectiveness of various talent management initiatives, managers can better ensure that these initiatives are not only efficient but also aligned with the broader organizational goals and objectives. For instance, a data-driven approach can help determine which talent management practices, such as retention strategies or development programs, have the greatest impact on employee performance, thus ensuring the optimization of resources and achieving desired outcomes.

The integration of business analytics into key HR practices, such as talent attraction, retention, learning and development, and career management, can make a substantial impact on the Abu Dhabi Police Force's operational effectiveness. This approach allows for continuous monitoring of employee performance, enabling managers to track engagement levels, identify areas for improvement, and implement timely interventions. The study emphasizes that this integration could significantly contribute to creating a more engaged workforce. Employee engagement serves as a mediator in improving overall performance, and by leveraging data-driven insights, managers can identify the key drivers of engagement and use this information to

develop targeted strategies for fostering a motivated and committed workforce. The alignment of employee engagement efforts with organizational goals, such as increasing operational efficiency or improving public service outcomes, is vital for maximizing the impact of talent management practices.

Additionally, the study provides valuable insights into the essential elements of a successful employee value proposition (EVP) within the Abu Dhabi Police. This includes factors such as job security, safe working conditions, and the availability of career development opportunities. By addressing these elements, the police force can improve its attractiveness as an employer, thereby aiding in the retention of talented officers. The study suggests that by focusing on enhancing the EVP, the Abu Dhabi Police can enhance officer satisfaction, which in turn leads to higher levels of performance and reduced turnover, thereby strengthening the force's ability to serve the community effectively.

The findings also underscore the significance of business analytics as a tool for enhancing employee engagement. The integration of data analytics allows managers to develop a more granular understanding of employee satisfaction and engagement drivers. This understanding enables targeted interventions and programs designed to improve employee motivation, commitment, and overall job satisfaction. Moreover, as the Abu Dhabi Police aim to achieve the ambitious goals set out in Vision 2030, the insights gained from utilizing business analytics in talent management can provide a competitive edge, positioning the force at the forefront of policing excellence. By aligning HR practices with data-driven insights, the force can not only improve employee performance but also enhance organizational efficiency and public service delivery.

Furthermore, the study provides a tested framework for improving employee performance through strategic engagement and talent management. This framework can serve as a valuable tool for managers to develop and implement more effective HR strategies that are specifically tailored to the unique needs and challenges of the law enforcement context. By focusing on business analytics and data-driven decision-making, the study offers a practical blueprint for fostering a more engaged and productive workforce, which is crucial for the ongoing success and effectiveness of the Abu Dhabi Police.

In conclusion, the practical contributions of this study provide actionable insights that can inform policy development, enhance operational effectiveness, and support the Abu Dhabi Police in its mission to maintain a high standard of public service. The study not only highlights the importance of adopting data-driven approaches in talent management but also provides a clear roadmap for enhancing employee engagement and performance. By leveraging the power of business analytics, managers within the Abu Dhabi Police can ensure that their talent management strategies are aligned with organizational objectives, ultimately contributing to the long-term success and excellence of the force.

5.5 Recommendations for Future Research

The findings of this study underscore the significant moderating effect of business analytics on various talent management practices namely talent attraction, learning and development, and career management and their subsequent impact on employee engagement within the Abu Dhabi Police. However, the relationship between business analytics and talent retention did not yield significant results. This divergence calls for

further investigation into why certain talent management practices are more amenable to business analytics integration than others.

Several important avenues for future research emerge from these findings. First, future studies should explore how business analytics can be leveraged more effectively to enhance the efficacy of talent management practices, particularly in high-stakes sectors like law enforcement. While the current study has provided important insights into how business analytics can be utilized in talent attraction, development, and career management, additional research is needed to further refine the methods and frameworks for applying business analytics in these areas. It would be valuable to explore whether certain types of analytics (e.g., predictive analytics, prescriptive analytics) might be more beneficial in specific areas of talent management.

Further exploration into the moderating role of business analytics is necessary, especially regarding the non-significant findings related to talent retention. Investigating the factors that contribute to the ineffectiveness of business analytics in retention could be particularly insightful. This may involve looking at external factors, such as the broader political, social, or organizational context in which law enforcement agencies operate, that could influence retention outcomes. Furthermore, this discrepancy may be a result of the specific demographic or organizational context of the Abu Dhabi Police, suggesting the need for studies in similar settings to better understand this anomaly.

A significant recommendation for future research is the replication of this study across various industries and countries. While this study provides valuable insights within the context of the Abu Dhabi Police, there is a need to test the applicability of these findings in diverse organizational and cultural environments. By doing so,

researchers can compare the impact of business analytics on talent management and employee engagement across different sectors, regions, and work cultures. This could yield important findings regarding the universal and context-specific factors that influence the effectiveness of business analytics in HR practices and contribute to refining global HR theories.

Additionally, future studies should explore other determinants of successful talent management. Variables such as quality management, organizational culture, and leadership style could play a pivotal role in the interaction between business analytics and employee engagement. For example, it would be worthwhile to investigate how certain aspects of organizational culture, such as the openness to innovation and the degree of autonomy granted to employees, may influence the successful integration of business analytics. Researchers could also explore how leadership styles impact the effectiveness of talent management practices, particularly in terms of fostering employee engagement and aligning business analytics with organizational goals.

Qualitative research methodologies should be adopted in future studies to uncover additional variables that may not have been captured in this quantitative study. Qualitative inquiries, such as in-depth interviews or focus groups, could provide valuable insights into the subjective experiences and perceptions of employees and managers. These methods would enable researchers to explore the intricate dynamics involved in the implementation of business analytics, including potential resistance to technological change, the training required for employees to effectively use analytics tools, and the ethical considerations surrounding the use of big data in HR practices. Through qualitative research, a deeper, more nuanced understanding of the complex

relationships between talent management, employee engagement, and business analytics could be achieved.

Moreover, the conceptual framework used in this study, which links business analytics with talent management practices and employee engagement, should be tested in other societies and sectors to assess its universality and generalizability. While the framework was developed in the context of the Abu Dhabi Police, its potential applicability to other public or private organizations remains an area of interest. Cross-cultural studies can provide valuable insights into how cultural differences, organizational norms, and national priorities shape the use of business analytics in HR practices. It would be particularly interesting to assess whether the patterns observed in the Abu Dhabi Police hold true in countries with different labor market dynamics, leadership styles, and social expectations.

In addition, longitudinal studies could provide more in-depth insights into the long-term effects of business analytics on talent management outcomes. This could involve tracking the same organizations over an extended period to assess whether the integration of business analytics has lasting effects on employee engagement, retention, and overall organizational performance. Longitudinal research could help identify trends and shifts that may not be immediately apparent in a cross-sectional study.

In conclusion, the results of this study underscore the importance of business analytics in enhancing talent management and employee engagement, while also highlighting the gaps in our understanding of its role in talent retention. Future research should aim to deepen the insights gained in this study by exploring additional variables, employing diverse research methodologies, and testing the framework in different cultural and organizational contexts. For practitioners, this research provides an

opportunity to refine HR strategies, while for academics, it challenges them to expand upon the theoretical contributions of this study and explore new avenues for integrating business analytics into talent management in various fields.

By addressing the recommendations outlined above, future studies will contribute to the growing body of knowledge on the effective use of business analytics in HR and help shape more data-driven, evidence-based practices in talent management across different sectors and organizational types.

REFERENCES

- Abdelwahed, N. A. A., & Doghan, M. A. A. (2023). Developing employee productivity and performance through work engagement and organizational factors in an educational society. *Societies*, 13(3), 65.
- 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.
- Abouabidalla, E. A. (2022). *Investigating Talent Management Strategies—The Case of the Abu Dhabi Government in Light of the Abu Dhabi Economic Vision 2030*. Liverpool John Moores University (United Kingdom). ProQuest Dissertations & Theses, 2022. 31521916
- Achmada, F. D., & Soetjipto, B. E. (2022). The Effect Of Talent Management On Employee Engagement And Employee Retention In Improving Employee Performance. *LITERACY: International Scientific Journals of Social, Education, Humanities*, 1(3), 80-94.
- Adamonienė, R., Kuveika, K., & Petkevičiūtė, N. (2022). Career management challenges: case of statutory organizations. *Public Security and Public Order*, (31), 3-20.
- Adewusi, A. O., Okoli, U. I., Adaga, E., Olorunsogo, T., Asuzu, O. F., & Daraojimba, D. O. (2024). Business intelligence in the era of big data: A review of analytical tools and competitive advantage. *Computer Science & IT Research Journal*, 5(2), 415-431.
- Adjo, J., Maybank, A., & Prakash, V. (2021). Building inclusive work

- environments. *Pediatrics*, 148(Supplement 2).
- Adriyanto, A. (2023). Evaluation of Employee Engagement Level in Improving Productivity and Retention in the Company. *Atestasi: Jurnal Ilmiah Akuntansi*, 6(1), 583-598.
- Aithal, P. S., & Maiya, A. K. (2023). Innovations in higher education industry—Shaping the future. *International Journal of Case Studies in Business, IT, and Education (IJCSBE)*, 7(4), 283-311.
- Al Aina, R., & Atan, T. (2020). The impact of implementing talent management practices on sustainable organizational performance. *Sustainability*, 12(20), 8372.
- Al Dhanhani, M. A., & Al Naqbi, S. (2022). Identifying enablers and obstacles for knowledge management in a police organization: case study of Abu Dhabi police. *Policing: A Journal of Policy and Practice*, 16(2), 270-281.
- Al Jawali, H., Darwish, T. K., Scullion, H., & Haak-Saheem, W. (2022). Talent management in the public sector: empirical evidence from the Emerging Economy of Dubai. *The International Journal of Human Resource Management*, 33(11), 2256-2284.
- Al Manhali, A. H., Al Kaabi, F., & Al Hanaee, M. (2022). We Are All Police—Abu Dhabi Police Community Engagement Initiative. *Policing: A Journal of Policy and Practice*, 16(2), 236-248.
- Al Mansoori, M. S. (2015). *A study into the benefits of developing talent management within the public sector: The case of Abu Dhabi Police General Head Quarters-UAE*. Liverpool John Moores University (United Kingdom).
- Aldarmaki, O. (2021). *A framework for reducing turnover intention among police personnel in Abu Dhabi* (Doctoral dissertation, Universiti Tun Hussein Malaysia).
- Al-Dhaafri, H. S., & Alosani, M. S. (2022). The intermediary role of organizational

- performance as a driver of total quality management and enterprise resource planning towards achieving organizational excellence: the moderating role of demographic factors. *The TQM journal*, 34(5), 1226-1249.
- Al-Harthy, B., & Yusof, R. (2022). A Conceptual Paper on Compensation and Benefits, Job Security, Work-Life Balance, Employee Retention and Localization in Oman. *Global Business & Management Research*, 14.
- Ali, I. M. (2024). A guide for positivist research paradigm: From philosophy to methodology. *Ideology Journal*, 9(2).
- Ali, Z., Bashir, M., & Mehreen, A. (2019). Managing organizational effectiveness through talent management and career development: The mediating role of employee engagement. *Journal of Management Sciences*, 6(1), 62-78.
- Alias, N. E., Noor, N., & Hassan, R. (2014). Examining the mediating effect of employee engagement on the relationship between talent management practices and employee retention in the Information and Technology (IT) organizations in Malaysia. *Journal of Human Resources Management and Labor Studies*, 2(2), 227-242.
- Alkaabi, F. A., & Maghelal, P. K. (2023). Early retirement intentions among Abu Dhabi Police: investigating the role of psychosocial work factors and sickness absenteeism. *BMC Public Health*, 23(1), 1221.
- Almanasreh, E., Moles, R., & Chen, T. F. (2019). Evaluation of methods used for estimating content validity. *Research in social and administrative pharmacy*, 15(2), 214-221.
- Almerri, H. S. H. (2023). Investigating the impact of organizational culture on employee retention: Moderating role of employee engagement. *Journal of System and Management Sciences*, 13(4), 488-507.

- Alrowwad, A. A., Obeidat, D. B. Y., Al-Khateeb, A., & Masa'deh, R. E. (2018). The role of work/life balance and motivational drivers of employee engagement on the relationship between talent management and organization performance: a developing country perspective. *Modern Applied Science*, 12(11).
- Al-Shamsi, A., & Ahmad, N. B. (2024). Opportunities and Challenges of AI Adoption by the Abu Dhabi Police: A Review Study. *International Journal of Academic Reserach in Economics and Management Sciences*, 13(3).
- Al-Tit, A. A., Al-Ayed, S., Alhammadi, A., Hunitie, M., Alsarayreh, A., & Albassam, W. (2022). The impact of employee development practices on human capital and social capital: the mediating contribution of knowledge management. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(4), 218.
- Aman-Ullah, A., Ibrahim, H., Aziz, A., & Mehmood, W. (2022). Impact of workplace safety on employee retention using sequential mediation: evidence from the health-care sector. *RAUSP Management Journal*, 57(2), 182-198.
- Amarakoon, U., Weerawardena, J., & Verreyne, M. L. (2018). Learning capabilities, human resource management innovation and competitive advantage. *The International Journal of Human Resource Management*, 29(10), 1736-1766.
- Andrianto, H., & Alsada, Y. (2019). The Conceptual Framework of Employee Engagement to Vigor, Dedication, and Absorption. *International Journal of Social Relevance & Concern*, 7(1), 11-14.
- Anwar, G., & Abdullah, N. N. (2021). The impact of Human resource management practice on Organizational performance. *International journal of Engineering, Business and Management (IJEEM)*, 5.
- Ardi, A., Cahyadi, H., Meilani, Y. F. C. P., & Pramono, R. (2024). Talent attraction through flexible work anytime from anywhere. *Journal of Infrastructure, Policy*

and Development, 8(3), 2998.

- Armstrong, M. B., & Landers, R. N. (2018). Gamification of employee training and development. *International Journal of Training and Development*, 22(2), 162-169.
- Arora, S., & Arora, N. (2024, June). Sustaining Talent in Tourism: Examining Monetary and Non-Monetary Catalysts. In *International Conference on Innovation and Regenerative Trends in Tourism and Hospitality Industry (IRTTHI 2024)* (pp. 393-406). Atlantis Press.
- Asfahani, A. M. (2024). Fusing talent horizons: the transformative role of data integration in modern talent management. *Discover Sustainability*, 5(1), 25.
- Asher, A., Briney, K., & Goban, A. (2023). Valid questions: the development and evaluation of a new library learning analytics survey. *Performance Measurement and Metrics*, 24(2), 101-119.
- Ashrafi, A., & Zareravasan, A. (2022). An ambidextrous approach on the business analytics-competitive advantage relationship: Exploring the moderating role of business analytics strategy. *Technological Forecasting and Social Change*, 179, 121665.
- Ashrafi, A., Ravasan, A. Z., Trkman, P., & Afshari, S. (2019). The role of business analytics capabilities in bolstering firms' agility and performance. *International journal of information management*, 47, 1-15.
- Awan, S. H., Habib, N., Shoaib Akhtar, C., & Naveed, S. (2020). Effectiveness of performance management system for employee performance through engagement. *SAGE open*, 10(4), 2158244020969383.
- Aziedjo, A. (2024). The Impact of Career Development on Employee Engagement and Retention. *International Journal of Multidisciplinary Studies and Innovative*

Research, 12(2), 1776-1784.

- Azmy, A. (2021). The effect of employee engagement and job satisfaction on workforce agility through talent management in public transportation companies. *Media Ekonomi Dan Manajemen*, 36(2), 212-229.
- Azzahra, H. R., & Putranto, N. A. R. (2023). Assessing Employee Engagement Level in FnB Service Industry: Case Study PT XYZ Indonesia. *Journal Integration of Social Studies and Business Development*, 1(2), 80-90.
- Badhon, M. B., Hasan, H. M., Islam, M. N. U., Jaly, N., Sumon, S. A., & Ullah, R. (2024). Enhancing Productivity through Business Analytics and Human Capital. *International Journal for Multidisciplinary Research*, 6, 1-11.
- Badmus, O., Rajput, S. A., Arogundade, J. B., & Williams, M. (2024). AI-driven business analytics and decision making. *World Journal of Advanced Research and Reviews*, 24(1), 616-633.
- Bah, M. O. P., Sun, Z., Hange, U., & Edjoukou, A. J. R. (2024). Effectiveness of organizational change through employee involvement: Evidence from telecommunications and refinery companies. *Sustainability*, 16(6), 2524.
- Baluch, A. M., & Ridder, H. G. (2021). Mapping the research landscape of strategic human resource management in nonprofit organizations: A systematic review and avenues for future research. *Nonprofit and Voluntary Sector Quarterly*, 50(3), 598-625.
- Barkhuizen, N. E., & Gumede, B. (2021). The relationship between talent management, job satisfaction and voluntary turnover intentions of employees in a selected government institution. *SA Journal of Human Resource Management*, 19, 12.
- Barton, H., Ramahi, A., & Tansley, C. (2016). Police performance improvement: a case study of the Abu Dhabi Police.

- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- Baruch, Y., & Rousseau, D. M. (2019). Integrating psychological contracts and ecosystems in career studies and management. *Academy of Management Annals*, 13(1), 84-111.
- Bello, B. G., Tula, S. T., Omotoye, G. B., Kess-Momoh, A. J., & Daraojimba, A. I. (2024). Work-life balance and its impact in modern organizations: An HR review. *World Journal of Advanced Research and Reviews*, 21(1), 1162-1173.
- Bemelmans-Videc, M. L., Eriksen, B., & Goldenberg, E. N. (2020). Facilitating organizational learning: human resource management and program evaluation. In *Can Governments Learn?* (pp. 145-187). Routledge.
- Bennell, C., Jenkins, B., Blaskovits, B., Semple, T., Khanizadeh, A. J., Brown, A. S., & Jones, N. J. (2022). Knowledge, skills, and abilities for managing potentially volatile police–public interactions: A narrative review. *Frontiers in psychology*, 13, 818009.
- Bhakuni, S., & Saxena, S. (2023). Exploring the link between training and development, employee engagement and employee retention. *Journal of Business and Management Studies*, 5(1), 173-180.
- Bhanumathi, P., & Hemavathi, P. (2025). HR Agility: Embracing Change in Human Resource Practices. In *Modern Trends and Future Innovation in Human Resource Management* (pp. 197-238). IGI Global.
- Bin, A. S., & Shmailan, A. (2015). The relationship between job satisfaction, job performance and employee engagement: An explorative study. *Issues in Business Management and Economics*, 4(1), 1-8.

- Biswakarma, G., & Subedi, K. (2025). The mediating role of employee engagement on the relationship between learning culture and employee performance in service sector. *The Learning Organization*, 32(2), 259-281.
- Borg, J., Borg, N., Scott-Young, C. M., & Naderpajouh, N. (2021). The work readiness–career resilience linkage: implications for project talent management. *International journal of managing projects in business*, 14(4), 917-935.
- Bouteraa, A., & Bouaziz, F. (2023). Do talent management practices improve organizational resilience? An empirical study within Tunisian companies. *African Journal of Economic and Management Studies*, 14(2), 271-288.
- Budtz-Jørgensen, J., Johnsen, C. G., & Sørensen, B. M. (2019). Against boundarylessness: The liminal career of the flexible employee. *Organization*, 26(6), 917-935.
- Bujang, M. A., Omar, E. D., Foo, D. H. P., & Hon, Y. K. (2024). Sample size determination for conducting a pilot study to assess reliability of a questionnaire. *Restorative dentistry & endodontics*, 49(1).
- Cahyadi, A., Marwa, T., Poór, J., Maulana, A., & Szabó, K. (2024). High-Involvement Human Resource Management Practices and Employee Resilience: The Mediating Role of Employee Technology Adaptation—A Case Study of South Sumatra. *Administrative Sciences*, 14(11), 292.
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., ... & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of research in Nursing*, 25(8), 652-661.
- Cao, E., Jiang, J., Duan, Y., & Peng, H. (2022). A data-driven expectation prediction framework based on social exchange theory. *Frontiers in Psychology*, 12, 783116.

- Castro, C., Bresó, J., Sola, S., Vlachostergiou, A., Plakia, M., & Bonavita, I. (2022). The Role of Law Enforcement Agencies and the Use of IT Tools for a Coordinate Response in Pandemic Crisis Management: The STAMINA Project. *Special Issue 5 Eur. L. Enft Rsch. Bull.*, 165.
- Celestin, M., Vasuki, M., Sujatha, S., & Kumar, A. D. (2024). Enhancing Employee Satisfaction and Engagement to Boost Productivity: The Role of Leadership, Culture, and Recognition Programs. *International Journal of Computational Research and Development*, 9(2), 67-74.
- Chandani, A., Mehta, M., Mall, A., & Khokhar, V. (2016). Employee engagement: A review paper on factors affecting employee engagement. *Indian Journal of Science and Technology*, 9(15), 1-7.
- Charokar, K., & Dulloo, P. (2022). Self-directed learning theory to practice: a footstep towards the path of being a life-long learner. *Journal of Advances in Medical Education & Professionalism*, 10(3), 135.
- Chatterjee, S., Rana, N. P., & Dwivedi, Y. K. (2024). How does business analytics contribute to organisational performance and business value? A resource-based view. *Information Technology & People*, 37(2), 874-894.
- Chen, H., Fang, T., Liu, F., Pang, L., Wen, Y., Chen, S., & Gu, X. (2020). Career adaptability research: A literature review with scientific knowledge mapping in web of science. *International Journal of Environmental Research and Public Health*, 17(16), 5986.
- Chernyak-Hai, L., & Rabenu, E. (2018). The new era workplace relationships: is social exchange theory still relevant?. *Industrial and organizational psychology*, 11(3), 456-481.
- Chi, H., Vu, T. V., Nguyen, H. V., & Truong, T. H. (2023). How financial and non–

- financial rewards moderate the relationships between transformational leadership, job satisfaction, and job performance. *Cogent Business & Management*, 10(1), 2173850.
- Chin, W. W. (1998). Commentary: Issues and opinion on structural equation modeling. *MIS quarterly*, vii-xvi.
- Chopra, A., Sahoo, C. K., & Patel, G. (2024). Exploring the relationship between employer branding and talent retention: the mediation effect of employee engagement. *International Journal of Organizational Analysis*, 32(4), 702-720.
- Clack, L. (2021). Employee engagement: Keys to organizational success. *The Palgrave handbook of workplace well-being*, 1001-1028.
- Cohen, L. H., Towbes, L. C., & Flocco, R. (1988). Effects of induced mood on self-reported life events and perceived and received social support. *Journal of personality and social psychology*, 55(4), 669.
- Colquitt, J. A., Scott, B. A., Rodell, J. B., Long, D. M., Zapata, C. P., Conlon, D. E., & Wesson, M. J. (2013). Justice at the millennium, a decade later: a meta-analytic test of social exchange and affect-based perspectives. *Journal of applied psychology*, 98(2), 199.
- Conboy, K., Mikalef, P., Dennehy, D., & Krogstie, J. (2020). Using business analytics to enhance dynamic capabilities in operations research: A case analysis and research agenda. *European Journal of Operational Research*, 281(3), 656-672.
- Conte, F., & Siano, A. (2023). Data-driven human resource and data-driven talent management in internal and recruitment communication strategies: an empirical survey on Italian firms and insights for European context. *Corporate Communications: An International Journal*, 28(4), 618-637.
- Crnogaj, K., & Rozman, M. (2017). Employee engagement by Gallup in Slovenian

- companies. *Economic and Social Development: Book of Proceedings*, 635-642.
- Cropanzano, R., & Rupp, D. E. (2008). Social exchange theory and organizational justice: Job performance, citizenship behaviors, multiple foci, and a historical integration of two literatures. *Research in social issues in management: Justice, morality, and social responsibility*, 63, 99.
- Dan, S. H. I. (2024). Work Engagement and Organizational Commitment Relationship with Career Growth. *Journal of Human Resource Management*, 27(2), 69-77.
- Darko, I. L. O., Bans-Akutey, A., Amoako, P., & Affum, L. K. (2024). Employee retention and organizational performance: Evidence from Ghana Police Service. *Annals of Management and Organization Research*, 5(3), 219-230.
- Darville, J. J., & Arghode, V. (2024). People Analytics, Talent Management, and Leadership Development in the USA and UAE. In *Industry 4.0 and People Analytics* (pp. 263-285). Apple Academic Press.
- Dattalo, P. (2008). *Determining sample size: Balancing power, precision, and practicality*. oxford university press.
- Day, D., Bastardo, N., Bisbey, T., Reyes, D., & Salas, E. (2021). Unlocking human potential through leadership training & development initiatives. *Behavioral Science & Policy*, 7(1), 41-54.
- De Oliveira, L. B., Cavazotte, F., & Alan Dunzer, R. (2019). The interactive effects of organizational and leadership career management support on job satisfaction and turnover intention. *The International Journal of Human Resource Management*, 30(10), 1583-1603.
- De-Arteaga, M., Feuerriegel, S., & Saar-Tsechansky, M. (2022). Algorithmic fairness in business analytics: Directions for research and practice. *Production and Operations Management*, 31(10), 3749-3770.

- Decuyper, A., & Schaufeli, W. (2020). Leadership and work engagement: Exploring explanatory mechanisms. *German Journal of Human Resource Management*, 34(1), 69-95.
- Delen, D., & Ram, S. (2018). Research challenges and opportunities in business analytics. *Journal of Business Analytics*, 1(1), 2-12.
- DeSimone, J. A., Harms, P. D., & DeSimone, A. J. (2015). Best practice recommendations for data screening. *Journal of organizational behavior*, 36(2), 171-181.
- Eboigbe, E. O., Farayola, O. A., Olatoye, F. O., Nnabugwu, O. C., & Daraojimba, C. (2023). Business intelligence transformation through AI and data analytics. *Engineering Science & Technology Journal*, 4(5), 285-307.
- Eisenberg, S., & Lee, K. (2020). A literature review on the relationship between personal traits and language learning. *Journal of Convergence for Information Technology*, 10(6), 147-155.
- 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.
- Elugbaju, W. K., Okeke, N. I., & Alabi, O. A. (2024). Human Resource Analytics as a Strategic Tool for Workforce Planning and Succession Management. *International Journal Of Engineering Research And Development*, 20(11), 744-756.
- Fabbri, R., & Al-Qassemi, S. S. (2022). *Urban Modernity in the Contemporary Gulf: Obsolescence and Opportunities* (p. 288). Taylor & Francis.
- Faeq, D. K., & Ismael, Z. N. (2022). Organizational culture as a mediator between employee dissatisfaction and turnover intention. *International Journal of English*

Literature and Social Sciences, 7(5), 95-108.

- Falletta, S. V., & Combs, W. L. (2021). The HR analytics cycle: a seven-step process for building evidence-based and ethical HR analytics capabilities. *Journal of Work-Applied Management*, 13(1), 51-68.
- Flake, J. K., Davidson, I. J., Wong, O., & Pek, J. (2022). Construct validity and the validity of replication studies: A systematic review. *American Psychologist*, 77(4), 576.
- Forbringer, L. R., & Solutions, O. E. (2002). Overview of the Gallup Organization's Q-12 survey. *OE Solutions*, 5.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.
- Frazier, M., Cohen McCullough, D., & Spence, D. (2022). Quality and performance management: An innovative approach to future police management. *American policing in*, 23-28.
- Gaber, J., & Gaber, S. L. (2010). Using face validity to recognize empirical community observations. *Evaluation and Program Planning*, 33(2), 138-146.
- Gao, J., & Sarwar, Z. (2024). How do firms create business value and dynamic capabilities by leveraging big data analytics management capability?. *Information Technology and Management*, 25(3), 283-304.
- Garavan, T. N., Heneghan, S., O'Brien, F., Gubbins, C., Lai, Y., Carbery, R., ... & Grant, K. (2020). L&D professionals in organisations: much ambition, unfilled promise. *European Journal of Training and Development*, 44(1), 1-86.
- Gede, D. U., & Huluka, A. T. (2024). Effects of employee engagement on organizational performance: case of public universities in Ethiopia. *Future*

Business Journal, 10(1), 32.

- Georgescu, I., Bocean, C. G., Vărzaru, A. A., Rotea, C. C., Mangra, M. G., & Mangra, G. I. (2024). Enhancing organizational resilience: The transformative influence of strategic human resource management practices and organizational culture. *Sustainability*, 16(10), 4315.
- Gilgun, J. F. (2019). Deductive qualitative analysis and grounded theory: Sensitizing concepts and hypothesis-testing. *The SAGE handbook of current developments in grounded theory*, 107-122.
- Gunderman, R. B., & Chan, S. (2013). The 13-point Likert scale: a breakthrough in educational assessment. *Academic radiology*, 20(11), 1466-1467.
- Gupta, N., & Sharma, V. (2016). Exploring employee engagement—A way to better business performance. *Global Business Review*, 17(3_suppl), 45S-63S.
- Hadijah, H. S. (2024). Implementation of talent management as a strategy for achieving company competitive advantage. *International Journal of Artificial Intelligence Research*, 6(1.1).
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2-24.
- Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, 1(3), 100027.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, mirror on the wall: a comparative evaluation of composite-based structural equation modeling methods. *Journal of the academy of marketing science*, 45, 616-632.
- Hakro, T. H., Siddiqui, M. B., & Banbhan, A. A. (2022). Investigating the relationship

- of talent management on employee performance, employee engagement and job satisfaction. *Research Journal of Social Sciences and Economics Review*, 3(3), 10-20.
- Halkias, D., Neubert, M., Thurman, P. W., & Harkiolakis, N. (2022). *The multiple case study design: Methodology and application for management education*. Routledge.
- Hamidi, N. N. E., Mansor, F. A., Hashim, M. Z., Muhammad, N., & Wan Azib, W. N. H. (2020). The relationship between physical workplace environment and employees' performance. *Journal of Contemporary Social Science Research*, 4(1), 56-67.
- Haque, S. M. S. (2023). Building lasting bonds: Exploring effective employee retention techniques in contemporary organizations. *European Journal of Human Resource Management Studies*, 7(1).
- Harsch, K., & Festing, M. (2020). Dynamic talent management capabilities and organizational agility—A qualitative exploration. *Human Resource Management*, 59(1), 43-61.
- Hedge, J. W., & Carter, G. W. (2020). Career pathways as an integrative framework for talent management system. *Career pathways: From school to retirement*, 62-83.
- Hendri, M. I. (2019). The mediation effect of job satisfaction and organizational commitment on the organizational learning effect of the employee performance. *International Journal of Productivity and Performance Management*, 68(7), 1208-1234.
- Hewitt, A. (2012). 2012 Trends in global employee Engagement. *Aon Corporation*, available at: <https://www.sigmoidcurve.com/assets/Uploads/2015-trends-inglobal-employee-engagement-sigmoid-connect.pdf> (accessed February 7,

2023).

- Hilal, S., & Litsey, B. (2020). Reducing police turnover: Recommendations for the law enforcement agency. *International journal of police science & management*, 22(1), 73-83.
- Hinzmann, R. A., Rašticová, M., & Šácha, J. (2019). Factors of employee engagement at the workplace. Do years of service count?. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*.
- Hirschi, A., & Koen, J. (2021). Contemporary career orientations and career self-management: A review and integration. *Journal of Vocational Behavior*, 126, 103505.
- Hongal, P., & Kinange, U. (2020). A study on talent management and its impact on organization performance-an empirical review. *International Journal of Engineering and Management Research (IJEMR)*, 10(1), 64-71.
- Huang, S. Y., Huang, C. H., & Chang, T. W. (2022). A new concept of work engagement theory in cognitive engagement, emotional engagement, and physical engagement. *Frontiers in Psychology*, 12, 663440.
- 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.
- Iershova, N. Y., Portna, O. V., Uhrimova, I. V., & Chaika, T. Y. (2022). The Impact of Employee Attitudes on the Effectiveness of Corporate Governance and Social External Effects: Business Analytics Platform. *Montenegrin Journal of Economics*, 18(2), 73-84.
- Irshad, M., Tariq, A. A., Chishty, B. A., & Shah, S. U. M. (2024). Navigating the Wave of Leadership in Learning Organizations. *Dialogue Social Science Review (DSSR)*, 2(3 (October)), 423-445.

- Itam, U., Misra, S., & Anjum, H. (2020). HRD indicators and branding practices: a viewpoint on the employer brand building process. *European Journal of Training and Development*, 44(6/7), 675-694.
- Iyanda Ismail, A., Rengasamy, E., & Wahab, N. O. (2024). Megatrends and the Future of Work: Unlocking Management Strategies and HR Models in Digitalizing the United Arab Emirates. In *HRM, Artificial Intelligence and the Future of Work: Insights from the Global South* (pp. 81-99). Cham: Springer Nature Switzerland.
- Izah, S. C., Sylva, L., & Hait, M. (2023). Cronbach's alpha: A cornerstone in ensuring reliability and validity in environmental health assessment. *ES Energy & Environment*, 23, 1057.
- Jabeen, R., & Rahim, N. (2021). Exploring the effects of despotic leadership on employee engagement, employee trust and task performance. *Management Science Letters*, 11(1), 223-232.
- Jaswal, P., & Bhattacharya, S. (2022). Employer branding-an employer attractiveness tool, attractiveness factors for millennial. *Cardiometry*, (24), 652-661.
- Jehanzeb, K. (2020). Does perceived organizational support and employee development influence organizational citizenship behavior? Person–organization fit as moderator. *European Journal of Training and Development*, 44(6/7), 637-657.
- Jia-Jun, Z., & Hua-Ming, S. (2022). The impact of career growth on knowledge-based employee engagement: The mediating role of affective commitment and the moderating role of perceived organizational support. *Frontiers in Psychology*, 13, 805208.
- Jibril, K., Safari, A., Shahin, A., & Hamdan, M. (2024). Developing a risk-based strategic human resource management: a mixed-method approach. *International*

Journal of Productivity and Quality Management, 43(2), 157-180.

John, A. S., & HAJAM, A. A. (2024). Leveraging Predictive Analytics for Enhancing Employee Engagement and Optimizing Workforce Planning: A Data-Driven HR Management Approach. *International Journal of Innovation in Management, Economics and Social Sciences*, 4(4), 33-41.

Johnson, E. (2021). Face validity. In *Encyclopedia of autism spectrum disorders* (pp. 1957-1957). Cham: Springer International Publishing.

Jufrizen, J., Harahap, D. S., & Khair, H. (2023). Leader-Member Exchange and Employee Performance: Mediating Roles of Work Engagement and Job Satisfaction. *Journal of Economics, Business, and Accountancy Ventura*, 26(3), 306-322.

Kaewnaknaew, C., Siripipatthanakul, S., Phayaphrom, B., & Limna, P. (2022). Modelling of talent management on construction companies' performance: A model of business analytics in Bangkok. *International Journal of Behavioral Analytics*, 2(1).

Kafetzopoulos, D., & Gotzamani, K. (2022). The effect of talent management and leadership styles on firms' sustainable performance. *European Business Review*, 34(6), 837-857.

Kaluarachchi, K. A. D. P. (2025). Philosophical Approaches to Qualitative Research (Positivism, Phenomenological Approach & Critical Social Sciences). *Sri Lanka Journal of Social Work*, 8(2).

Kareska, K. (2023). Human resource management strategies for achieving competitive advantage of organizations. *Strategy Models for Firm Performance Enhancement eJournal*, 15(20).

Kašpárková, L., Vaculík, M., Procházka, J., & Schaufeli, W. B. (2018). Why resilient

- workers perform better: The roles of job satisfaction and work engagement. *Journal of Workplace Behavioral Health*, 33(1), 43-62.
- Kerdpitak, C., & Jermisittiparsert, K. (2020). The impact of human resource management practices on competitive advantage: Mediating role of employee engagement in Thailand. *Systematic Reviews in Pharmacy*, 11(1), 443-452.
- Khajarian, A., Angell, L. C., & Batra, A. (2023). Higher education, skill development, and the evolving graduate employability landscape in the United Arab Emirates. In *Sustainable and Dynamic Graduate Employability* (pp. 45-70). Routledge India.
- Khalaf Al Mazrouei, F. (2022). Abu Dhabi Police... A Modern Vision that Keeps Pace with Development and Future Foreseeing. *Policing: A Journal of Policy and Practice*, 16(2), 233-235.
- Khan, A., Talukder, M. S., Islam, Q. T., & Islam, A. N. (2024). The impact of business analytics capabilities on innovation, information quality, agility and firm performance: The moderating role of industry dynamism. *VINE Journal of Information and Knowledge Management Systems*, 54(5), 1124-1152.
- Khan, M. A. S. H., Minhaj, S. M., & Mohammad Athar Ali, M. A. H. (2024). To explore the impact of corporate culture and leadership behaviour on work performance, mental health and job satisfaction of employees: An empirical study. *Journal of Infrastructure, Policy and Development*, 8(1).
- Khoreva, V., & Vaiman, V. (2021). Talent management: decision making in the global context. In *The Routledge Companion to Talent Management* (pp. 81-93). Routledge.
- Kim, S. H., Kim, M., & Holland, S. (2020). Effects of intrinsic motivation on organizational citizenship behaviors of hospitality employees: The mediating roles

- of reciprocity and organizational commitment. *Journal of Human Resources in Hospitality & Tourism*, 19(2), 168-195.
- Kim, W., Kim, J., Woo, H., Park, J., Jo, J., Park, S. H., & Lim, S. Y. (2017). The relationship between work engagement and organizational commitment: Proposing research agendas through a review of empirical literature. *Human Resource Development Review*, 16(4), 350-376.
- Kissoonduth, K., Webb, W., & Kahn, S. B. (2019). Remuneration Variables that play a role in attracting and retaining academic staff at Public Higher Education Institutions. *Administratio Publica*, 27(1), 116-139.
- Komolafe, A. M., Aderotoye, I. A., Abiona, O. O., Adewusi, A. O., Obijuru, A., Modupe, O. T., & Oyeniran, O. C. (2024). Harnessing business analytics for gaining competitive advantage in emerging markets: A systematic review of approaches and outcomes. *International journal of management & entrepreneurship research*, 6(3), 838-862.
- Kongrode, J., Aujirapongpan, S., & Ru-Zhue, J. (2023). Exploring the impact of dynamic talent management capability on competitive performance: The mediating roles of dynamic marketing capability of startups. *Journal of Competitiveness*, 15(1), 113.
- Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Van Buuren, S., Van der Beek, A. J., & De Vet, H. C. (2014). Improving the individual work performance questionnaire using rasch analysis. *Journal of applied measurement*, 15(2), 160-175.
- Korankye, B. (2020). Exploring the mediating role of work engagement, career management and career satisfaction among small and medium enterprises in Ghana. *International Journal of Management, Accounting and Economics*, 7(7),

416-434.

- Kraig, A., Harrison, E. R., & Zak, P. J. (2021). The impact of organizational trust on the performance of police departments. *SN Social Sciences*, 1(12), 284.
- Kravariti, F., & Johnston, K. (2020). Talent management: a critical literature review and research agenda for public sector human resource management. *Public Management Review*, 22(1), 75-95.
- Krejcie, R. V., & Morgan, D. W. (1970). Sample size determination table. *Educational and psychological Measurement*, 30(3), 607-610.
- Kumar, S. (2022). The impact of talent management practices on employee turnover and retention intentions. *Global Business and Organizational Excellence*, 41(2), 21-34.
- Kumari, K., Barkat Ali, S., Un Nisa Khan, N., & Abbas, J. (2021). Examining the role of motivation and reward in employees' job performance through mediating effect of job satisfaction: An empirical evidence. *International Journal of Organizational Leadership*, 10(4), 401-420.
- Kundi, Y. M., Baruch, Y., & Ullah, R. (2023). The impact of discretionary HR practices on knowledge sharing and intention to quit—a three-wave study on the role of career satisfaction, organizational identification, and work engagement. *The International Journal of Human Resource Management*, 34(22), 4205-4231.
- Kwon, K., & Jang, S. (2022). There is no good war for talent: A critical review of the literature on talent management. *Employee Relations: The International Journal*, 44(1), 94-120.
- Kwon, K., & Park, J. (2019). The life cycle of employee engagement theory in HRD research. *Advances in Developing Human Resources*, 21(3), 352-370.
- Kwon, K., Jeong, S., Park, J., & Yoon, S. W. (2024). Employee development and

- employee engagement: a review and integrated model. *Career development international*, 29(2), 169-184.
- Lee, C. S., Cheang, P. Y. S., & Moslehpour, M. (2022). Predictive analytics in business analytics: decision tree. *Advances in Decision Sciences*, 26(1), 1-29.
- Lee, J. Y., Park, S., & Baker, R. (2018). The moderating role of top management support on employees' attitudes in response to human resource development efforts. *Journal of Management & Organization*, 24(3), 369-387.
- Li, Z., Stamolampros, P., & Zhao, X. (2024). Dynamics in the asymmetric effects of job attributes on employee satisfaction: A mixed-method approach using big data. *Tourism Management*, 105, 104967.
- Lievens, F., & Slaughter, J. E. (2016). Employer image and employer branding: What we know and what we need to know. *Annual review of organizational psychology and organizational behavior*, 3(1), 407-440.
- Lin, Y., & Wu, X. (2024). Enhancing knowledge-based professional Management of Auxiliary Police in mega-cities: challenges and solutions. *Journal of the Knowledge Economy*, 15(3), 12216-12252.
- Ling, L., Qing, T., & Shen, P. (2014). Can training promote employee organizational commitment? The effect of employability and expectation value. *Nankai Business Review International*, 5(2), 162-186.
- Lingle, J. (2024). Retaining police officers: Training programs and incentives law enforcement agencies use to retain police officers.
- Liu, B., Cui, Z., & Nanyangwe, C. N. (2023). How line-manager leadership styles and employee-perceived HRM practices contribute to employee performance: a configurational perspective. *Leadership & Organization Development Journal*, 44(1), 156-171.

- Liu, S., Liu, O., & Chen, J. (2023). A review on business analytics: definitions, techniques, applications and challenges. *Mathematics*, 11(4), 899.
- Lopez-Zafra, E., Pulido-Martos, M., & Cortés-Denia, D. (2022). Vigor at work mediates the effect of transformational and authentic leadership on engagement. *Scientific Reports*, 12(1), 17127.
- Ludwig, M., Enders, D., Basedow, F., Walker, J., & Jacob, J. (2022). Sampling strategy, characteristics and representativeness of the InGef research database. *Public health*, 206, 57-62.
- Lund, B. (2023). The questionnaire method in systems research: An overview of sample sizes, response rates and statistical approaches utilized in studies. *VINE Journal of Information and Knowledge Management Systems*, 53(1), 1-10.
- Lyria, R. K. (2015). *Effect of talent management on organizational performance in companies listed in Nairobi securities exchange in Kenya*. College of Human Resource Development School of Business, School of Entrepreneurship, Procurement and Management, School of Communication and Development Studies, (Doctoral dissertation). <http://hdl.handle.net/123456789/1571>
- Mabaso, C. M., & Mathebula, S. (2025). Total rewards for attracting and retaining Millennials in the workplace post-COVID-19. *SA Journal of Human Resource Management*, 23, 1-13.
- Magdalenic, D., & Lusic, L. (2025). Assessing the Impact of Digital Tools on the Recruitment Process Using the Design Thinking Methodology. *Administrative Sciences*, 15(4), 139.
- Maier, C., Thatcher, J. B., Grover, V., & Dwivedi, Y. K. (2023). Cross-sectional research: A critical perspective, use cases, and recommendations for IS research. *International Journal of Information Management*, 70, 102625.

- Maier, C., Thatcher, J. B., Grover, V., & Dwivedi, Y. K. (2023). Cross-sectional research: A critical perspective, use cases, and recommendations for IS research. *International Journal of Information Management*, 70, 102625.
- Majhi, S. G., Mukherjee, A., & Anand, A. (2023). Business value of cognitive analytics technology: a dynamic capabilities perspective. *VINE Journal of Information and Knowledge Management Systems*, 53(6), 1231-1249.
- Malarvizhi, S., & Raji, V. (2024). Reviewing the landscape: A literature-based exploration of sustainable HR practices and Key performance indicators (KPIs) in green HRM for assessing organizational sustainability. In *3rd International Conference on Reinventing Business Practices, Start-Ups and Sustainability (ICRBSS 2023)* (pp. 580-588). Atlantis Press.
- Malhotra, P., & Singh, M. (2016). Indirect impact of high performers on the career advancement of their subordinates. *Human Resource Management Review*, 26(3), 209-226.
- Malik, P. (2024). Individual-focused transformational leadership and change-oriented organizational citizenship behavior: mediating and moderating mechanisms of job crafting and employee resilience. *Journal of Organizational Effectiveness: People and Performance*, 11(1), 90-113.
- Malik, P., & Garg, P. (2020). Learning organization and work engagement: The mediating role of employee resilience. *The International Journal of Human Resource Management*, 31(8), 1071-1094.
- Mardanov, I. (2021, July). Intrinsic and extrinsic motivation, organizational context, employee contentment, job satisfaction, performance and intention to stay. In *Evidence-based HRM: a Global Forum for Empirical Scholarship* (Vol. 9, No. 3, pp. 223-240). Emerald Publishing Limited.

- Memon, M. A., Cheah, J. H., Ramayah, T., Ting, H., Chuah, F., & Cham, T. H. (2019). Moderation analysis: issues and guidelines. *Journal of Applied Structural Equation Modeling*, 3(1), 1-11.
- Meira, J. V. D. S., & 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.
- Mellenbergh, G. J., & Mellenbergh, G. J. (2019). Outliers. *Counteracting Methodological Errors in Behavioral Research*, 293-308.
- Merry, J. (2013). Aon Hewitt's 2013 trends in global engagement: where do organizations need to focus attention?. *Strategic HR Review*, 13(1), 24-31.
- Milani, R., Setti, I., & Argentero, P. (2021). Learning agility and talent management: A systematic review and future prospects. *Consulting Psychology Journal: Practice and Research*, 73(4), 349.
- Modise, J. M. (2023). Efficient and Effective Leadership in Law Enforcement, Characteristics and Behaviors of Effective Police Leaders that Assists Upholding A High Standard of Professionalism and Integrity. *International Journal of Innovative Science and Research Technology*, 8(9), 2096-2112.
- Mohammed, A. (2015). The impact of talent management on employee engagement, retention and value addition in achieving organizational performance. *International journal of core Engineering & Management*, 1(12), 142-152.
- Mohammed, H. Y. A. (2024). Economic Diversification through Knowledge-Based Industries 2024. *Journal of Ecohumanism*, 3(8), 83-106.
- Mokoena, W., Schultz, C. M., & Dachapalli, L. A. P. (2022). A talent management, organisational commitment and employee turnover intention framework for a

- government department in South Africa. *SA Journal of Human Resource Management*, 20, 1920.
- Mtau, T. T., & Rahul, N. A. (2024). Optimizing business performance through KPI alignment: a comprehensive analysis of key performance indicators and strategic objectives. *American Journal of Industrial and Business Management*, 14(1), 66-82.
- Muchibi, W. M., Mutua, S. M., & Juma, D. (2022). Influence of career development on employee engagement in the public health sector in Kenya. *International Academic Journal of Human Resource and Business Administration*, 4(1), 297-327.
- Muhammad, G., & Naz, F. (2022). A moderating role of HR analytics between employee engagement, retention and organisational performance. *International Journal of Business Environment*, 13(4), 345-357.
- Musakuro, R. N. (2022). A framework development for talent management in the higher education sector. *SA Journal of Human Resource Management*, 20, 1671.
- Mustafa, B., & Lleshi, S. (2024). The impact of lifelong learning and investments in employee development on employee productivity and performance. *Multidisciplinary Reviews*, 7(8), 2024175-2024175.
- Muttaqin, R., & Saputro, A. H. (2023). The Effect Of Job Description And Compensation On Employee Performance At PT Mettana, Bandung City. *JEMSI (Jurnal Ekonomi, Manajemen, Dan Akuntansi)*, 9(4), 1440-1445.
- Nadeem, K., Khan, M. A., Imtiaz, N., & Iftikhar, Y. (2019). Turnover intention and perceived organizational support; mediating role of work engagement and organizational commitment. *European Scientific Journal ESJ*, 15(10), 222-236.
- Nagpal, P. (2022). Organizational commitment as an outcome of employee

- engagement: A social exchange perspective using a SEM model. *International Journal of Biology, Pharmacy and Allied Sciences*, 11(1), 72-86.
- Narayanan, A., Rajithakumar, S., & Menon, M. (2019). Talent management and employee retention: An integrative research framework. *Human Resource Development Review*, 18(2), 228-247.
- Nardi, P. M. (2018). *Doing survey research: A guide to quantitative methods*. Routledge.
- Natsir, I., Ode, H., Irfana, T. B., Pulungan, D. R., & Sihite, M. (2024). An Analysis of the Role of Human Resource Management in Enhancing Organizational Efficiency and Effectiveness. *International Journal of Economics (IJE)*, 3(2).
- Ndatshe, Y., Mokhele, M. O., & Jakoet-Salie, A. (2024). The effects of employee turnover on the loss of organisational knowledge in South African municipalities: Balancing rhetoric with actual practice. *International Journal of Research in Business & Social Science*, 13(7).
- Neyroud, P., AlMansoori, B. K., Davies, A., & AlKaabi, F. A. M. (2023). Developing organisational excellence: Applying benchmarking for guiding and measuring police agency performance—Abu Dhabi Police case study. *International Journal of Police Science & Management*, 25(4), 484-499.
- Ngozi, D., & Edwinah, A. (2022). Employee engagement and talent retention: a review. *South Asian Research Journal of Biology and Applied Biosciences*, 4(5), 188-197.
- Nguyen, H. M., & Nguyen, L. V. (2023). Employer attractiveness, employee engagement and employee performance. *International Journal of Productivity and Performance Management*, 72(10), 2859-2881.
- Nguyen, T. N. T., Bui, T. H. T., & Nguyen, T. H. H. (2021). Improving employees'

- proactive behaviors at workplace: The role of organizational socialization tactics and work engagement. *Journal of Human Behavior in the Social Environment*, 31(6), 673-688.
- Niu, Y., Ying, L., Yang, J., Bao, M., & Sivaparthipan, C. B. (2021). Organizational business intelligence and decision making using big data analytics. *Information Processing & Management*, 58(6), 102725.
- Noercahyo, U. S., Maarif, M. S., & Sumertajaya, I. M. (2021). The role of employee engagement on job satisfaction and its effect on organizational performance. *Jurnal Aplikasi Manajemen*, 19(2), 296-309.
- Nunes, C. A., Alvarenga, V. O., de Souza Sant'Ana, A., Santos, J. S., & Granato, D. (2015). The use of statistical software in food science and technology: Advantages, limitations and misuses. *Food research international*, 75, 270-280.
- Nuraini, N. (2024). Creating Environments for Continuous Employee Development and Learning. *Economics and Digital Business Review*, 5(1), 769-789.
- Nyberg, A. J., Reilly, G., & Cragun, O. R. (2024). A strategic recruiting system model for integrating human capital resources to solve strategic organizational challenges. In *Essentials of Employee Recruitment* (pp. 56-76). Routledge.
- O'Neill, M., & Brabazon, A. (2019). Business analytics capability, organisational value and competitive advantage. *Journal of Business Analytics*, 2(2), 160-173.
- Obeng-Tuaah, M. (2025). Employees Training and Development to Enhance Organisational Performance: A Systematic Review: Employees Training and Development to Enhance Organisational Performance. *International Journal of Multidisciplinary Studies and Innovative Research*, 13(1), 1-15.
- Obuobisa-Darko, T. (2020). Ensuring employee task performance: Role of employee engagement. *Performance Improvement*, 59(8), 12-23.

- Okhuysen, G., & Bonardi, J. P. (2011). The challenges of building theory by combining lenses. *Academy of Management Review*, 36(1), 6-11.
- Okon, R. I. C. H. A. R. D., Odionu, C. S., & Bristol-Alagbariya, B. E. R. N. A. D. E. T. T. E. (2024). Integrating data-driven analytics into human resource management to improve decision-making and organizational effectiveness. *IRE Journals*, 8(6), 574.
- Oribhabor, C. B., & Anyanwu, C. A. (2019). Research sampling and sample size determination: a practical application. *Journal of Educational Research (Fudjer)*, 2(1), 47-57.
- Oseghale, R. O., Nyuur, R. B., & Debrah, Y. A. (2019). Institutional factors and high-performance work organisations (HPWOs) in Sub-Saharan Africa (SSA). *Management Science: Foundations and Innovations*, 199-218.
- Pala, S. K. (2024). Use and Applications of Data Analytics in Human Resource Management and Talent Acquisition. *International Journal of Enhanced Research in Management & Computer Applications ISSN*, 2319-7463.
- Pala, S. K. (2024). Use and Applications of Data Analytics in Human Resource Management and Talent Acquisition. *International Journal of Enhanced Research in Management & Computer Applications ISSN*, 2319-7463.
- Pallant, J. (2020). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. Routledge.
- Pandita, D., & Ray, S. (2018). Talent management and employee engagement—a meta-analysis of their impact on talent retention. *Industrial and commercial training*, 50(4), 185-199.
- Patil, B. S., & Priya, M. S. R. (2024). HR data analytics and evidence based practice as a strategic business partner. *Vilakshan-XIMB Journal of Management*, 21(1), 114-

- Philip, B., Mathew, G. A., Sebastian, R. T., Eshwari, B., Roopa, M. B., & Mathews, S. B. (2024). Strategizing Talent Acquisition for Fostering Future Workforce Success: Addressing Millennial Turnover and Hiring Challenges in a Rapidly Evolving Business Landscape. In *Anticipating Future Business Trends: Navigating Artificial Intelligence Innovations: Volume 1* (pp. 357-368). Cham: Springer Nature Switzerland.
- Pougajendy, S., Mathiazhagan, A., & Karunamurthy, A. (2024). The Role of Organizational Culture in Driving Employee Engagement: Insights and Implications. *Quing: International Journal of Multidisciplinary Scientific Research and Development*, 3(3), 26-32.
- Power, D. J., Heavin, C., McDermott, J., & Daly, M. (2018). Defining business analytics: an empirical approach. *Journal of Business Analytics*, 1(1), 40-53.
- Quader, M. (2024). Exploring human resource management practices and employee satisfaction in Bangladesh's private banking sector. *Journal of Policy Options*, 7(1), 36-45.
- Ramayah, T. J. F. H., Cheah, J., Chuah, F., Ting, H., & Memon, M. A. (2018). Partial least squares structural equation modeling (PLS-SEM) using smartPLS 3.0. *An updated guide and practical guide to statistical analysis*, 1(1), 1-72.
- Rajâa, O., & Mekkaoui, A. (2025). Revealing the impact of social exchange theory on financial performance: a systematic review of the mediating role of human resource performance. *Cogent Business & Management*, 12(1), 2475983.
- Retno, B., Samsuddin, H., Nitawati, E. Y., Soelistya, D., & Putrianti, F. G. (2024). Human Resource Management Strategy the Role of Managers and Career Development. *Jurnal Ilmiah Manajemen Kesatuan*, 12(4), 951-960.

- Rezaiee, M., & Kareshki, H. (2024, November). Empowering career pathways: integrating self-regulation strategies with career counseling practices. In *Frontiers in Education* (Vol. 9, p. 1422692). Frontiers Media SA.
- Rindfleisch, A., Malter, A. J., Ganesan, S., & Moorman, C. (2008). Cross-sectional versus longitudinal survey research: Concepts, findings, and guidelines. *Journal of marketing research*, 45(3), 261-279.
- Riyanto, S., Endri, E., & Herlisha, N. (2021). Effect of work motivation and job satisfaction on employee performance: Mediating role of employee engagement. *Problems and Perspectives in Management*, 19(3), 162.
- Rogers, K. (2018). Do your employees feel respected. *Harvard Business Review*, 96(4), 62-70.
- Rounak, S., & Misra, R. K. (2020). Employee value proposition: an analysis of organizational factors—the way to enhance value perception. *Development and Learning in Organizations: An International Journal*, 34(6), 9-12.
- Russo, E., Moeller, M., & Liesch, P. (2023). Philosophies on talent management systems in Australian subsidiaries of foreign MNEs. *The InTernaTional Journal of human resource managemenT*, 34(9), 1685-1725.
- Sadaf, M., Mukhtar, U., Nemati, A. R., Yousaf, R., & Javed, W. (2022). Impact of organizational value system, perceived organizational support, and job satisfaction on organizational commitment. *Journal of Entrepreneurship, Management, and Innovation*, 4(1), 71-99.
- Saifan, S. (2025). Senior Leadership Traits and Their Impact on Leadership Effectiveness in the United Arab Emirates Police. *Journal of Police and Legal Sciences*, 16(1), 2.
- Saini, A., Saini, G. K., & Kumar, S. (2021). Role of corporate social marketing

- campaigns in employer branding: a study of campus engagement initiatives. *Social marketing quarterly*, 27(4), 324-346.
- Saks, A. M. (2022). Caring human resources management and employee engagement. *Human resource management review*, 32(3), 100835.
- Saks, A. M., Gruman, J. A., & Zhang, Q. (2022). Organization engagement: a review and comparison to job engagement. *Journal of Organizational Effectiveness: People and Performance*, 9(1), 20-49.
- Samuel, I., & Isa, M. Y. M. (2024). The Mediating Role of Talent Management in Succession Planning and Private Organization Sustainability: A Conceptual Article. *Journal of Current Social and Political Issues*, 2(1), 22-33.
- Saputra, A., Wang, G., Zhang, J. Z., & Behl, A. (2022). The framework of talent analytics using big data. *The TQM Journal*, 34(1), 178-198.
- Sarker, I. H. (2021). Data science and analytics: an overview from data-driven smart computing, decision-making and applications perspective. *SN Computer Science*, 2(5), 377.
- Saunders, F. C., Gale, A. W., & Sherry, A. H. (2016). Responding to project uncertainty: Evidence for high reliability practices in large-scale safety-critical projects. *International Journal of Project Management*, 34(7), 1252-1265.
- Schmidt, J. (2022). Importance of L&D initiatives in employee engagement. *HR Future*, 2022(5), 22-24.
- Sebire, J., Stubbs, G., & Al Hanaee, M. (2025). Safety and security in Abu Dhabi: The impact of policing on public perceptions. *International Journal of Law, Crime and Justice*, 80, 100728.
- Segovia, R. O. (2024). *Overcoming Recruitment and Retention Challenges in Law Enforcement: A Systematic Review*. Faculty Publications and Presentations. 237.

https://digitalcommons.liberty.edu/educ_fac_pubs/237

- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Selvakumar, P., Dinesh, N., Gaidhani, S., Sharma, M., & TC, M. (2025). Organizational Culture and Values in Employee-Owned Businesses. In *Organizational Models, Cultural Dynamics, and CSR Applications in Employee-Owned Enterprises* (pp. 1-30). IGI Global Scientific Publishing.
- Sembiring, E., & Damayanti, N. (2023). Talent attraction, talent retention, and talent management as a mediating on organization performance. *Ultima Management: Jurnal Ilmu Manajemen*, 15(1), 58-76.
- Serhan, C., Nasr, N., Cheikh, G., & Nachar, G. (2024). Retaining young employees in the hospitality and tourism sector: the role of workplace context and management practices. *EuroMed Journal of Business*. Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/EMJB-01-2024-0009>
- Setiawan, I., & Prasajo, S. (2021). Effect of talent management and employee engagement on turnover intention with employee retention mediation. *Journal of Business Management and Accounting*, 3(2), 55-63.
- Shan, Z., & Wang, Y. (2024). Strategic talent development in the knowledge economy: a comparative analysis of global practices. *Journal of the Knowledge Economy*, 1-27.
- Sharma, K. (2021). Talent Management: From Resource-Based View to Dynamic Capabilities. In *The Routledge Companion to Talent Management* (pp. 57-67). Routledge.
- Simbula, S., Margheritti, S., & Avanzi, L. (2023). Building work engagement in organizations: A longitudinal study combining social exchange and social identity

- theories. *Behavioral Sciences*, 13(2), 83.
- Singh, M., Srivastava, S. P., Srivastava, S., & Singhal, T. (2023). Unlocking Predictive Insights for Employee Retention and Engagement: Harnessing Machine Learning and Big Data Analytics in HR Practices. In *International Conference on Mechanical and Energy Technologies* (pp. 497-505). Singapore: Springer Nature Singapore.
- Singh, S., Agarwal, T., & Pant, T. (2024). Examining the temporal effects of employer branding on employee engagement and employee retention: A longitudinal study in the Indian IT Sector. *Journal of Chinese Human Resources Management*, 15(3), 104-118.
- Son, J., Park, O., Bae, J., & Ok, C. (2020). Double-edged effect of talent management on organizational performance: the moderating role of HRM investments. *The international journal of human resource management*, 31(17), 2188-2216.
- Sorn, M. K., Fienena, A. R., Ali, Y., Rafay, M., & Fu, G. (2023). The effectiveness of compensation in maintaining employee retention. *Open Access Library Journal*, 10(7), 1-14.
- Sousa, M. J., & Rocha, Á. (2019). Leadership styles and skills developed through game-based learning. *Journal of Business Research*, 94, 360-366.
- Sousa, r. R. A. D., Carth, j. L., & Nascimento, E. D. S. (2023). Recruitment and selection: strategies to attract, recruit and select the best talent for the organization. *Istacien Multidisciplinary Scientific Journal*, 1(2), 1-16.
- Stahl, G., Björkman, I., Farndale, E., Morris, S. S., Paauwe, J., Stiles, P., ... & Wright, P. (2012). Six principles of effective global talent management. *Sloan Management Review*, 53(2), 25-42.
- Steinbach, A. L., Holcomb, T. R., Holmes Jr, R. M., Devers, C. E., & Cannella Jr, A.

- A. (2017). Top management team incentive heterogeneity, strategic investment behavior, and performance: A contingency theory of incentive alignment. *Strategic Management Journal*, 38(8), 1701-1720.
- Suknunan, S., & Bhana, A. (2022). Influence of employee-manager relationship on employee performance and productivity. *Problems and Perspectives in Management*, 20(3).
- Susanto, P. C. (2022). Employee engagement strategy: analysis of organizational commitment, compensation, career development. In *International Conference of Humanities and Social Science (ICHSS)* (pp. 96-103).
- Susanto, P. C., & Sawitri, N. N. (2022). Coaching, Mentoring, Leadership Transformation and Employee Engagement: A Review of the Literature. *Dinasti International Journal of Education Management & Social Science*, 7(2).
- Susanto, P. C., Syailendra, S., & Suryawan, R. F. (2023). Determination of motivation and performance: Analysis of job satisfaction, employee engagement and leadership. *International Journal of Business and Applied Economics*, 2(2), 59-68.
- Taamneh, A. M., Taamneh, M., Alsaad, A., & Al-Okaily, M. (2022). Talent management and academic context: A comparative study of public and private universities. *EuroMed Journal of Business*, 17(4), 731-751.
- Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic management journal*, 28(13), 1319-1350.
- Teece, D. J. (2018). Business models and dynamic capabilities. *Long range planning*, 51(1), 40-49.
- Teece, D. J., & Pisano, G. (1994). As capacidades dinâmicas da firma: uma introdução. *Tradução de: "The dynamic capabilities of firms: an introduction"*.

- Industrial and Corporate Change*, 3(3).
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal*, 18(7), 509-533.
- Tenenhaus, M., Amato, S., & Esposito Vinzi, V. (2004). A global goodness-of-fit index for PLS structural equation modelling. In *Proceedings of the XLII SIS scientific meeting* (Vol. 1, No. 2, pp. 739-742).
- Thakre, N., & Mathew, P. (2020). Psychological empowerment, work engagement, and organizational citizenship behavior among Indian service-sector employees. *Global Business and Organizational Excellence*, 39(4), 45-52.
- Tkalac Verčič, A., Galić, Z., & Žnidar, K. (2023). The relationship of internal communication satisfaction with employee engagement and employer attractiveness: testing the joint mediating effect of the social exchange quality indicators. *International Journal of Business Communication*, 60(4), 1313-1340.
- Tomar, S., & Gaur, M. (2020). HR analytics in business: role, opportunities, and challenges of using it. *Journal of Xi'an University of Architecture & Technology*, 12(7), 1299-1306.
- Turner, P. (2020). Employee engagement in contemporary organizations. *Employee engagement in contemporary organizations*. Springer
- Turner, P., & Turner, P. (2020). What is employee engagement?. *Employee engagement in contemporary organizations: Maintaining high productivity and sustained competitiveness*, 27-56.
- Twigg, S. (2024). *A Critical Analysis of Learning Development and Knowledge Transfer in Police Training in England and Wales* (Doctoral dissertation, University of Central Lancashire).
- Urme, U. N. (2023). The impact of talent management strategies on employee

- retention. *International Journal of Science and Business*, 28(1), 127-146.
- Van Allen, S. (2013). Engagement at work: Its effects on performance continues in tough economic times. *Key Findings From Gallup's Q12 Meta-Analysis of 1.4 Million Employees*, 1-2.
- Van Hoa, N., & Van Thu, P. (2024). Factors Affecting Talent Attraction: Theoretical Basis. *International Journal of Advanced Multidisciplinary Research and Studies*, 4(1), 865-869.
- Varpio, L., Paradis, E., Uijtdehaage, S., & Young, M. (2020). The distinctions between theory, theoretical framework, and conceptual framework. *Academic medicine*, 95(7), 989-994.
- Walker, K. (2024). Employee feedback: How to provide feedback and recognition regularly. *Strategic HR Review*, 23(2), 46-50.
- Warganegara, A., & Adam, M. (2023). Improving the work effectiveness of bhabinkamtibmas police in disruptive scenarios: analysing the impact of behaviour and competence, with adaptation as an intervening variable. *Croatian International Relations Review*, 29(92), 125-152.
- Wilson, J. M., Grammich, C. A., Cherry, T., & Gibson, A. (2023). Police retention: a systematic review of the research. *Policing: a journal of policy and practice*, 17, paac117.
- Wolniak, R., Dolata, M., Hadryjańska, B., & Wysokińska-Senkus, A. (2024). Employing business analytics in Industry 4.0 settings for human resource analytics. *Zeszyty Naukowe Politechniki Śląskiej. Organizacja i Zarządzanie*, 197, 629-640.
- Xi, M., Chen, Y., & Jiang, K. (2025). All Roads Lead to Rome? A Contingent Configurational Perspective of HRM Systems and Organizational

Effectiveness. *Personnel Psychology*.

- Yadav, A., Pandita, D., & Singh, S. (2022). Work-life integration, job contentment, employee engagement and its impact on organizational effectiveness: a systematic literature review. *Industrial and Commercial Training*, 54(3), 509-527.
- Yarangga, R. E., Ibrahim, M. B. H., Irawan, A., Akbar, M. A., & Rasyid, A. (2023). Succession Excellence: Nurturing Leadership Talent for Sustainable Organizational Success. *Advances: Jurnal Ekonomi & Bisnis*, 1(6), 317-331.
- Yildiz, D., Bozbura, F. T., Tatoglu, E., & Zaim, S. (2024). How do organizational career management activities influence employees' career outcomes? The mediating role of career capital. *International Journal of Organizational Analysis*, 32(9), 1805-1832.
- Yildiz, R. O., & Esmer, S. (2023). Talent management strategies and functions: a systematic review. *Industrial and commercial training*, 55(1), 93-111.
- Yin, N. (2018). The influencing outcomes of job engagement: an interpretation from the social exchange theory. *International Journal of Productivity and Performance Management*, 67(5), 873-889.
- Younas, M., & Waseem Bari, M. (2020). The relationship between talent management practices and retention of generation 'Y' employees: mediating role of competency development. *Economic research-Ekonomska istraživanja*, 33(1), 1330-1353.
- Zaitoun, A. A. M. R., & Taib, R. M. (2024). The Contribution of Transformational Leadership and Innovation Practices in Fostering Policemen Performance of Abu Dhabi Police. *International Journal of Business and Technology Management*, 6(S4), 218-231.
- Zaitoun, A. A. M. R., & Taib, R. M. (2024). The Impact of Innovation Practices on the Performance of Abu Dhabi Police. *International Journal of Business and*

Technology Management, 6(S4), 232-242.

- Zapata-Cantu, L., Cantu Delgado, J. H., & Gonzalez, F. R. (2016). Resource and dynamic capabilities in business excellence models to enhance competitiveness. *The TQM Journal*, 28(6), 847-868.
- Zhang, Z., & Jia, M. (2010). Using social exchange theory to predict the effects of high-performance human resource practices on Corporate Entrepreneurship: Evidence from China. *Human Resource Management*, 49(4), 743-765.
- Zhao, Q., Cai, Z., Zhou, W., & Zang, L. (2022). Organizational career management: a review and future prospect. *Career Development International*, 27(3), 343-371.
- Zimba, O., & Gasparian, A. Y. (2023). Designing, conducting, and reporting survey studies: a primer for researchers. *Journal of Korean Medical Science*, 38(48).
- Žukauskas, P., Vveinhardt, J., & Andriukaitienė, R. (2018). Exploratory research. *Management culture and corporate social responsibility*, 189.

APPENDICES

APPENDICES A SURVEY QUESTIONNAIRE



Dear Respondent,

I am a Ph.D. student at **University Malaysia Sarawak** and this survey is part of my PhD research. You are invited to participate in this survey, which will take approximately 5 minutes of your valuable time. This questionnaire is designed to study the It will take approximately 5 minutes to complete the questionnaire. This questionnaire is designed to study **The Influence of Talent Management Practices on Employee Engagement in the Abu Dhabi Police: Moderating Role of Business Analytics.**

Your participation is on voluntarily basis. There are no foreseeable risks associated with this survey. Your survey responses will be strictly confidential and data from this research will be reported only in the aggregate. Your information will be coded and will remain confidential.

If you have questions at any time about the survey or the questionnaire items, you may contact

Fahad Al Omaira
Phone: +971522222823
Email: alomaira88@gmail.com
Thank you very much for your time and support.

1- Gender Male ☐ Female ☐

2- Age (years)	18 to 24	25 to 30	31 to 40	41 to 50	51 to 60	Above 60

3- Education Level	High School	Diploma	Bachelor	Master	Ph.D./Doctorate	Others

4- Position level	 فريقت Lt.General	 عميد Brigadier	 مقدم Lt.Colonel	 نقيب Captain

5- Monthly Income (AED)	5000 - 10000	10001 - 15000	15001 - 20000	20001 - 25000	25001 - 30000	30001 - 35000	35001 - 40000	40001 - 45000	45001 - 50000	Above 50000

6- Working experience (years)	01-05 years	05-10 years	10-15 years	15-20 years	20-25 years	25-30 years	30 above years

SECTION-B: Please choose the appropriate answer that suite your agreement level

to every statement:

B1	Talent Attraction	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1	My organization is actively involved in the implementation of employer branding					
2	My organization has good working conditions and fair wages that enabled it to attract the right talents					
3	My organization values talent search matrix during selection to get experienced, qualified, expertise, potential, and qualified employees					
4	My organization strives to build a good brand image to attract talented employees					
5	My organization assures employees job security to attract the right talent.					
6	My organization supports the employee training and career progression					
7	Work-life balance, as well as social networking facilities in my organization, is a motivating factor to the employees					
8	My organisation ensures a good organizational climate to attract the right talents					

B2	Talent Retention	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1	My organization uses an effective leadership style and the organization is careful about how employee issues are handled					
2	My organization ensures our image remains good all the time to retain our talented employees					
3	My organization has an internal recruitment policy that helps to raise the loyalty and morale of our employees					
4	My organization has flexible working hours that encourage employees' retention					
5	My organization offers training opportunities to enhance career growth hence retain talented employees					
6	In my organization, there is an effective performance assessment that enhances employee confidence					
7	My organization offers attractive non-monetary rewards to the employees					

B3	Learning and Development	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1	My organization puts in place appropriate learning and development strategies					
2	My organization identifies the employees who need learning and development before conducting training					
3	My organization organised training materials that mapped to every employee needs of learning and development					
4	In my organization, employees are continuously acquiring new knowledge and skills, and mastering new ways of doing things					
5	In my organisation, on the job training is performed by the senior staff					
6	In my organization, the development of leadership skills has a great interest					
7	The training for the development of teamwork skills has a high priority in my organisation					
8	My organisation developed many electronic training materials that fit with different employees' need					

B4	Career Management	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1	My organization offers career counselling					
2	My organization has established career centres where employees can access useful materials and advice on career growth and development					
3	My organization believes career planning facilitates the expansion and growth of the organization					
4	This organization encourages job rotation across departments to increase employees' value					
5	My organization plans on employee growth and progression					
6	My organization strives to establish career paths and ladders in every department					
7	In my organization, programs and initiatives that enhance employee development are developed					
8	My organization has established succession planning					
9	My organization has the provision career mentors					
10	In my organization, there are retirement preparation programs					

B5	Employee Engagement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1	I know what is expected of me at work					
2	I have the materials and equipment I need to do my work right					
3	At work, I have the opportunity to do what I do best every day					
4	Recently, I have received recognition or praise for doing good work					
5	My supervisor, or someone at work, seems to care about me as a person					
6	My manager at work encourages my development					
7	At work, my opinions are counted					
8	The mission or purpose of my organization makes me feel that my job is important.					
9	My associates or fellow employees are committed to doing quality work					
10	In the last six months, someone at work has talked to me about my progress					
11	I have the opportunities at work to learn and grow					

B6	Business Analytics	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1	In my organization, we predict and prepare for the future by proactively evaluating scenarios or potential trade-offs.					
2	In my organization, decision-making is based on rigorous analytic approaches (e.g., quantitative modelling, simulation).					
3	In my organization, we manage data to enable the ability to share and aggregate data across departments or business units					
4	In my organization, business information and analytics differentiate us within the industry					
5	In my organization, we improve our information and analytics capability is a top priority”					

B7	Employees Performance	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1	I complete my work within the time allocated					
2	I work overtime to complete my tasks					
3	My performance is measured against the productivity					
4	I attend to my work with speed and accuracy					
5	My performance has continually improved					
6	I take time to listen to the clients to ensure I attend to them effectively					
7	I do my work effectively without complaining					
8	I combine the available resources very well to provide quality services					
9	I usually take time to follow up with customers to ensure that they are satisfied with the services					
10	I record down a number of my activities to-do list before starting on the day's work					
11	My job is in line with my interests, skills, and attitudes					