

**INFLUENCE OF HUMAN CAPITAL DEVELOPMENT ON EMPLOYEE
PERFORMANCE IN KENYA POWER AND LIGHTING COMPANY, KENYA**

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DECLARATION AND RECOMMENDATION

Declaration

I declare that this thesis is my original work and has not been submitted for a degree or any other academic award at any other university or institution.

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Recommendation

This thesis has been approved by the university supervisors for the examination purposes.

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DEDICATION

I dedicate this thesis to my wife, Halima Abdullahi Dalacha, and my children, Buke, Abdullahi, Samira, Salama, Salad and Fatma.

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ABSTRACT

Employee performance is a critical determinant of organizational success, impacting productivity, service delivery, and competitive advantage. High levels of employee performance are essential for organizations to meet their strategic goals, enhance operational efficiency, and remain adaptable to market demands. In Kenya Power and Lighting Company (KPLC), employee performance is closely linked to the capacity of the workforce to meet the evolving demands of the energy sector. To improve performance, KPLC recognizes the importance of human capital development (HCD), specifically employee training, career development, performance management, and knowledge management, in bridging skill gaps and optimizing workforce output. Despite the importance of these strategies, there is limited empirical research exploring the individual and joint effects of these human capital components on employee performance within utility organizations. This study investigated the influence of human capital development, specifically employee training, career development, performance management, and knowledge management, on employee performance at KPLC. Grounded in Experiential Learning Theory, Social Cognitive Career Theory, Goal-Setting Theory, and Social Exchange Theory, the research employed a descriptive cross-sectional design. The target population consisted of 1,200 employees in the Mount Kenya Region, from which a sample of 300 respondents was selected using stratified cluster sampling. Data were collected using structured questionnaires and analyzed through both descriptive and inferential statistical methods. Diagnostic tests, including normality, multicollinearity, and homoscedasticity, were conducted to ensure the robustness and validity of the regression model. The multiple regression analysis revealed an adjusted R^2 value of 0.797, indicating that 79.7% of the variation in employee performance was explained by the four human capital development dimensions examined. The overall model was statistically significant ($F = 69.857, p < 0.001$), confirming that the independent variables significantly explain variations in employee performance. Specifically, all four components of human capital development had notable positive effects on employee performance. Employee training showed a significant positive impact ($\beta = 0.395, p = 0.000$), career development ($\beta = 0.428, p = 0.001$), performance management ($\beta = 0.512, p = 0.000$), and knowledge management ($\beta = 0.601, p = 0.000$) each demonstrated strong contributions to performance enhancement. These results underscore the vital role of structured human capital development initiatives in boosting employee engagement and productivity. Notably, knowledge management exhibited the greatest influence, highlighting its role in fostering organizational learning, collaboration, and enhanced productivity. The study concludes that the strategic application of integrated human capital development initiatives significantly enhances employee performance at KPLC. The findings suggest that utility organizations should institutionalize structured training programs, career progression pathways, transparent performance management systems, and knowledge-sharing platforms to optimize workforce potential. These insights offer valuable implications for policymakers, HR practitioners, and corporate leaders seeking to improve organizational performance through effective workforce development.

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LIST OF ABBREVIATIONS AND ACRONYMS

HCD: Human capital development

ICT: Information communication technology

KPLC: Kenya power and lighting company

ELT: Experiential Learning Theory

NACOSTI: National Commission for Science, Technology and Innovation

SCCT: Social Cognitive Career Theory

SET: Social Exchange Theory

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Employee performance is a critical determinant of organizational success, influencing both operational efficiency and overall competitiveness. Organizations that prioritize employee performance are better positioned to achieve strategic goals, improve their service delivery, and remain competitive in their respective industries (Nyambegera & Gicheru, 2021). Human capital development (HCD), which encompasses employee education, training, and ongoing professional development, is critical to improving employee performance. Organizations engage in comprehensive development programs to guarantee that their staff has the essential skills, knowledge, and competences. This leads to higher productivity, innovation, and improved service delivery (Kang et al., 2020).

Global best practices demonstrate the value of HCD in driving employee performance. For instance, companies like Google and Microsoft have adopted innovative approaches to professional development, resulting in a high level of employee satisfaction and improved performance. Google invests heavily in continuous learning programs such as “Career Guru” and “Googler-to-Googler,” which promote mentorship and peer learning. These initiatives not only enhance employee skills but also increase employee engagement and motivation, leading to higher productivity (Kaufman, 2018). Similarly, Microsoft fosters a growth mindset by encouraging its employees to engage in lifelong learning and self-improvement. This culture of development is central to Microsoft’s ability to adapt to changing market demands and maintain its position as an industry leader (Dweck, 2017).

In Europe, Siemens has been a model for HCD, particularly in integrating lifelong learning within its organizational culture. Siemens offers extensive training programs, e-learning platforms, and leadership development opportunities. This emphasis on learning not only enhances employee skills but also promotes job satisfaction, employee retention, and organizational agility. The company has seen improvements in performance, innovation, and operational efficiency, all of which contribute to its long-term success (Siemens, 2019).

In Kenya, the importance of HCD is particularly relevant in sectors where operational efficiency and service quality are paramount, such as in the energy sector. The Kenya Power and Lighting Company (KPLC), a key player in this sector, faces increasing pressure to enhance both its service delivery and operational efficiency to remain competitive. Meeting the demands of a growing customer base, improving grid reliability, and sustaining profitability all depend on the performance of KPLC's employees. To meet these challenges, KPLC must equip its employees with the necessary skills and competencies to navigate the dynamic energy landscape. HCD, as an essential tool for professional growth, ensures that employees continue to improve and adapt to new industry challenges (Kibui et al., 2019).

However, despite the recognized importance of HCD, many organizations in Kenya, including KPLC, face challenges in fully leveraging the potential of their workforce. In the energy sector, there are significant gaps in employee skills, training programs, and professional development opportunities. Research indicates that KPLC's employee performance is hindered by inadequate training programs, limited access to advanced learning opportunities, and insufficient investment in employee development. These limitations impact not only individual employee performance but also the organization's overall ability to meet customer demands and improve service delivery (Kibui et al., 2019). Therefore, the need for

comprehensive HCD strategies to enhance employee performance and, consequently, improve organizational efficiency is critical for KPLC and other companies within the Kenyan energy sector.

1.1.1 Global Perspective on Human Capital Development and Employee Performance

On a global scale, nations have increasingly recognized that Human Capital Development (HCD) plays a pivotal role in enhancing employee performance and driving economic growth. In Japan, the concept of continuous improvement, known as "Kaizen," is deeply ingrained in their corporate culture. Employees are consistently encouraged to upgrade their skills through ongoing training and development programs, which not only boosts their individual performance but also contributes significantly to overall productivity within organizations (Harada, 2019). South Korea provides another illustration of the impact of HCD. The nation's substantial investments in education and skill development are widely considered key drivers behind its rapid economic growth. These initiatives have led to marked improvements in employee performance, which, in turn, has contributed to South Korea's status as a global economic powerhouse (Park & Jung, 2021).

In Southeast Asia, countries like Indonesia and the Philippines have implemented national strategies that integrate vocational training with higher education to enhance workforce capabilities. These measures have proven effective in boosting employee performance, particularly in sectors such as manufacturing and services, where a skilled workforce is crucial to maintaining competitive advantage (Sulaiman, 2021; Olfindo & Beaton, 2020).

Europe presents a similar story. Countries like Germany and Spain have long embraced apprenticeship programs that align education with industry needs, leading to a highly skilled

workforce and consistently strong employee performance across various sectors (Schneider, 2020). In North America, Canada and Mexico have also made significant strides in HCD by promoting lifelong learning and skill acquisition, which has translated into heightened employee performance across diverse industries (Jackson & Chapman, 2021). Meanwhile, Australia and New Zealand have prioritized skill development as part of their HCD strategies, yielding notable improvements in national productivity and workforce performance (Jackson & Chapman, 2021).

1.1.2 Regional Perspective on HCD and Employee Performance

Across Africa, the relationship between Human Capital Development and employee performance is gaining recognition, particularly in leading economies such as Nigeria, South Africa, and Ghana. In Nigeria, the government has placed a strong emphasis on technical and vocational education as part of its national development strategy. This focus has led to measurable improvements in employee performance across both public and private sectors (Adeyemo, 2020). South Africa, known for its strong mining and manufacturing industries, has made significant investments in continuous learning and skill development initiatives. These efforts have resulted in enhanced employee performance, particularly in sectors that are critical to the nation's economic success (Ramdass, 2021).

In East Africa, countries like Ethiopia and Tanzania have adopted HCD-focused strategies to boost employee performance, particularly in their expanding industrial sectors. These programs, which emphasize skills training and workforce development, have led to increased productivity and innovation among employees (Mbwana, 2020; Belay, 2019). Similarly, Egypt has focused its HCD investments on sectors such as healthcare and technology, leading

to significant gains in employee performance in these critical areas (El-Said & Youssef, 2020).

In countries like Uganda and Rwanda, human capital development initiatives have been centered around improving access to education and specialized training programs for the youth entering the workforce. These initiatives have had a direct impact on employee performance, particularly in emerging industries such as technology and services, where skilled labor is essential for competitiveness (Kwesiga & Nuwagaba, 2020).

1.1.3 Local Perspective on HCD and Employee Performance

In Kenya, there is a growing acknowledgment of the crucial role Human Capital Development plays in enhancing employee performance and driving national growth. The country's Vision 2030 agenda emphasize the development of a skilled and capable workforce as a cornerstone for achieving sustainable economic advancement (Omolo, 2020). Most of service-based organizations have integrated comprehensive human capital development programs, including technical training, leadership development, and continuous learning initiatives. These efforts are specifically designed to bridge skill gaps, promote innovation, and ultimately improve employee performance and organizational efficiency (Kimani & Mwangi, 2021).

Furthermore, Kenya is increasingly prioritizing sectors such as Information and Communication Technology (ICT) and renewable energy, where there is a high demand for a skilled and adaptable workforce. Investments in workforce development in these areas have led to notable improvements in employee performance and service delivery (Njuguna, 2019). Research suggests that Kenyan organizations that prioritize HCD enjoy enhanced employee engagement, job satisfaction, and overall productivity, making them more competitive in their

respective industries (Muthoni, 2021). For KPLC, in particular, the correlation between HCD and employee performance is particularly significant, given the company's reliance on both technical skills and customer service excellence to maintain its competitive edge in the energy sector. HCD can directly impact employee performance.

In a rapidly evolving energy sector, especially with increasing focus on green energy, sustainability, and digitalization, HCD is critical for ensuring employees remain competitive and adaptable to emerging technologies and processes. As Otoo (2022) highlights, the link between HCD and employee performance is crucial for ensuring organizational resilience, future readiness, and the ability to respond effectively to industry disruptions. Therefore, the interrelationship between HCD and employee performance is fundamental not only to operational efficiency but also to long-term organizational sustainability.

1.2 Statement of the Problem

Effective human capital development is a crucial driver of employee performance, as it equips individuals with the necessary skills, knowledge, and competencies to excel in their roles. Extensive research has underscored the significant impact of investing in human capital on enhancing workforce productivity. For instance, Bakhsh et al. (2020) found that organizations that prioritize human capital development experience a remarkable 24% increase in employee performance. This improvement in performance is not merely an isolated benefit; it leads to enhanced overall organizational performance, fostering a competitive edge in the marketplace. Furthermore, research by Bhatnagar (2019) revealed that companies that invest in employee training and development can achieve up to a 27% increase in productivity, underscoring the vital link between human capital initiatives and superior performance.

outcomes. Such compelling statistics emphasize the critical importance of human capital development in nurturing employee potential and driving organizational success.

The current state of human capital development in Kenya reveals a significant gap that demands urgent attention. Recent studies highlight a substantial performance deficit in the country's energy sector, primarily due to inadequate human capital development. Research indicates that employee performance is approximately 30% below its potential in organizations with insufficient training and development opportunities, emphasizing the critical role of human capital investment in boosting workforce productivity and organizational effectiveness (Muriuki, 2023). Findings show that only 35% of employees in Kenya's energy sector have access to essential training and development, considerably lower than the global average of 60%. This limited investment in human capital has been linked to diminished employee performance, with 55% of respondents reporting concerns over lacking the necessary skills and competencies to meet their organizations' objectives (Muriuki, 2023). These deficiencies not only hinder individual performance but also impair overall organizational effectiveness.

Moreover, the lack of a robust training framework contributes to a cycle of underperformance that can impact the competitiveness of organizations like Kenya Power and Lighting Company. According to Karanja and Mwangi (2021), the absence of strategic human resource development programs results in employees being ill-equipped to handle the evolving demands of the energy sector. Additionally, Onyango (2020) emphasizes that investment in employee development is crucial for fostering innovation and improving service delivery, which are critical for meeting organizational objectives.

Despite the global consensus on the positive link between human capital development and employee performance, Kenya faces several challenges that hinder the full realization of this relationship. Factors such as insufficient funding for training programs, limited access to professional development resources, and a lack of strategic focus on employee skill enhancement contribute to this gap. Understanding these challenges is crucial for reassessing the connection between human capital development and employee performance within Kenya Power and Lighting Company. This research aims to explore the factors that either support or obstruct human capital development in the company. By identifying these factors, targeted interventions can be developed to address existing gaps and improve employee performance. The findings of this study inform evidence-based decision-making processes aimed at enhancing employee performance in Kenya.

1.3 Objectives of the Study

1.3.1 General Objective

To establish the influence of human capital development on employee performance at Kenya Power and Lighting Company.

1.3.2 Specific Objectives:

- i. To examine the influence of employee training on employee performance at Kenya Power and Lighting Company.
- ii. To assess the influence of career development on employee performance at Kenya Power and Lighting Company.

- iii. To determine the influence of performance management on employee performance at Kenya Power and Lighting Company.
- iv. To find out the influence of Knowledge management on employee performance at Kenya Power and Lighting Company.

1.4 Research Hypothesis

H₀1: Employee training has no significant influence on employee performance at Kenya Power and Lighting Company.

H₀2: Career development has no significant influence on employee performance at Kenya Power and Lighting Company.

H₀3: Performance management has no significant influence on employee performance at Kenya Power and Lighting Company.

H₀4: Knowledge management has no significant influence on employee performance at Kenya Power and Lighting Company.

1.5 Significance of the Study

This study holds significant value for Kenya Power and Lighting Company (KPLC), whose operations depend on a technically skilled and competent workforce. It provides insights into how investments in employee training, career development, performance management, and knowledge sharing influence employee performance across key operational areas such as electricity transmission and distribution. The findings equip KPLC with evidence-based strategies for addressing skill gaps, improving productivity, and enhancing service delivery.

By aligning human capital development with performance goals, the company can reduce power outages, boost customer satisfaction, and increase overall operational efficiency.

For employees, the study underscores the importance of continuous learning and professional growth. It links human capital development to improved job satisfaction, motivation, and career advancement. Employees gain a better understanding of how structured training and development programs contribute to both individual and team performance. The research also serves as a vital tool for KPLC's management, offering actionable insights into which areas of human capital development deliver the highest performance returns. These insights can inform strategic decisions on training investments, talent development, resource allocation, and succession planning, ensuring the alignment of human resource practices with corporate goals.

Beyond KPLC, the study offers broader implications for policymakers, HR practitioners, and energy sector stakeholders. As a state-owned enterprise, KPLC's experience provides a model for public sector human capital development. The study can inform national HR policy, particularly under frameworks such as Vision 2030, by encouraging investment in workforce skills and institutional capacity building. Moreover, it adds to the limited body of literature on human capital development in utility companies within developing countries, providing a foundation for future research. The study's relevance also extends to other energy firms in Kenya, encouraging sector-wide adoption of robust HR practices to improve productivity, innovation, and service reliability critical elements in supporting industrial growth, SMEs, and national economic development.

1.6 Justification of the Study

Human capital development has become a pivotal factor in driving organizational performance, particularly within capital-intensive and service-oriented sectors such as energy. Kenya Power and Lighting Company (KPLC), as the nation's primary electricity distributor, plays a central role in Kenya's economic growth and industrialization efforts. However, operational challenges ranging from inefficiencies, frequent power outages, to employee performance gaps underscore the need for a more structured and evidence-based approach to workforce development. Despite ongoing efforts in employee training and development, empirical studies focusing on the specific impact of human capital development on performance within public utilities like KPLC remain limited in the Kenyan context. This study seeks to fill that critical gap by examining the influence of employee training, career development, performance management, and knowledge management on employee outcomes.

Moreover, the study is timely and relevant given the evolving operational demands and technological shifts in the energy sector. With increasing reliance on digital infrastructure, renewable energy integration, and customer-centric service delivery, KPLC must equip its workforce with dynamic skills and adaptive capabilities. By identifying which aspects of human capital development yield the most significant improvements in employee performance, this research provides actionable insights that can help KPLC enhance operational efficiency, workforce engagement, and service reliability. The study therefore supports organizational transformation, improved service quality, and better resource allocation in the face of strategic reforms and stakeholder expectations.

Additionally, this research contributes to public policy and academic literature by offering context-specific findings applicable to state-owned enterprises and the wider energy sector in developing economies. Policymakers, HR practitioners, and scholars can use the results to design and implement effective human resource strategies aligned with national development agendas such as Kenya Vision 2030. By doing so, the study not only benefits KPLC and its employees but also supports national objectives related to job creation, infrastructure reliability, and economic resilience.

1.7 Scope of the Study

This study focused on two core variables: human capital development and employee performance. Human capital development encompasses organizational initiatives aimed at enhancing employee skills, knowledge, and competencies through training, mentoring, professional development, and capacity building. Employee performance was evaluated using key performance indicators (KPIs) such as productivity, efficiency, job satisfaction, and goal attainment. The research was geographically confined to Kenya Power and Lighting Company (KPLC), a state-owned enterprise operating across various regions in Kenya. The study targeted departments involved in critical functions power generation, transmission, distribution, customer service, and administration. A representative sample of employees was drawn from different departments and regional offices to reflect the diversity of KPLC's workforce. The study covered the period 2024–2025, enabling an assessment of recent human capital development practices and their influence on performance.

The target population comprised employees across hierarchical levels, including senior managers, middle-level supervisors, and operational staff. Sampling techniques were employed to ensure diversity in roles, experience, and exposure to development initiatives.

The study sought to determine how various human capital development practices contribute to or hinder employee performance and to identify areas for improvement. The theoretical foundation of the study was anchored in Experiential Learning Theory, which posits that organizations investing in employee development expect improved individual and collective outcomes in return. This framework provided a lens through which to explore the reciprocal relationship between employer investments in capacity building and employee-driven performance enhancements within a public utility context.

1.8 Assumptions of the Study

This study was grounded on several key assumptions to uphold the validity and reliability of its findings. It was assumed that respondents from Kenya Power and Lighting Company (KPLC) provided accurate, honest, and reflective responses, enabling credible conclusions about the influence of human capital development (HCD) on employee performance. The study further assumed that HCD initiatives such as training, mentoring, and professional development had a measurable and observable impact on employee productivity, efficiency, and job satisfaction. Additionally, it was presumed that employees were sufficiently aware of how these initiatives influenced their performance and could provide informed feedback through the survey instruments.

Another core assumption was that HCD programs were implemented uniformly across various departments and regions within KPLC, ensuring equitable access and allowing performance differences to be attributed to the quality and effectiveness of HCD initiatives. The study also assumed that HCD was the primary internal factor influencing employee performance during the

study period, with minimal interference from external variables such as economic or technological disruptions.

1.9 Definition of Terms

Employee Training

Employee training refers to the organized efforts by an organization to improve employees' job-related skills, knowledge, and competencies through structured learning experiences. It typically includes formal programs aimed at enhancing the technical and soft skills required to perform tasks efficiently and effectively. (Nonaka & Takeuchi, 2022).

Employee Performance

Employee performance refers to the degree to which employees effectively and efficiently fulfill the tasks and responsibilities required by their job roles. It is often measured by the quality, quantity, and timeliness of work completed, as well as by the employee's contribution to organizational goals and objectives (Mathis & Jackson, 2021).

Career Development

Career development is the process through which employees manage their progression within the organization by acquiring new skills, seeking new responsibilities, and making career advancements. It involves both individual efforts, such as pursuing further education and experience, and organizational support, such as career counseling and mentorship programs (Mathis & Jackson, 2021).

Human Capital Development

Human capital development is the process of improving the knowledge, skills, abilities, and competencies of employees to enhance their performance and organizational productivity. It includes initiatives such as training, education, professional development, and skill acquisition aimed at maximizing employee potential and overall organizational success (Becker, 2023).

Knowledge management

Knowledge management refers to the process by which employees exchange information, expertise, skills, and insights within an organization to improve efficiency, innovation, and collaboration. It can take place formally through structured systems such as training programs or informally through daily interactions, contributing to the organization's collective knowledge base (Nonaka & Takeuchi, 2022).

Performance Management

Performance management is the continuous dialogue between managers and staff members with the goal of making sure that individual performance continuously meets organizational objectives. To improve performance on an individual and organizational level, it entails establishing expectations, tracking advancement, giving feedback, and assessing outcomes (Nonaka & Takeuchi, 2022).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter examined both the theoretical and empirical literature relevant to this subject. Furthermore, the study was framed with a framework that depicted the interaction of the independent and dependent variables.

2.2 Theoretical Review

The following theories guide this study: Experiential Learning Theory, Social Cognitive Career Theory, Goal-Setting Theory, and Social Exchange Theory.

2.2.1: Experiential Learning Theory

Employee training is theoretically linked to Experiential Learning Theory. The Experiential Learning Theory (ELT) was proposed by David A. Kolb in 1984. His theory outlines how learners can gain skills and knowledge through reflection on hands-on experiences, suggesting that learning is not just a cognitive process but also rooted in direct experience. Kolb's Experiential Learning Theory was formally published in 1984, and it continues to be a cornerstone in the fields of education, human resource development, and employee training.

According to the Experiential Learning Theory, learning occurs in four stages: tactile experience, reflective observation, abstract conceptualization, and active investigation. Kolb believes that people learn best when they go through all four stages in a cyclical manner. Employees taking training, for example, might participate in an event (Concrete event), reflect on that experience (Reflective Observation), generate new ideas or modify existing

knowledge (Abstract Conceptualization), and then apply those ideas in real-life circumstances (Active Experimentation). This cyclical process is essential for deeply integrating learning into employees' behavior and performance.

Kolb's work has been further developed by other scholars, including Alice Y. Kolb and David A. Kolb in later years. In their 2005 work, they revisited and refined aspects of the original theory, emphasizing the flexibility of the learning process and the importance of context in learning (Kolb & Kolb, 2005). They proposed that the learning cycle is not linear but rather iterative and dynamic, adapting to the learner's environment, personality, and external factors. The Experiential Learning Theory is widely accepted in corporate training and human resource development (HRD) contexts, particularly because it aligns well with adult learning principles, which emphasize practical, hands-on learning. Many training programs across industries are designed around the core tenets of ELT, integrating real-world tasks and reflective practices to enhance employee performance (Yardley et al., 2012). It is especially favored in fields where hands-on learning is paramount, such as healthcare, manufacturing, and leadership development programs.

Other scholars have generally lauded Kolb's Experiential Learning Theory for its practical application and ease of use in educational and professional settings. According to Seaman et al. (2017), the theory's adaptability makes it suitable for diverse learning environments, and its focus on experience makes it particularly effective for adult learners. However, authors such as Moon (2004) note that the theory's strength lies in its cyclical nature, which allows learners to continuously refine their understanding based on new experiences and reflections. Despite its widespread use, the Experiential Learning Theory has been critiqued by several scholars. Some argue that Kolb's model overemphasizes the individual learner's cognitive

processes and neglects the role of social and cultural contexts in learning (Fenwick, 2001). Others point out that the model assumes learners will naturally progress through the four stages, which may not always be the case. Moreover, its applicability to formal, structured learning environments has been questioned, especially in situations where learning outcomes must be strictly predefined (Miettinen, 2000).

Despite critiques, the Experiential Learning Theory remains robust in its application to employee training and development. ELT emphasizes the importance of active learning and reflection, which is particularly useful in improving employee performance. By engaging employees in hands-on experiences, companies can ensure that workers develop practical skills that are directly applicable to their roles. Reflective observation and abstract conceptualization stages help employees adapt their learning to different situations, ultimately improving their decision-making and problem-solving abilities, which are key to enhanced performance (Kolb, 1984).

2.2.2: Social Cognitive Career Theory

Career development is theoretically linked to Social Cognitive Career Theory. The Social Cognitive Career Theory (SCCT) was authored by Robert W. Lent, Steven D. The model to focus on career development and decision-making. SCCT examines how individuals' beliefs, behaviors, and environments interact to shape their career trajectories (Lent et al., 1994). It offers a robust framework for understanding how personal factors, social influences, and learning experiences contribute to career choices.

The Social Cognitive Career Theory was formally introduced in 1994 when Lent, Brown, and Hackett published their foundational article in *Journal of Vocational Behavior*. The theory

was a significant development in career psychology as it integrated several elements from Bandura's work, particularly his concepts of self-efficacy, outcome expectations, and personal goals, into a model specifically tailored to career development. The year 1994 is notable because it marked a shift in how career researchers and practitioners approached the relationship between personal agency and career development.

According to SCCT, professional growth is influenced by self-efficacy beliefs, outcome expectations, and personal ambitions (Lent et al., 1994). Self-efficacy refers to confidence in one's abilities, while outcome expectations involve beliefs about action consequences. Personal ambitions guide career goals. People are more likely to pursue careers where they feel competent and expect rewards. Learning experiences shape self-efficacy and expectations, ultimately influencing career choices and performance. Since its inception, SCCT has been further developed and expanded by various scholars. One notable development came from Lent and Brown (2006), who refined the model to include career self-management, thereby addressing how individuals adapt to career challenges and opportunities over time. This advancement highlighted the role of proactive career behaviors, such as networking and skill development, in career advancement. Other scholars, such as Nauta (2013), have applied SCCT to diverse populations, thereby expanding its utility across different cultural contexts and career stages.

SCCT is widely accepted and used in both academic and practical settings for underpinning career development. Its emphasis on the interaction between individual beliefs, environmental factors, and behaviors makes it a versatile framework for studying how people make career-related decisions. Organizations and career counselors use SCCT to design interventions that enhance self-efficacy and help employees align their goals with career opportunities (Brown

& Lent, 2013). The theory has also been applied across diverse populations and industries, making it highly applicable for workforce development and human capital enhancement strategies, where employee performance is a critical factor.

Several scholars have praised SCCT for its comprehensive approach to career development. According to Gibbons and Shoffner (2004), SCCT's inclusion of self-efficacy and outcome expectations makes it particularly well-suited for explaining how individuals develop career interests and make decisions. Other authors, such as Betz (2008), argue that the theory's emphasis on cognitive processes provides valuable insights into how individuals navigate barriers to career success, such as gender discrimination or lack of access to educational resources. Additionally, the theory's flexibility has been praised, as it can be applied across various cultural and socioeconomic contexts (Nauta, 2013).

Despite its wide acceptance, SCCT has been critiqued on several fronts. One major critique is that the theory may not fully account for the influence of unconscious factors, such as emotions or biases, in career decision-making. According to Blustein (2001), SCCT focuses too heavily on rational cognitive processes, potentially neglecting the emotional and psychological aspects of career development. Additionally, some authors argue that the theory's reliance on self-efficacy might oversimplify the complex, multifaceted nature of career choices, especially in individuals who face systemic barriers such as socioeconomic disadvantages (Patton & McMahon, 2006).

Despite its critiques, SCCT remains a robust theoretical framework for understanding how career development influences employee performance. By focusing on self-efficacy and outcome expectations, the theory offers insights into how individuals set career goals, seek out learning opportunities, and adapt to changing career environments. Employees who have

high levels of self-efficacy are more likely to take on challenging tasks, seek feedback, and invest in their development, all of which contribute to improved performance (Lent et al., 1994). Moreover, SCCT's emphasis on goal-setting aligns with performance management practices, which often focus on aligning employee goals with organizational objectives.

2.2.3: Goal-Setting Theory

Performance management is theoretically linked to Goal-setting Theory. Goal-Setting Theory was authored by Edwin A. Locke in 1968, who proposed that setting specific, challenging goals leads to higher levels of task performance compared to vague or easy goals. Locke's initial work focused on the role of conscious goals in human motivation, specifically how individuals are motivated to act when they are committed to achieving a clearly defined goal. Locke's theory shifted the focus from external motivators, such as rewards and punishment, to internal drivers, asserting that goals serve as a critical regulator of human action (Locke, 1968). His groundbreaking research provided the basis for understanding the link between goal clarity and enhanced performance in organizational settings.

Locke (1968) proposed the Goal-Setting Theory to highlight the motivational benefits of clear, challenging goals. According to Locke, goals can mobilize energy and effort, direct attention, increase persistence, and promote the development of strategies to reach objectives. The theory hypothesizes that specific goals result in better performance than general goals like "do your best" because they create a sense of direction, foster effort, and enhance persistence. Additionally, the theory posits that feedback and goal commitment are essential to ensure the individual stays focused and motivated towards goal accomplishment. This framework has served as a fundamental model in the study of employee motivation and performance management (Locke & Latham, 1990).

The development of Goal-Setting Theory did not stop with Locke's original work. Locke and Gary Latham, in 1990, further advanced the theory by formalizing the relationship between goal difficulty, specificity, and performance. They argued that goals that are both challenging and specific lead to higher performance, provided that the individual is committed to the goal and receives adequate feedback on progress. Locke and Latham (2002) later refined their model by introducing the concept of self-efficacy, which posits that people who believe they are capable of achieving their goals are more likely to exert effort towards their achievement. Thus, Goal-Setting Theory has evolved into a comprehensive framework explaining not only goal setting but also the mechanisms underlying motivation and performance in organizational settings (Locke & Latham, 2002).

Today, Goal-Setting Theory remains one of the most widely accepted and utilized frameworks for understanding performance management and employee motivation. Its applicability spans various industries and sectors, including healthcare, education, and corporate management. Performance management systems often incorporate goal-setting components, where managers work with employees to establish clear, measurable objectives. Studies by Aguinis (2019) highlight that performance management systems that incorporate goal-setting principles show significant improvements in employee engagement, productivity, and overall organizational outcomes. This theory's emphasis on setting specific, achievable goals is especially relevant in the context of human capital development, as it aligns organizational objectives with employee performance metrics.

Several scholars have supported the use of Goal-Setting Theory to underpin performance management systems. For instance, Latham (2004) argues that the simplicity and direct application of the theory make it a powerful tool for both managers and employees. By setting

clear expectations through goal setting, employees can better understand what is required of them, thus reducing ambiguity and increasing productivity. Other researchers, such as Noe et al. (2017) have emphasized the importance of the theory in enhancing employee motivation and facilitating professional development. The theory's contribution to human capital development initiatives is significant because it ties employee growth directly to organizational success.

Despite its broad acceptance, Goal-Setting Theory has faced criticism from some scholars. Critics argue that the theory may not be universally applicable across different cultural contexts or job types. For instance, Meyer et al. (2004) contend that in high-stress jobs or environments that require creativity, rigid goal-setting frameworks may actually hinder performance by stifling flexibility and adaptability. Furthermore, the theory assumes that individuals have the capacity to achieve challenging goals, which may not be the case in all situations, especially when employees lack the necessary resources or support. These critiques suggest that while the theory has strengths, it may not provide a one-size-fits-all solution for performance management.

Nonetheless, proponents of Goal-Setting Theory maintain that it remains a valuable tool for enhancing employee performance, particularly when integrated with other motivational strategies. Locke and Latham (2002) acknowledged some of these critiques and suggested that the theory works best when goal setting is combined with appropriate levels of support and feedback. The incorporation of self-efficacy in their revised model addresses concerns about employees' abilities to meet challenging goals, suggesting that managers play a critical role in building their team's confidence and skill sets. This revision strengthens the case for Goal-Setting Theory as a core element of performance management systems.

2.2.4: Social Exchange Theory

Knowledge management is theoretically linked to Social Exchange Theory. Social Exchange Theory (SET) was first proposed by sociologist George C. Homans in 1958. Homans formulated the theory to explain human interactions and relationships in terms of cost-benefit analysis, drawing parallels between social behavior and economic exchange. According to Homans, individuals engage in social interactions with the expectation of receiving rewards that are proportional to their contributions. This exchange process underlies human behavior in various settings, including organizational contexts where Knowledge management plays a critical role (Homans, 1958).

Homans (1958) hypothesized that social interactions are driven by a system of exchanges, where individuals give something of value (such as time, effort, or information) and expect something of equal or greater value in return. This theory posits that the balance of these exchanges determines the strength and durability of relationships, as well as the willingness of individuals to engage in future exchanges. In the context of organizations, employees share knowledge with colleagues with the expectation of receiving either intrinsic or extrinsic rewards, such as recognition, reciprocity, or career advancement (Blau, 1964). These exchanges form the basis of knowledge management behavior, a key component of human capital development and employee performance.

Peter Blau expanded Social Exchange Theory in 1964 by formalizing the concept of "power" in exchange relationships. Blau argued that knowledge exchange creates imbalances in power dynamics, with individuals who possess valuable knowledge wielding more influence within the organization. Blau's work highlighted that knowledge management behaviors are not only transactional but also impact organizational structures, hierarchies, and social capital (Blau,

1964). Further developments by Emerson (1976) integrated the concept of dependency into Social Exchange Theory, suggesting that employees are more likely to share knowledge when they perceive themselves as dependent on others or when they seek to reduce their dependency by contributing valuable insights.

Today, Social Exchange Theory is widely accepted as a framework for understanding knowledge management behaviors in organizations. Research by Cropanzano and Mitchell (2005) shows that employees are more likely to share knowledge when they perceive the exchange as fair, reciprocal, and rewarding. This theory is often applied in organizational behavior studies, particularly in knowledge management, to explain why individuals choose to share or withhold information in professional settings. In the context of human capital development, knowledge management practices are critical because they enable the transfer of skills, expertise, and best practices, ultimately influencing employee performance and organizational success (Cropanzano & Mitchell, 2005).

Other researchers have agreed that Social Exchange Theory plays an important role in knowledge management and has an influence on employee performance. For example, Noe et al. (2017) contend that social exchanges inside teams and departments improve collaborative efforts, establishing a culture of continuous learning and development. The idea offers a valuable lens through which to analyze how formal rewards (such as promotions or bonuses) and informal rewards (such as peer acknowledgment) motivate knowledge management. Knowledge management practices are more common in firms where employees feel high levels of fairness and reciprocity (Noe et al., 2017). This can lead to enhanced employee performance and creativity.

Despite its widespread acceptance, Social Exchange Theory has faced criticism from several authors. One critique is that the theory assumes individuals act rationally and weigh the costs and benefits of each interaction, which may not always be the case in complex organizational environments. For example, Molm (2003) argued that not all social exchanges are driven by the expectation of reciprocity. Instead, some individuals may share knowledge out of altruism or a desire to contribute to the greater good of the organization. Additionally, the theory has been critiqued for its emphasis on dyadic relationships, neglecting the role of larger social networks and group dynamics in facilitating or hindering knowledge management practices (Molm, 2003).

Nevertheless, Social Exchange Theory remains highly relevant in supporting the relationship between Knowledge management and employee performance. The theory's foundational premise—that employees are more likely to share knowledge when they expect to benefit from the exchange—continues to hold true in modern organizations. In fact, many knowledge management systems and organizational strategies are built upon this principle, providing formal mechanisms to reward employees for their contributions. This encourages a culture of collaboration and continuous improvement, which in turn positively impacts employee performance and organizational success (Blau, 1964; Cropanzano & Mitchell, 2005).

Social Exchange Theory provides a persuasive explanation for knowledge management as a critical component of human capital development and its impact on employee performance. By framing knowledge management as a transactional exchange in which employees balance costs and rewards, the theory helps to explain why some people are more inclined to engage in these practices than others. Regardless of its criticisms, Social Exchange Theory's emphasis on reciprocity, fairness, and incentives provides a solid framework for understanding how

knowledge management behaviors lead to improved performance at both the individual and organizational levels.

2.3 Empirical Literature

2.3.1 Employee Training and Employee Performance

Employee training is widely recognized as a key factor influencing performance within organizations. Training equips employees with essential skills and knowledge to execute their duties effectively. In today's dynamic corporate environment, continuous professional development is crucial to keeping pace with technological advancements and competitive demands (Muriuki, 2020). Effective training enhances individual capabilities, fosters a learning culture, and drives organizational growth.

Numerous studies establish a positive correlation between employee training and performance. Salas et al. (2022) conducted a meta-analysis of 160 trials and found a moderate positive correlation ($r = 0.34$) between training interventions and performance outcomes. Their research underscores the importance of including transfer mechanisms to help employees apply learned skills in real-world settings. Additionally, the study recommends training programs that encourage collaboration to improve overall performance.

In East Africa, Mwendia and Kabere (2019) examined the effects of training on public sector employees in Kenya using a quantitative survey of 150 respondents. Their findings revealed a strong positive correlation ($r = 0.65$) between training and employee performance, highlighting enhanced efficiency and effectiveness in roles. The authors recommend substantial investment in training to address skill gaps and improve service delivery in public institutions.

Similarly, Owino and Wanyonyi (2020) studied the effect of training in Kenyan manufacturing enterprises using a descriptive survey of 120 employees across five firms. Their research revealed a 30% increase in productivity among trained employees, emphasizing the need for customized training programs tailored to industry-specific requirements. They recommend ongoing training initiatives to maintain competitiveness in the rapidly evolving manufacturing sector.

A study by Ndung'u and Ndunda (2020) evaluated training impacts in Kenyan banks using a mixed-methods approach with 200 respondents. The results demonstrated that frequent training significantly enhanced employee performance and job satisfaction. The authors stress the need for financial institutions to develop robust training frameworks aligned with organizational goals to sustain high performance. Beyond Kenya, Kauffeld and Lehmann-Willenbrock (2019) analyzed training effects across European industries using a longitudinal study of 500 employees over two years. Their findings showed a 25% increase in key performance indicators (KPIs) for employees who underwent training. The study underscores the need for regular training evaluations to measure effectiveness and adapt strategies accordingly.

In the healthcare sector, Alshammari et al. (2020) examined training's impact on employee performance in Saudi Arabian hospitals. Their survey-based study of 300 healthcare professionals found that well-structured training programs improved patient care and employee engagement. The authors advocate for prioritizing training as a strategic investment to enhance service quality.

In the IT sector, Choudhury and Dutta (2019) explored training effects on employee performance in Indian IT firms. Their quantitative study of 150 employees found a strong positive correlation, with a 40% improvement in job performance among trained workers. They recommend adopting innovative training methods such as e-learning to cater to diverse workforce needs.

In Kenya's agricultural sector, Waweru (2020) employed a descriptive survey of 100 employees to assess training effects on performance. Findings indicated a 35% productivity increase due to skill development initiatives. The study stresses the need for continuous training to keep up with agricultural innovations and recommends partnerships between training institutions and firms to enhance relevance.

Further, Mutua and Munyao (2019) examined training and performance in Kenyan NGOs through qualitative interviews with 50 employees. Their study found that training improved competence, confidence, and overall organizational effectiveness. They recommend aligning training programs with organizational missions to maximize impact.

These studies collectively highlight the strong link between training and employee performance at global, regional, and local levels. Organizations increasingly recognize training as a driver of performance, productivity, and continuous learning. The research underscores the importance of tailoring training to industry-specific needs to ensure relevance and maximize return on investment. Organizations that prioritize effective training strategies not only enhance employee performance but also gain a competitive edge. As business environments evolve, future studies should explore the impact of digital transformation and remote work on training effectiveness.

2.3.2 Career Development and Employee Performance

Career development is a crucial factor in enhancing employee performance, fostering skill improvement, and increasing job satisfaction. As the labor market grows more competitive, employees seek opportunities to upgrade their competencies, directly impacting job performance. Research highlights that effective career development programs promote continuous learning, innovation, and engagement, leading to increased organizational productivity (Ng'ang'a et al., 2021). Organizations that prioritize career development align employee growth with corporate objectives, enhancing overall performance.

Ghiselli et al. (2020) conducted a quantitative study across multiple industries in the U.S., surveying 1,500 workers. Their findings revealed a significant positive correlation ($r = 0.68$) between career development programs and employee performance. Employees who participated in structured career growth initiatives demonstrated higher job satisfaction and productivity. The study recommends implementing clear career tracks and mentorship programs to enhance employee performance.

In Kenya, Muthuri et al. (2022) investigated career development in higher education institutions using a mixed-methods approach with 300 academic staff members. Their results showed a strong correlation ($r = 0.75$) between career advancement and employee performance. Professional development activities such as workshops and seminars were identified as crucial for improving teaching and research capacity. The authors suggest universities invest in career development initiatives to boost staff productivity and institutional effectiveness.

Similarly, Ochieng and Mwangi (2021) examined career development in Kenya's telecommunications sector through a survey of 200 employees. Their findings indicated a 30% increase in performance metrics among employees engaged in career development programs. The authors recommend structured career plans, including training and mentoring, to enhance employee growth and organizational performance.

Kamau and Nduati (2023) analyzed career development in Kenyan NGOs using a descriptive survey of 150 employees. Their study found a significant positive correlation between career development practices and employee performance, with an average 25% performance improvement among participants. The authors suggest NGOs implement tailored career development programs to enhance job satisfaction and overall performance.

On a global scale, Alharthi et al. (2022) studied career development in Saudi Arabia's banking industry, surveying 400 employees. Their findings indicated that structured career development programs led to a 35% increase in productivity. The study emphasizes the need for ongoing evaluation to ensure career programs align with employee and organizational needs.

In the Asian hospitality sector, Chen et al. (2021) examined career development's impact on 250 employees from five major hotels. Their study found a strong positive correlation ($r = 0.72$) between career development initiatives and employee performance. The researchers advocate for investing in career development programs such as skills training and leadership development to improve engagement and performance.

In Kenya's agricultural sector, Okumu and Rambo (2023) conducted qualitative interviews with 50 employees from various agricultural firms. Their findings revealed that professional

development opportunities significantly enhanced motivation and job satisfaction. The authors recommend that agricultural enterprises focus on career development initiatives to retain employees and boost performance. Further, Were and Odhiambo (2020) investigated career development in Kenya's education sector, surveying 300 teachers across 10 schools. Their findings showed a significant positive relationship between career development efforts and employee performance. Teachers who participated in professional development reported increased student engagement and performance. The authors suggest implementing continuous training programs to enhance teaching effectiveness and student outcomes.

These studies support the substantial link between career development and employee performance across industries and countries. Organizations that engage in organized career paths, mentorship, and professional development improve both individual employee performance and overall company success. The Kenyan context emphasizes the significance of customizing career development programs to the demands of the workforce in order to enhance effectiveness. Organizations that promote professional development increase employee performance while simultaneously gaining a competitive advantage. As the business environment changes, future study should look into the effects of digital transformation and remote work on career growth. Fostering a culture of continuous learning ensures that employees continue to improve and the organization succeeds over time.

2.3.3 Performance Management and Employee Performance

Performance management is a critical component of organizational strategy, aimed at enhancing employee performance and productivity. It involves setting goals, tracking progress, providing feedback, and assessing contributions to align employee efforts with company objectives (Baker

et al., 2021). Effective performance management fosters accountability, motivation, and continuous improvement, ultimately driving employee engagement and organizational success (Owens & Hekman, 2022). Organizations seeking competitive advantage are increasingly focusing on performance management frameworks to optimize employee performance and job satisfaction.

Agyemang and Broadbent (2020) examined the link between performance management and employee performance in Ghana's manufacturing sector using a survey of 300 workers. Their findings revealed a strong positive correlation ($r = 0.72$) between effective performance management and improved employee performance. The study recommends frequent performance reviews and structured feedback systems to enhance engagement and productivity.

In Kenya's banking sector, Kamau et al. (2021) conducted a mixed-methods study involving 200 employees from five banks in Nairobi. Their research found a significant positive correlation ($r = 0.68$) between performance management techniques, such as goal-setting and continuous feedback, and employee performance. The study suggests training managers in effective performance management to boost engagement and productivity.

Similarly, Mwangi and Njeru (2022) investigated performance management in Kenya's education sector through a survey of 250 teachers across 10 secondary schools. The study found a strong positive relationship ($\beta = 0.75$) between performance management strategies and employee performance. Teachers who received consistent feedback and support reported higher job satisfaction and performance. The authors recommend clear performance criteria and administrator training programs to enhance effectiveness.

In the healthcare sector, Were et al. (2023) studied performance management practices among 150 healthcare professionals in Nairobi hospitals. Their research showed that regular evaluations and

constructive feedback led to a 30% improvement in patient care quality. The study recommends comprehensive performance management frameworks to enhance accountability and service delivery.

Sahu and Dey (2021) explored performance management in India's IT industry, surveying 400 IT employees. Their findings indicated a 20% increase in productivity among employees who received regular feedback and recognition. The authors emphasize aligning performance management systems with corporate goals to improve employee output.

Alharthi et al. (2022) examined performance management in Saudi Arabia's banking sector through a cross-sectional survey of 350 employees. The study found that structured performance management systems significantly enhanced employee performance, with a reported 25% increase in productivity. The authors advocate for performance management training for managers to improve feedback quality and employee development.

In Kenya's NGO sector, Odhiambo and Onyango (2020) conducted a mixed-methods study on 100 employees across ten NGOs. Their findings revealed a strong positive correlation ($r = 0.65$) between performance management strategies and employee performance. Employees who received regular assessments and constructive feedback reported higher job satisfaction and performance. The study recommends implementing transparent performance management systems to foster accountability.

These studies collectively highlight the significant role of performance management in improving employee performance across industries and regions. Key themes in the literature emphasize the importance of frequent feedback, employee recognition, and clear performance metrics. In Kenya,

research underscores the need for organizations to adapt performance management strategies to workforce needs, ensuring alignment with employee goals and industry demands.

Organizations that implement effective performance management frameworks enhance productivity, engagement, and job satisfaction. As business environments evolve, future research should explore how digital transformation and remote work impact performance management. Cultivating a culture of accountability and continuous improvement is essential for sustaining employee performance and long-term organizational success.

2.3.4 Knowledge management and Employee Performance

Knowledge management plays a crucial role in enhancing employee performance in today's fast-paced, information-driven workplace. By facilitating the exchange of tacit and explicit knowledge, organizations improve collaboration, innovation, and productivity (Huang & Hu, 2021). Effective knowledge management practices contribute to sustainable growth by leveraging collective intelligence, fostering learning, and aligning individual capabilities with strategic goals.

Naghavi et al. (2020) investigated the relationship between knowledge management and employee performance in Europe's technology sector. Their study of 400 employees found a strong positive correlation ($r = 0.78$), with participants in knowledge management programs reporting higher job satisfaction and improved performance. The study recommends formal knowledge management initiatives to enhance collaboration and productivity.

Similarly, Mwendu and Mungai (2021) examined knowledge management in East African universities through a mixed-methods study of 250 academic staff across 10 institutions. Their findings indicated a significant positive correlation ($r = 0.72$) between knowledge

management and employee performance. Faculty members emphasized the importance of collaborative platforms and workshops in enhancing teaching efficacy. The study recommends universities invest in knowledge management systems to foster continuous learning and cooperation.

Otieno and Nyabera (2022) assessed knowledge management in Kenya's financial sector, surveying 150 employees from five banks in Nairobi. Their findings showed a 25% productivity increase among employees actively engaged in knowledge-sharing initiatives. The study suggests implementing structured knowledge management frameworks to facilitate best practices and performance improvement.

In the telecommunications industry, Mwanzia et al. (2023) conducted a quantitative study involving 300 employees from three major Kenyan telecom companies. The results revealed a strong correlation ($r = 0.68$) between knowledge management and employee performance. Employees reported improved collaboration, problem-solving skills, and overall job performance. The study recommends regular training and forums to strengthen knowledge-sharing practices.

Cheng et al. (2020) investigated knowledge management in Asia's healthcare sector using a survey of 200 medical professionals across five hospitals. The study found that participation in knowledge management activities led to a 30% improvement in patient care quality. The researchers emphasize the need for healthcare institutions to foster open communication and knowledge-sharing cultures to enhance performance and patient outcomes. Zhang et al. (2021) analyzed knowledge management in China's hospitality industry through a survey of 500 hotel employees. Their study found that structured knowledge management programs resulted

in a 20% increase in customer satisfaction. The authors recommend formal knowledge management platforms and employee participation initiatives to improve service delivery.

In Kenya's NGO sector, Karanja and Obanda (2023) used a mixed-methods approach to examine knowledge management's role in employee performance among 100 NGO employees. Their findings demonstrated a strong positive correlation, showing that employees engaged in knowledge-sharing activities were more productive and satisfied. Similarly, Ndung'u and Wambua (2022) studied the agricultural sector using data from 200 employees across various firms. Their research found a significant positive correlation between knowledge management and worker productivity, with employees engaged in knowledge-sharing reporting increased creativity and efficiency. Both studies recommend prioritizing knowledge management initiatives to enhance worker performance.

Kinyua and Kamau (2021) explored knowledge management in Kenya's manufacturing sector through a survey of 250 employees from five firms. Their findings indicated a strong correlation ($r = 0.70$) between knowledge management and employee performance. Employees who actively engaged in knowledge-sharing practices reported improved efficiency and teamwork. The authors advocate for industrial companies to integrate knowledge management systems to drive performance.

These studies collectively reinforce the strong link between knowledge management and employee performance across industries and regions. Organizations that prioritize structured knowledge-sharing initiatives improve productivity, innovation, and job satisfaction. Future research should explore how digital transformation and remote work influence knowledge management dynamics. By fostering a culture that promotes knowledge-sharing,

organizations can enhance employee capabilities, drive strategic success, and maintain competitiveness in evolving business environments.

2.4 Summary research gaps

While existing literature consistently links employee training, career development, performance management, and knowledge management to improved performance, several research gaps remain.

One key gap concerns the effects of digital transformation and remote work on training effectiveness. While training enhances performance, traditional models may not fully adapt to virtual environments. Future research should explore how e-learning, virtual training, and remote collaboration influence performance, particularly in sectors reliant on in-person interactions, such as healthcare and education.

Another gap involves the long-term impact of career development on employee retention, leadership growth, and organizational loyalty. Studies by Ghiselli et al. (2020) and Muthuri et al. (2022) highlight immediate benefits, but there is limited longitudinal research assessing sustained career development outcomes.

Similarly, while performance management is linked to motivation and productivity, the integration of AI-driven tracking tools and automated feedback systems remains underexplored. With the rise of data-driven performance evaluation, research should examine how these tools impact employee morale and organizational culture, particularly in remote and hybrid work settings.

In knowledge management, the role of organizational culture and leadership in fostering knowledge exchange needs further study. Research by Naghavi et al. (2020) and Mwendu and

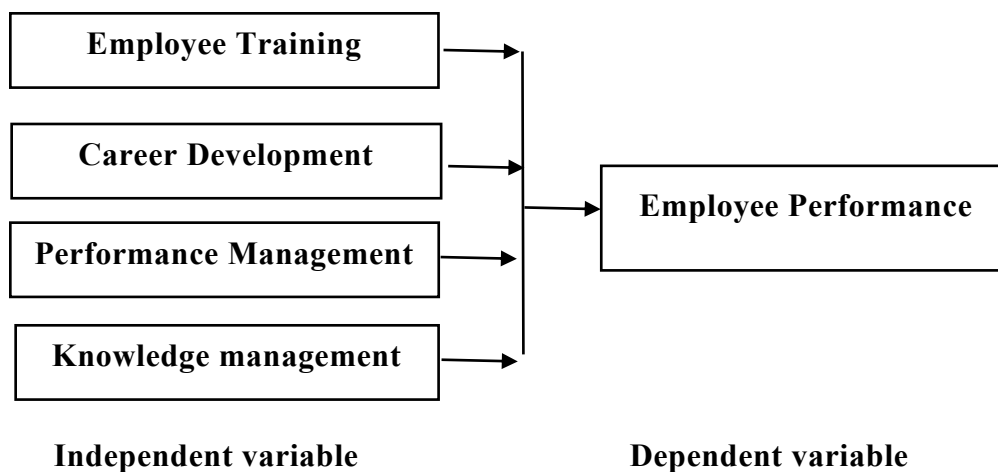
Mungai (2021) highlights benefits, but more is needed on how leadership styles, structures, and incentives shape knowledge-sharing behaviors, especially in rapidly evolving industries.

Lastly, the intersection of training, career development, performance management, and knowledge management within digital transformation remains underexplored. A holistic approach is needed to understand how these elements collectively impact employee performance in modern workplaces. Addressing these gaps offer valuable insights for organizations adapting to evolving work environments.

2.5 Conceptual framework

Figure 2.1

Conceptual Framework

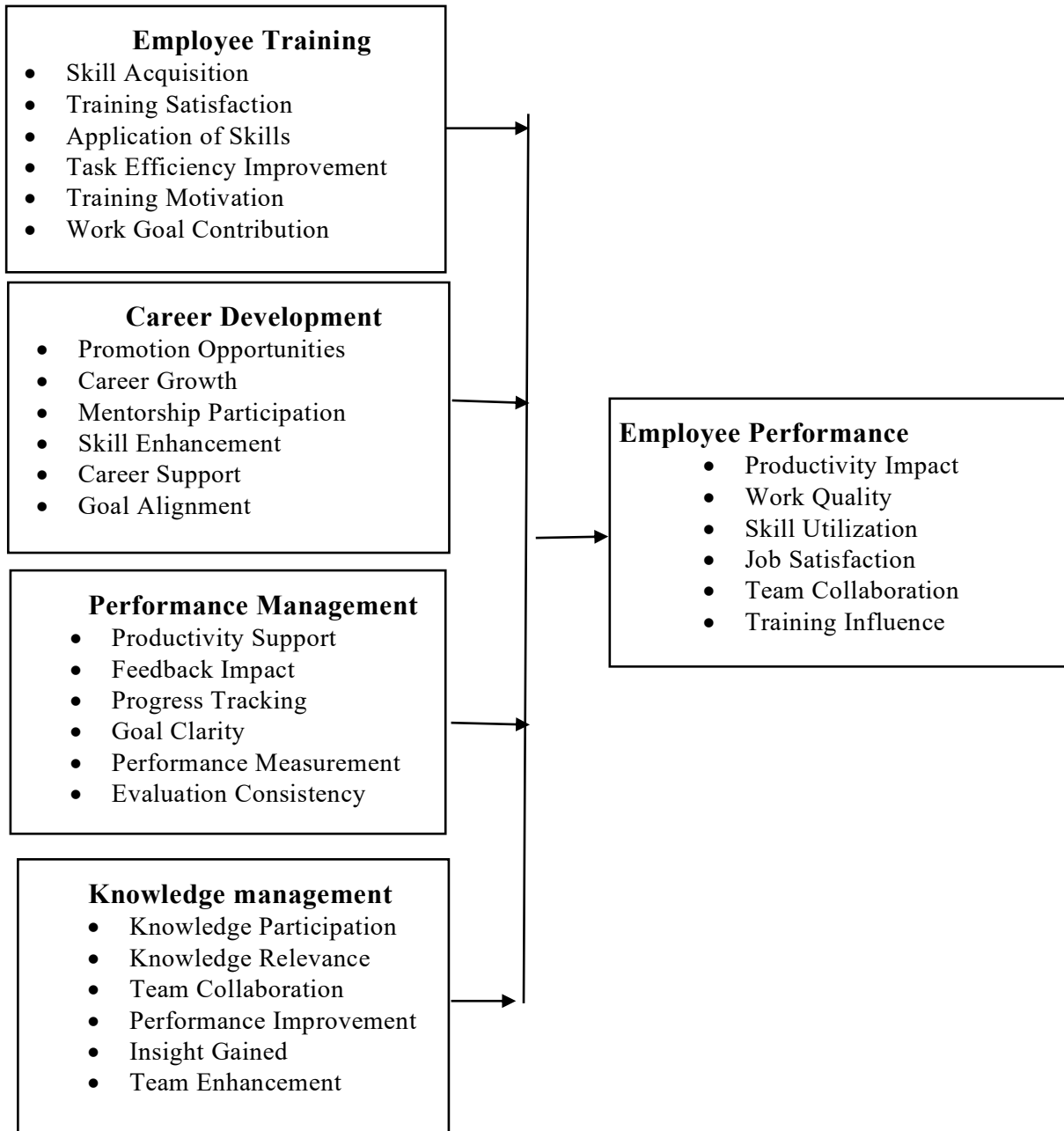


2.6 Operational framework

The process of operationalization entails transforming the constructs into measurable variables, ensuring that the study gathers data efficiently and accurately evaluates the impact of the explanatory variables on the dependent variable. These variables were measured as depicted in figure 2.2.

Figure 2.2

Operation Framework



Independent variable

Dependent variable

Figure 2.2: Operational Framework

2.6.1 Explanation of Variables

Employee Training: These variable covers initiatives aimed at enhancing employees' skills, knowledge, and competencies through formal training programs, workshops, seminars, and on-the-job training. Effective training is expected to improve employee performance by equipping staff with the tools needed to carry out their duties more efficiently and accurately.

Career Development: This refers to organizational mechanisms that support employee growth and career progression. It includes mentorship programs, succession planning, and advancement opportunities. Emphasis on career development is assumed to enhance employee motivation, engagement, and retention, thereby positively impacting performance and contributing to organizational success.

Performance Management: This variable involves the continuous assessment of employee performance through tools such as appraisals, feedback sessions, and goal setting. A well-structured performance management system helps identify employee strengths and areas for improvement, offering direction and support for development. When effectively implemented, it fosters accountability, improves individual productivity, and aligns employee efforts with organizational goals.

Knowledge Management: This reflects the extent to which knowledge, skills, and best practices are shared across the organization. Fostering a knowledge-sharing culture is believed to encourage collaboration, innovation, and improved decision-making. As a result, it strengthens organizational capacity and enhances individual and collective performance.

Employee Performance: This is the dependent variable and central focus of the study. It is assessed through indicators such as productivity, work quality, efficiency, and achievement of organizational objectives. The study aims to establish how the identified human capital development variables training, career development, performance management, and knowledge management contribute to overall employee performance at Kenya Power and Lighting Company.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The approach for data gathering and analysis was presented in this chapter. It covered the target population, study location, sample size, sampling methods, and research design. The data collection tools, pre-testing, validity and reliability metrics, data analysis techniques, and ethical issues were also covered in detail.

3.2 Research Design

The study employed a descriptive research approach. Creswell (2014) defines a descriptive research design as the collecting of data to characterize features of a population or phenomena. This design was appropriate since it provides for the realistic depiction of current events, actions, and trends by collecting measurable data. Descriptive research approaches are especially beneficial for summarizing huge amounts of data and discovering patterns or correlations that can serve as the foundation for future research (Cooper & Schindler, 2011).

The descriptive research design is commonly employed in situations where the objective is to provide a clear and accurate representation of the population under study, especially when the research seeks to answer "what" or "how" questions about a phenomenon (Saunders, 2016). It is often used when researchers need to describe the characteristics of a specific group, event, or condition in its natural setting without manipulating variables. A descriptive research design was conducted by Obonyo (2020), who explored the influence of human resource management practices on employee performance in public universities in Kenya. The study used a descriptive methodology to collect data on current practices and examine the link between human resource management methods and employee outcomes.

3.3 Location of Study

This study was conducted across all nine counties under the KPLC Mount Kenya Regions. The research covered the entire workforce employed within these regional branches, ensuring comprehensive representation. By incorporating all employees from all nine counties, the research aimed to gather a broad and diverse variety of perspectives, allowing for a more rigorous examination of the aspects under consideration. This approach ensured that the findings were reflective of the organization as a whole, allowing for more generalizable conclusions regarding the subject of the study.

3.4 Target population

A research study's target population was the whole set of people or instances from which a sample was taken. It included the particular traits the researcher was interested in examining and was essential to guaranteeing that the results could be extrapolated to a wider setting (Creswell & Creswell, 2019). Two essential elements of the target population in this study were the unit of analysis and the unit of observation. Employees of the Kenya Power and Lighting Company (KPLC) in the Mount Kenya Region served as the unit of observation for this study, while the company itself served as the unit of analysis.

Specifically, the target population included all nine counties under the KPLC Mount Kenya Regions: Nyeri, Kirinyaga, Murang'a, Embu, Tharaka Nithi, Meru, Isiolo, Marsabit, and Laikipia Counties. The unit of observation encompassed a total of 1,200 employees who work at KPLC across these nine counties, as detailed in Table 3.1 below.

Table 3.1***Target Population***

KPLC Mount Kenya region	Target Population	Population Proportion
Nyeri County	200	17%
Kirinyaga County	150	13%
Muranga County	210	18%
Embu County	170	14%
Tharaka Nithi County	58	5%
Meru County	196	16%
Isiolo County	62	5%
Marsabit County	72	6%
Laikipia County	82	7%
Total	1200	100%

3.5 Sampling Techniques and Sample Size**3.5.1 Sampling Techniques**

The KPLC Mount Kenya Region is geographically distributed across nine counties, the study adopted a cluster sampling technique. As noted by Thomas (2023), cluster sampling is a probability-based method particularly suitable for studies involving large and dispersed populations. Under this approach, the population was divided into smaller, naturally occurring units referred to as clusters, from which a representative sample was drawn.

In the context of this study, the nine operational regions within the KPLC Mount Kenya region were treated as distinct clusters. From each cluster, respondents were selected using simple random sampling. This was executed through computer-generated random numbers derived from employee identification data obtained from the human resource registry of the organization. This procedure ensured that every eligible employee within the defined clusters had an equal probability of selection, thereby enhancing the representativeness and reliability of the sample.

3.5.2 Sample Size

The sample size refers to a subset of the total population that represents the general perspectives of the target population. In this study, the sample size was determined using the formula suggested by Yamane (1967), which provides a simple approach for calculating sample sizes

Where: n = sample size, N = total population size, e = margin of error

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{1200}{1 + 1200 (0.05)^2}$$

$$n = 300$$

The sample size of 300 respondent, based on a Confidence Level of 95% and a Margin of Error of 5%, which are commonly recommended standards in social science research. Consequently, these 300 respondents were distributed proportionally across the nine Counties as indicated in Table 3.2 below.

Table 3.2***Sample Size***

KPLC employees	Target Population	Sample size	Sample size Proportion
Nyeri County	200	50	17%
Kirinyaga County	150	38	13%
Muranga County	210	53	18%
Embu County	170	43	14%
Tharaka Nithi County	58	15	5%
Meru County	196	49	16%
Isiolo County	62	16	5%
Marsabit County	72	18	6%
Laikipia County	82	21	7%
Total	1200	300	100%

3.6 Research Instrumentation

Data for this study was gathered through self-administered questionnaires, which were structured to facilitate efficient and comprehensive data collection within a set period. The questionnaire items were accurately crafted to directly correspond with the research objectives, ensuring that the information collected was both relevant and meaningful to the study. This method allowed participants to complete the questionnaires independently, offering them the flexibility to respond at their convenience.

To safeguard the privacy and anonymity of the respondents, the questionnaires did not require the disclosure of any personal or identifying information. This approach fostered a sense of security among participants, ensuring that they felt comfortable and unpressured when providing their responses. By eliminating the potential for coercion, the study enhanced the reliability and validity of the data collected, as participants were more likely to provide honest and unbiased answers.

3.6.1 Pre-testing of Questionnaire

A pilot study was conducted at KPLC Nakuru County to evaluate the clarity, relevance, and reliability of the research instrument before the main data collection. Nakuru County was selected because it shares similar operational characteristics with the Mount Kenya Region but was not part of the actual study area, thereby minimizing the risk of data contamination.

In line with Mugenda and Mugenda (2008) the pilot involved 30 respondents which is 10% of the target population, who were not included in the final sample. These participants completed the questionnaire and were encouraged to provide feedback on any ambiguous or unclear items. The responses helped refine the instrument, ensuring that all questions were aligned with the study objectives and comprehensible to respondents.

3.6.2 Reliability of Research Instruments

The reliability of research instruments is a key factor in ensuring their effectiveness in addressing the specific issues identified in the study. To evaluate this reliability, the Cronbach alpha coefficient was computed. According to Cooper and Schindler (2014), a Cronbach alpha coefficient of at least 0.7 is considered necessary to demonstrate a high level of reliability in the responses.

3.7 Data Collection Procedure

The researcher applied for a research permit from the National Commission for Science, Technology, and Innovation (NACOSTI). Upon approval of the research permit, the researcher proceeded to distribute the research instruments to the selected respondents. Each questionnaire

was accompanied by a comprehensive cover letter outlining the purpose, objectives, and ethical considerations of the study to ensure informed consent.

The data collection process employed the drop-and-pick-later method, whereby questionnaires were delivered to respondents and collected after a period of one week to allow adequate time for completion. Upon retrieval, the completed questionnaires were reviewed for completeness and consistency, then securely stored to maintain confidentiality and uphold ethical standards regarding the protection of respondent information.

3.8 Data Analysis and Presentation

In this study, data was collected, and incomplete questionnaires were filtered to identify any ambiguities. The coding of the sorted data was performed using the Statistical Package for Social Sciences (SPSS) software, Version 25. This coding process involved assigning numerical values to various statistical arrangements to facilitate analysis. Multiple regression analysis was employed to examine the relationship between human capital development and employee performance in the Kenya Power and Lighting Company, Kenya.

The model is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where;

Y = Employee Performance

X1 = employee training

X2 = career development

X3 = performance management

X4 = Knowledge management

β_0 = constant coefficient (intercept)

$\beta_1, \beta_2, \beta_3, \beta_4$ = slope coefficient of independent variables

ϵ = error term

3.9 Diagnostic Tests.

To determine whether the independent and dependent variable data violated the assumptions underlying multiple regression analysis models, the following diagnostic tests were conducted: the linearity test, auto-correlation test, multi-collinearity test, normality test, and homoscedasticity test. These tests were performed before proceeding with regression and correlation analysis.

3.9.1 Normality Test

A normality test is a statistical procedure used to determine if a dataset followed a normal distribution, which is a necessary assumption in many parametric statistical studies (Razali, 2019). Parametric tests, such as t-tests and ANOVAs, required the assumption of normality to produce trustworthy and accurate findings. When data significantly deviated from normality, the validity of these statistical tests could be undermined, potentially leading to incorrect interpretations or conclusions (Razali, 2019).

In this study, the Kolmogorov-Smirnov and Shapiro-Wilk tests were used to determine the dataset's normality. These tests produced a p-value, which reflected the probability that the data followed a normal distribution. A p-value larger than 0.05 showed that the data was normally distributed,

whereas a p-value less than 0.05 indicated a deviation from normality (Shapiro & Wilk, 1965). This review ensured that subsequent statistical analyses were selected correctly and that valid results were generated based on the dataset's characteristics. By running these tests, the research determined whether parametric approaches were appropriate or if non-parametric techniques should be used to evaluate the data.

3.9.2 Auto-correlation Test

Autocorrelation is a statistical concept that occurred when residuals (errors) from a regression model exhibited a correlation with each other across time or observations, potentially affecting the validity of the model's results (Wooldridge, 2022). To detect autocorrelation, the study utilized the Durbin-Watson test. The Durbin-Watson statistic ranged from 0 to 4, with a value of 2 indicating no autocorrelation. Values below 2 suggested positive autocorrelation, while values above 2 indicated negative autocorrelation. Generally, a statistic between 1.5 and 2.5 was interpreted as evidence of no significant autocorrelation (Wooldridge, 2022). Employing this test ensured the reliability of regression analysis by identifying potential issues with residual independence, which was a critical assumption in statistical modeling.

3.9.3 Heteroscedasticity Test

In regression analysis, heteroscedasticity is the state in which the residuals' (error terms') variability varied across all levels of the independent variables (Gujarati, 2019). To determine whether the residual error term altered in response to changes in the independent variables, the Breusch-Pagan test was used. The test assumed that the response values from the independent variables were regressed on the residual error term. The alternative hypothesis for the Breusch-Pagan test was that the error variances were a multiplicative function of one

or more variables, whereas the null hypothesis was that the error variances were all equal. When $p < 0.05$, heteroscedasticity was detected using the Breusch-Pagan test (Gujarati, 2019).

3.9.4 Multicollinearity Test

Multicollinearity is a statistical problem that occurred when two or more independent variables in a multiple regression model are highly correlated, making it difficult to determine how each of them influenced the dependent variable individually (O'Brien, 2021). Because of this, sample coefficients could differ greatly from the actual population parameters. Furthermore, lower t-statistics resulting from strong multicollinearity frequently erroneously implies that there is no linear relationship between the dependent variable and the affected independent variables. The Variance Inflation Factor (VIF) was used in this study to assess multicollinearity. Significant multicollinearity was indicated by a VIF score of 10 or above, which could impact the regression analysis's dependability (O'Brien, 2021). Identifying and addressing multicollinearity ensured the accuracy of the model and the validity of the inferred relationships between variables.

3.9.5 Linearity Test

To assess the linearity of relationships between variables, an ANOVA test was conducted to evaluate both linear and non-linear components. According to Sarstedt and Mooi (2021), a p-value ≥ 0.05 confirmed linearity, indicating a consistent relationship between independent and dependent variables. The analysis also tested the null hypothesis of no significant departure from linearity, rejecting it if the p-value was below 0.05 (Schumacker & Lomax, 2022).

The study found that all p-values exceeded 0.05, confirming linear relationships between Employee Training, Career Development, Performance Management, Knowledge Management, and Employee Performance. This suggested that changes in independent variables proportionally affected employee performance at Kenya Power and Lighting Company (KPLC), validating the dataset's suitability for regression analysis.

3.10 Ethical Consideration

To ensure adherence to high ethical standards, the study followed a clearly defined ethical framework that was operationalized at every stage of the research process. The researcher obtained an introductory letter from Kenya Methodist University, which formally explained the purpose and academic nature of the study. This letter was presented to institutional stakeholders to facilitate access and cooperation during data collection.

In compliance with national regulations, a research permit was obtained from the National Commission for Science, Technology, and Innovation (NACOSTI) prior to fieldwork. This ensured that the study met all legal and regulatory requirements for conducting research in Kenya.

Ethical procedures were operationalized through informed consent, whereby all participants were briefed both orally and in writing on the objectives, benefits, and voluntary nature of the study. Respondents were required to sign a consent form before participating, confirming their understanding and agreement. To uphold confidentiality and anonymity, the study avoided collecting personal identifiers such as names, job titles, or employee numbers. Instead, questionnaires were coded using sequential numbers. All completed instruments were securely stored in password-protected digital files and locked physical cabinets, accessible only to the researcher.

Additionally, participants were informed that they could withdraw from the study at any point without any consequences. The data collected was used strictly for academic purposes, with all findings reported in aggregated form to prevent any individual identification. Through these measures, the study ensured compliance with established ethical research principles, including voluntary participation, informed consent, confidentiality, anonymity, and data protection.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the research findings, including an analysis of response rates, as well as assessments of reliability and validity. It also examines diagnostic tests and explores the demographic characteristics relevant to the study variables. Descriptive statistics for both independent and dependent variables are provided, along with an analysis of correlations and regression analyses between these variables.

4.2 Response Rate

The study distributed a total of 300 questionnaires, of which 266 were completed and returned, yielding a response rate of 86.66%. This high response rate was facilitated by the strategic use of self-administered questionnaires and reassurances regarding the confidentiality of participants' responses. According to Baruch and Holtom (2008), a response rate above 50% is generally deemed acceptable, while rates exceeding 70% are considered excellent for ensuring the reliability of research findings. Additionally, as noted by Johnson and Wislar (2012), higher response rates help reduce the risk of non-response bias, thereby enhancing the overall validity of the study. Given that this study achieved a response rate of 86.66%, the data obtained is robust and suitable for in-depth statistical analysis, reinforcing the credibility and significance of the research findings presented in Table 4.1.

Table 4.1
Response Rate

Questionnaires	Frequency	Percentage
Returned	266	86.66%
Not Returned	34	11.33%
Total	300	100%

4.2 Length of Service

Length of service plays a critical role in shaping employees' expertise, organizational knowledge, and institutional memory, which are essential for informed decision-making and operational effectiveness. Employees with extensive tenure tend to have a comprehensive understanding of workplace dynamics, enabling them to provide valuable insights into organizational processes. Table 4.2 shows that most respondents (29.32%) have been employed at KPLC for 11–15 years, indicating significant institutional knowledge and experience.

Other respondents reported varying lengths of service: 1–5 years (21.05%), 6–10 years (19.17%), less than 1 year (13.91%), 16–20 years (9.77%), 21–25 years (4.89%), and over 26 years (1.88%). The high proportion of respondents in the 11–15 years category underscores the value of tenure in employee retention and knowledge transfer within the organization. As noted by Morrow et al. (2014), long-tenured employees play a crucial role in fostering stability, improving efficiency, and mentoring newer staff. Additionally, Cascio (2021)

highlights that organizations with experienced employees tend to exhibit lower turnover rates and higher performance levels due to accumulated institutional knowledge.

The distribution of tenure in KPLC reflects a balanced workforce, with both newer employees contributing fresh perspectives and experienced personnel ensuring operational continuity. This diverse mix enhances organizational resilience and knowledge sustainability, reinforcing the credibility of the study findings.

Table 4.2

Length of Service

Length of Service	Frequency	Percentage
Less than 1 year	37	13.91%
1–5 years	56	21.05%
6–10 years	51	19.17%
11–15 years	78	29.32%
16–20 years	26	9.77%
21–25 years	13	4.89%
26+ years	5	1.88%
Total	266	100%

4.3 Pilot Study Results

The pilot study was conducted as a preliminary phase to evaluate the practicality, reliability, and validity of the research instruments and methodologies. This process helped identify potential challenges, improve data collection tools, refine ambiguous questions, and enhance the overall study framework using a smaller but representative sample. Reliability was assessed using statistical methods such as Cronbach's Alpha, which confirmed the consistency and effectiveness of the instruments in capturing relevant data. The findings from the pilot study reinforced the credibility of the research framework, ensuring that the main study would yield accurate, reliable, and generalizable results.

4.3.1 Reliability Analysis

All constructs analyzed achieved Cronbach's Alpha coefficients exceeding the acceptable threshold of 0.7, signifying a high level of internal consistency and reliability. A pretest was conducted to assess inter-item correlation, confirming the suitability of the research instruments for investigating the Influence of Human Capital Development on Employee Performance in Kenya Power and Lighting Company, Kenya. These results align with the recommendations of Hair et al. (2020), who assert that reliability coefficients above 0.7 are considered appropriate for ensuring consistency in research measurements. The findings validate the effectiveness of the study instruments in examining the impact of human capital development dimensions such as employee training, career development, performance management, and knowledge management on employee performance. The summarized reliability analysis results are presented in Table 4.3.

Table 4.3***Reliability Analysis Results***

Variables	No. of Items	Cronbach's Alpha	Remark
Employee Training (Et)	6	0.762	Satisfactory
Career Development (Cd)	6	0.804	Satisfactory
Performance Management (Pm)	6	0.789	Satisfactory
Knowledge Management (Km)	6	0.828	Satisfactory
Employee Performance (Ep)	6	0.821	Satisfactory

4.3.2 Validity Analysis

Content validity was assessed through a pretest, in which a draft questionnaire was reviewed by five subject matter experts with experience in human capital development and employee performance. Their evaluation focused on the clarity, relevance, and structure of the questionnaire items. Based on their feedback, necessary revisions were made before conducting the pilot test to ensure the accuracy of the research instrument. According to Boateng et al. (2018), content validity is strengthened when experts determine whether the measures effectively capture the intended concepts. The content validity index (CVI) was computed using the formula outlined by Lynn (2020).

This content validity formula was; $CVI = K/N$

Where; K = number of Items declared valid by the raters

N = number of Items in the Questionnaire

Polit and Yang (2016) suggest that a CVI of 0.90 or higher is indicative of strong content validity. The results from the pretest showed a Content Validity Index (CVI) of 0.933, corresponding to a 93.3% congruency percentage, which confirms a high level of content validity for the questionnaire. The detailed validity results are presented in Table 4.4.

Table 4.4

Validity Results

Rater	Number of Items	Items Declared Valid	Content Validity Index	Congruency Percentage	Recommendation
Rater 1	30	28	0.93	93%	Valid
Rater 2	30	27	0.90	90%	Valid
Rater 3	30	28	0.93	93%	Valid
Rater 4	30	28	0.93	93%	Valid
Rater 5	30	28	0.93	93%	Valid
Average	30	27.8	0.933	93.3%	Valid

4.4 Descriptive Statistics Findings

All variables were measured using a five-point Likert scale, ranging from strongly disagree to strongly agree. Descriptive statistics were determined by analyzing responses to statements aligned with each research objective, utilizing a customized descriptive table. To compare the findings with previous studies and assess data variability, mean and standard deviation tests were conducted. This descriptive analysis offers valuable insights into the regularity, frequency, and overall trends related to governance and service delivery within national referral hospitals in Kenya.

According to Joshi et al. (2015), the Likert scale used for evaluation ranged from 1.0 to 5.0, with corresponding mean score classifications: mean scores between 1.0 and 1.8 indicated strong disagreement, scores from 1.8 to 2.6 signified disagreement, values between 2.6 and 3.4 represented neutrality, scores from 3.4 to 4.2 reflected agreement, while those ranging from 4.2 to 5.0 demonstrated strong agreement. The analysis employed percentages, mean values, and standard deviations to interpret the findings effectively.

4.4.1 Descriptive Statistics for the Construct: Employee Training

Survey findings reveal that employee training programs at Kenya Power and Lighting Company (KPLC) significantly enhance skills and performance. A majority (69.9%) agreed, and 19.9% strongly agreed, that training helped them acquire new skills, reflected in a high mean score of 4.07 (SD = 0.758). Similarly, 67.7% agreed, and 20.7% strongly agreed, that they were satisfied with the training quality (M = 4.04, SD = 0.785).

Training applicability was affirmed by 65.8% of respondents, with 22.2% strongly agreeing that the skills learned improved their work performance (M = 4.01, SD = 0.797). Additionally, 63.5% agreed, and 21.0% strongly agreed, that training enhanced task efficiency (M = 3.97, SD = 0.825). Training also fostered motivation, as 61.3% agreed, and 23.7% strongly agreed, that past experiences encouraged future participation (M = 3.94, SD = 0.846). Moreover, 60.9% agreed, and 22.9% strongly agreed, that acquired skills contributed to achieving work goals (M = 3.98, SD = 0.820).

These results align with prior studies highlighting training's role in boosting employee productivity, engagement, and performance (Noe et al., 2021). Effective training fosters motivation and job satisfaction, enhancing organizational outcomes (Garg & Dhar, 2023). To

maximize impact, organizations should align training with evolving job demands and industry advancements (Sahoo & Mishra, 2021).

Table 4.5

Descriptive Statistics of Employee Training

Statements (N=266)	1 (SD)	2 (D)	3 (N)	4 (A)	5 (SA)	Mean	Std. Deviation
The training programs provided by the company have helped me acquire new skills.	5 (1.9%)	12 (4.1%)	10 (3.8%)	186 (69.9%)	53 (19.9%)	4.07	0.758
I am satisfied with the quality and content of the training sessions offered.	8 (2.3%)	9 (3.4%)	14 (5.3%)	180 (67.7%)	55 (20.7%)	4.04	0.785
I can apply the skills learned during training to improve my work performance.	5 (1.9%)	10 (3.8%)	16 (6.0%)	175 (65.8%)	60 (22.2%)	4.01	0.797
The training has enhanced my ability to perform tasks more efficiently.	7 (2.6%)	12 (4.5%)	22 (8.3%)	169 (63.5%)	56 (21.0%)	3.97	0.825
I feel motivated to attend future training programs based on my past experiences.	8 (3.0%)	14 (5.3%)	20 (7.5%)	163 (61.3%)	63 (23.7%)	3.94	0.846
The skills I gained from the training have directly contributed to achieving my work goals.	6 (2.3%)	12 (4.5%)	21 (7.9%)	162 (60.9%)	65 (22.9%)	3.98	0.820

4.4.2 Descriptive Statistics for the Construct: Career Development

Survey findings indicate that career development opportunities at Kenya Power and Lighting Company (KPLC) are generally well-received, though areas for improvement exist. A majority (69.5%) agreed, and 20.5% strongly agreed, that promotion opportunities are based on performance, reflected in a mean score of 4.06 (SD = 0.791). Similarly, 65.8% agreed, and

22.3% strongly agreed, that they have experienced career growth at KPLC ($M = 4.00$, $SD = 0.818$), though some feel limited in advancement prospects.

Mentorship programs play a key role, with 61.7% agreeing, and 25.5% strongly agreeing, that mentorship positively influences career development ($M = 3.97$, $SD = 0.843$). Additionally, 63.5% agreed, and 21.5% strongly agreed, that mentorship has enhanced their professional skills ($M = 3.94$, $SD = 0.857$).

Organizational support for long-term career goals was acknowledged by 60.9% of employees, with 23.5% strongly agreeing ($M = 3.92$, $SD = 0.870$), though further reinforcement is needed. Similarly, 59.8% agreed, and 22.5% strongly agreed, that their career goals align with company opportunities ($M = 3.89$, $SD = 0.879$), underscoring the need for better alignment.

These findings align with research emphasizing career development's role in employee engagement and retention (Aguinis & Burgi-Tian, 2021). Organizations investing in structured career pathways, mentorship, and training enhance job satisfaction and commitment (Collins et al., 2023). However, ensuring career development remains accessible and aligned with employees' goals is crucial for maximizing impact (Salas-Vallina et al., 2022).

Table 4.6***Descriptive Statistics of Career Development***

Statements (N=266)	1 (SD)	2 (D)	3 (N)	4 (A)	5 (SA)	Mean	Std. Deviation
The organization provides ample opportunities for promotion based on performance.	5 (1.9%)	11 (4.1%)	11 (4.1%)	185 (69.5%)	54 (20.5%)	4.06	0.791
I have experienced career growth through promotions during my time with the company.	7 (2.6%)	12 (4.5%)	16 (6.0%)	175 (65.8%)	56 (22.3%)	4.00	0.818
I have participated in a mentorship program that has positively influenced my career development.	8 (3.0%)	13 (4.9%)	22 (8.3%)	164 (61.7%)	68 (25.5%)	3.97	0.843
Mentorship opportunities in the company help me enhance my professional skills.	9 (3.4%)	14 (5.3%)	20 (7.5%)	169 (63.5%)	57 (21.5%)	3.94	0.857
The organization supports me in achieving my long-term career goals.	10 (3.8%)	13 (4.9%)	22 (8.3%)	162 (60.9%)	62 (23.5%)	3.92	0.870
My career development goals are aligned with the opportunities provided by the company.	11 (4.1%)	15 (5.6%)	21 (7.9%)	159 (59.8%)	60 (22.5%)	3.89	0.879

4.4.3 Descriptive Statistics for the Construct: Performance Management

Survey findings indicate that performance management practices at Kenya Power and Lighting Company (KPLC) are generally well-received, though areas for improvement remain. A majority (70.7%) agreed, and 21.5% strongly agreed, that the system supports productivity improvement (M = 4.05, SD = 0.798). Feedback was also valued, with 67.7% agreeing, and 22.5% strongly agreeing, that performance reviews enhance work quality (M = 4.02, SD = 0.812).

Tracking progress toward performance goals was acknowledged by 65.0% of employees, with 21.1% strongly agreeing ($M = 3.98$, $SD = 0.831$), though clarity and accessibility could be improved. Similarly, 63.3% agreed, and 20.3% strongly agreed, that reviews clarify how to meet work goals ($M = 3.94$, $SD = 0.846$).

Regarding evaluation criteria, 61.4% agreed, and 19.5% strongly agreed, that the system uses clear, measurable metrics ($M = 3.90$, $SD = 0.860$), while 60.0% agreed, and 18.5% strongly agreed, that evaluation criteria are applied consistently ($M = 3.87$, $SD = 0.872$), suggesting room for improvement in transparency and fairness.

These findings align with prior research emphasizing performance management's role in enhancing motivation, productivity, and goal achievement (DeNisi & Murphy, 2022; Armstrong, 2023). Effective systems that provide clear feedback, measurable goals, and consistent evaluations drive engagement and performance (Aguinis & Burgi-Tian, 2021). However, ensuring employees perceive the system as transparent and supportive remains essential for maximizing its impact (Collins et al., 2023).

Table 4.7***Descriptive Statistics of Performance Management***

Statements (N=266)	1 (SD)	2 (D)	3 (N)	4 (A)	5 (SA)	Mean	Std. Deviation
The performance management system provides support that contributes to changes in my productivity.	6 (2.3%)	11 (4.1%)	18 (6.8%)	174 (70.7%)	57 (21.5%)	4.05	0.798
The feedback I receive during performance reviews influences the quality of my work.	7 (2.6%)	12 (4.5%)	19 (7.1%)	168 (67.7%)	60 (22.5%)	4.02	0.812
I am able to track my progress toward achieving the goals set during performance evaluations.	9 (3.4%)	14 (5.3%)	20 (7.5%)	173 (65.0%)	56 (21.1%)	3.98	0.831
Performance reviews provide clarity on how I can meet or exceed my work goals.	10 (3.8%)	16 (6.0%)	21 (7.9%)	168 (63.3%)	54 (20.3%)	3.94	0.846
The performance management system uses clear and measurable criteria to track my productivity.	12 (4.5%)	18 (6.8%)	22 (8.3%)	163 (61.4%)	52 (19.5%)	3.90	0.860
The performance management system applies consistent criteria when evaluating work quality.	13 (4.9%)	19 (7.1%)	24 (9.0%)	160 (60.0%)	50 (18.5%)	3.87	0.872

4.4.4 Descriptive Statistics for the Construct: Knowledge Management

Survey findings indicate that knowledge management practices at Kenya Power and Lighting Company (KPLC) are generally well-received, though areas for improvement exist. A majority (68.4%) agreed, and 21.5% strongly agreed, that they actively participate in knowledge management activities (M = 4.01, SD = 0.807). Similarly, 65.0% agreed, and 21.8% strongly agreed, that shared knowledge benefits their work (M = 3.98, SD = 0.825).

Collaboration improvements were acknowledged by 62.8% of employees, with 21.4% strongly agreeing that knowledge management enhances teamwork (M = 3.94, SD = 0.841). Additionally, 61.0% agreed, and 20.5% strongly agreed, that sharing knowledge with colleagues has improved their job performance (M = 3.90, SD = 0.854).

Regarding knowledge impact, 59.3% agreed, and 19.3% strongly agreed, that they have gained valuable insights from colleagues (M = 3.87, SD = 0.862), while 58.0% agreed, and 18.5% strongly agreed, that knowledge management enhances team performance (M = 3.84, SD = 0.875). These findings suggest knowledge-sharing initiatives are beneficial but could be further optimized through structured processes.

These results align with research emphasizing knowledge management’s role in enhancing collaboration, decision-making, and innovation (Nonaka & Toyama, 2021; Hislop et al., 2022). Organizations investing in structured knowledge-sharing mechanisms improve both individual and collective productivity, leading to better performance outcomes (Grant, 2023). However, ensuring knowledge management activities are accessible, relevant, and impactful remains essential for maximizing their effectiveness (Alavi & Leidner, 2022).

Table 4.8

Descriptive Statistics of Knowledge Management

Statements (N=266)	1 (SD)	2 (D)	3 (N)	4 (A)	5 (SA)	Mean	Std. Deviation
I actively participate in knowledge management activities within the organization.	6 (2.3%)	13 (4.9%)	18 (6.8%)	172 (68.4%)	57 (21.5%)	4.01	0.807
The knowledge shared during team discussions is relevant and beneficial to my work.	7 (2.6%)	14 (5.3%)	19 (7.1%)	173 (65.0%)	58 (21.8%)	3.98	0.825

Statements (N=266)	1 (SD)	2 (D)	3 (N)	4 (A)	5 (SA)	Mean	Std. Deviation
Knowledge management practices have improved collaboration within my team.	9 (3.4%)	16 (6.0%)	20 (7.5%)	167 (62.8%)	57 (21.4%)	3.94	0.841
Sharing knowledge with my colleagues has helped me perform better in my role.	11 (4.1%)	18 (6.8%)	22 (8.3%)	162 (61.0%)	54 (20.5%)	3.90	0.854
I have gained valuable insights from the knowledge shared by my colleagues.	13 (4.9%)	20 (7.5%)	25 (9.0%)	158 (59.3%)	51 (19.3%)	3.87	0.862
Knowledge management activities have contributed to enhancing my team's overall performance.	15 (5.6%)	22 (8.3%)	26 (9.8%)	154 (58.0%)	49 (18.5%)	3.84	0.875

4.4.5 Descriptive Statistics for the Construct: Employee Performance

Survey results indicate that employees at Kenya Power and Lighting Company (KPLC) perceive human capital development as a key driver of performance. A majority (69.9%) agreed, and 20.5% strongly agreed, that training enhances productivity (M = 4.04, SD = 0.799). Similarly, 66.9% agreed, and 22.5% strongly agreed, that development initiatives improve work quality (M = 4.01, SD = 0.816).

Regarding personal goals, 64.9% agreed, and 21.1% strongly agreed, that acquired skills aid in achieving performance objectives (M = 3.97, SD = 0.833). Additionally, 63.5% agreed, and 19.8% strongly agreed, that professional development influences job satisfaction (M = 3.93, SD = 0.847).

Human capital development also enhances teamwork, with 61.8% agreeing, and 18.9% strongly agreeing, that training improves collaboration (M = 3.90, SD = 0.861). Furthermore, 60.0% agreed, and 18.1% strongly agreed, that employee training contributes to team

performance (M = 3.87, SD = 0.874), though refining training alignment with team objectives could optimize its impact.

These findings align with research emphasizing human capital development’s role in boosting performance, engagement, and teamwork (Aguinis & Burgi-Tian, 2021). Structured training programs enhance productivity and job satisfaction (Noe et al., 2023). However, ensuring that development programs are relevant, practical, and aligned with organizational goals remains critical for maximizing their effectiveness (Spreitzer et al., 2021).

Table 4.9
Descriptive Statistics of Employee Performance

Statements (N=266)	1 (SD)	2 (D)	3 (N)	4 (A)	5 (SA)	Mean	Std. Deviation
The training I receive contributes to changes in my productivity levels.	5 (1.9%)	12 (4.5%)	18 (6.8%)	176 (69.9%)	55 (20.5%)	4.04	0.799
Human capital development initiatives have an impact on the quality of my work output.	6 (2.3%)	11 (5.3%)	20 (7.9%)	175 (66.9%)	54 (22.5%)	4.01	0.816
The skills acquired from development programs help me work towards achieving my performance goals.	8 (3.0%)	16 (6.0%)	22 (8.3%)	173 (64.9%)	56 (21.1%)	3.97	0.833
Participation in professional development activities influences my overall job satisfaction.	9 (3.4%)	17 (6.4%)	21 (7.9%)	169 (63.5%)	53 (19.8%)	3.93	0.847
Human capital development initiatives have affected my ability to collaborate with my team.	11 (4.1%)	18 (6.8%)	23 (8.6%)	164 (61.8%)	50 (18.9%)	3.90	0.861
The organization’s emphasis on employee training contributes to changes in overall team performance.	13 (4.9%)	21 (7.9%)	24 (9.0%)	160 (60.0%)	48 (18.1%)	3.87	0.874

4.5 Qualitative Data Analysis

4.5.1 Qualitative Analysis (Employee Training)

Participants were asked to describe how the training they received at KPLC impacted their ability to perform their jobs more effectively. Their responses highlighted the crucial role of structured training programs in enhancing technical skills, improving job efficiency, and fostering adaptability in a rapidly evolving work environment. Employees noted that hands-on training and mentorship significantly increased their confidence and competence in handling job-related tasks.

A recurring theme was the importance of continuous learning, with many participants emphasizing that refresher courses and professional development initiatives kept them updated on industry trends and best practices. Additionally, respondents highlighted that training had strengthened teamwork and collaboration, improving overall communication and efficiency across departments.

Another key insight was the enhanced problem-solving and decision-making abilities resulting from structured training. Employees reported that training programs enabled them to approach complex tasks more strategically, thereby improving their productivity. Furthermore, role-specific training was cited as a key factor in improving employee performance, as it allowed individuals to directly apply newly acquired skills to their job responsibilities.

These findings align with previous research, such as Garcia et al. (2021) which emphasizes that targeted training enhances both technical and behavioral competencies, leading to improved job performance and employee engagement. Similarly, Iqbal and Ahmad (2022) highlight that continuous learning fosters adaptability and innovation, enabling employees to contribute more effectively to organizational success.

The qualitative analysis revealed several key themes regarding the impact of training on employee performance. A significant 85.34% of respondents emphasized that hands-on training and mentorship were critical in improving job efficiency. Additionally, 82.33% highlighted the importance of continuous learning opportunities, stating that ongoing training aligns them with industry advancements. A further 80.08% of participants noted that training had enhanced teamwork and collaboration, while 78.20% reported improved problem-solving and decision-making abilities due to structured training programs. Lastly, 81.20% of employees emphasized the significance of role-specific training, which enabled them to apply their skills more effectively in their daily tasks.

These themes collectively underscore the need for structured, ongoing, and role-specific training programs to enhance employee efficiency, job satisfaction, and overall organizational performance.

Table 4.10

Qualitative Analysis (Employee Training Impact)

Theme	Frequency	Percentage
Hands-on training and mentorship	227	85.34%
Continuous learning opportunities	219	82.33%
Improved teamwork and collaboration	213	80.08%
Enhanced problem-solving and decision-making	208	78.20%
Role-specific training for job efficiency	216	81.20%

4.5.2 Qualitative Analysis (Career Development)

Participants were asked to describe how the organization has supported their career development and how this has influenced their work performance. Their responses

emphasized the crucial role of structured career development initiatives in enhancing professional growth, motivation, and overall job performance. Employees highlighted that mentorship programs, leadership development training, and career progression opportunities have significantly contributed to improving their skills and confidence in handling complex work responsibilities. Many noted that mentorship relationships with experienced colleagues had helped them gain valuable insights and guidance, leading to improved work efficiency and better career planning.

A recurring theme in the responses was the importance of clear and structured promotion pathways, with employees stressing that well-defined career advancement opportunities enhance job satisfaction and motivation. Respondents expressed that when promotions are linked to performance and skill development, employees are more likely to remain engaged and committed to organizational goals. Additionally, participants highlighted that the company's support for further education and certification programs had enabled them to specialize in their respective fields, improving both individual performance and overall team productivity.

Another key insight was the impact of professional training programs and cross-functional job rotations on employee versatility and adaptability. Employees reported that exposure to different roles and departments through job rotation had strengthened their problem-solving abilities and broadened their understanding of company operations. Some respondents mentioned that this practice enhanced their ability to take on leadership roles, thereby contributing to better decision-making and strategic thinking. Furthermore, structured training on emerging industry trends was cited as a critical factor in ensuring employees remain competitive and well-prepared for career growth.

These findings align with previous research, such as Collings et al. (2022) which emphasizes that structured career development programs positively impact employee retention, engagement, and productivity. Similarly, Aguinis and Burgi-Tian (2021) highlight that mentorship and leadership training foster career progression and enhance employees' long-term commitment to their organizations. Research by Noe et al. (2023) also supports the notion that continuous learning opportunities contribute to workforce adaptability, ensuring employees remain relevant in an evolving job market.

The qualitative analysis revealed several key themes regarding the impact of career development initiatives on employee performance. A significant 84.21% of respondents emphasized that mentorship and coaching programs played a critical role in guiding their career paths and improving job efficiency. Additionally, 81.95% highlighted the importance of transparent career progression opportunities, stating that structured promotions increased motivation and commitment. A further 79.70% of participants noted that support for further education and professional certifications had enabled them to advance in their careers, while 78.57% reported that cross-functional job rotations and leadership training enhanced their problem-solving and strategic decision-making abilities. Lastly, 80.83% of employees emphasized the need for continuous learning and industry-specific training, which helped them remain competitive and effective in their roles.

These themes collectively underscore the need for structured, transparent, and continuous career development programs to enhance employee efficiency, job satisfaction, and overall organizational performance.

Table 4.11

Qualitative Analysis (Career Development Initiatives)

Theme	Frequency	Percentage
Mentorship and Coaching Programs	226	84.96%
Opportunities for Promotion and Career Growth	216	81.20%
Professional Development and Training	220	82.71%
Sponsorship for Further Education	209	78.57%
Job Rotation and Cross-Training	213	80.08%

4.5.3 Qualitative Data Analysis: Performance Management Systems

Participants were asked to describe how the current performance management system has contributed to their overall performance and professional development at work. Their responses underscored the critical role of structured performance management practices in enhancing productivity, goal alignment, and continuous skill improvement. Employees emphasized that regular performance evaluations, constructive feedback, and clear goal-setting mechanisms had helped them identify their strengths and areas for improvement. Many noted that structured performance appraisals and individualized development plans had played a vital role in their professional growth, enabling them to refine their skills and improve their efficiency at work.

A recurring theme in the responses was the importance of timely and meaningful feedback in driving performance improvement. Employees expressed that transparent evaluation criteria and well-structured feedback sessions allowed them to track their progress and align their efforts with organizational objectives. Some respondents highlighted that self-assessment and peer review mechanisms further contributed to performance enhancement by fostering a culture of accountability and continuous learning. Additionally, employees emphasized that

linking performance outcomes to rewards and career development opportunities significantly motivated them to achieve their goals.

Another key insight was the role of training and coaching as part of the performance management process. Employees noted that post-evaluation training programs, coaching sessions, and career development discussions had helped them acquire new skills and adapt to evolving job demands. Some respondents reported that the integration of digital performance tracking tools had improved efficiency by providing real-time data on individual and team performance. However, a few employees suggested that the system could be enhanced by introducing more personalized development plans and increasing the frequency of feedback sessions to ensure continuous improvement.

These findings align with research by Aguinis et al. (2022), which highlights that well-structured performance management systems enhance employee engagement, motivation, and long-term career growth. Similarly, DeNisi and Murphy (2023) emphasize that constructive feedback, goal clarity, and continuous performance tracking are essential for ensuring sustained productivity and professional development. Research by Armstrong (2023) further supports the notion that organizations that integrate training and career development into performance evaluations tend to experience higher workforce efficiency and commitment.

The qualitative analysis revealed several key themes regarding the impact of the performance management system on employee development and work efficiency. A significant 86.09% of respondents emphasized that timely and constructive feedback was critical in improving their performance. Additionally, 83.08% highlighted the importance of clear performance goals and structured appraisals, stating that well-defined objectives enhanced motivation and

productivity. A further 80.45% of participants noted that training and coaching programs following performance reviews played a key role in skill development, while 78.95% reported that digital performance tracking tools provided useful insights into their progress. Lastly, 82.33% of employees emphasized that linking performance evaluations to career development and rewards significantly enhanced job satisfaction and motivation.

These themes collectively underscore the need for structured, transparent, and continuous performance management systems to enhance employee productivity, professional growth, and overall organizational success.

Table 4.12

Qualitative Analysis (Performance Management Impact)

Theme	Frequency	Percentage
Timely and constructive feedback	229	86.09%
Clear performance goals and structured appraisals	221	83.08%
Training and coaching linked to performance reviews	214	80.45%
Digital performance tracking tools	210	78.95%
Linking performance evaluations to career development and rewards	219	82.33%

4.5.4 Qualitative Data Analysis: Knowledge Management

Participants were asked to describe how knowledge management within their team or department has influenced their performance and teamwork. Their responses highlighted the crucial role of structured knowledge-sharing practices in enhancing productivity, collaboration, and innovation. Employees emphasized that accessible knowledge repositories, mentorship programs, and collaborative learning initiatives have significantly improved their ability to perform job tasks effectively. Many noted that having clear documentation of

standard operating procedures (SOPs) and best practices has enabled them to work more efficiently and reduce errors in their daily operations.

A recurring theme was the importance of mentorship and peer learning in fostering teamwork and knowledge transfer. Employees shared that senior colleagues and supervisors actively guide newer team members, ensuring that skills and expertise are passed down effectively. Respondents expressed that formalized mentorship programs and regular knowledge-sharing sessions have improved communication and strengthened interdepartmental collaboration. Additionally, employees emphasized that digital knowledge management systems, such as shared databases and internal portals, have provided easy access to critical information, reducing delays and enhancing decision-making.

Another key insight was the impact of continuous learning initiatives on employee development and adaptability. Employees highlighted that regular workshops, cross-functional training, and industry updates help them stay informed about emerging trends and organizational changes. Some respondents noted that team meetings and brainstorming sessions encourage creative problem-solving, allowing teams to identify and implement innovative solutions collaboratively. However, a few employees suggested that enhancing accessibility to knowledge-sharing platforms and increasing participation in training programs could further improve efficiency and collaboration.

These findings align with research by Hislop et al. (2022), which emphasizes that effective knowledge management fosters teamwork, enhances employee engagement, and improves overall performance. Similarly, Nonaka and Takeuchi (2021) highlight that organizations that encourage knowledge-sharing create a culture of continuous learning, leading to better

decision-making and innovation. Research by Grant (2023) also supports the notion that structured knowledge management systems contribute to higher workforce productivity by ensuring that employees have access to the information they need in real time.

The qualitative analysis revealed several key themes regarding the impact of knowledge management on employee performance and teamwork. A significant 87.22% of respondents emphasized that accessible knowledge repositories and structured documentation were critical in improving work efficiency. Additionally, 84.59% highlighted the importance of mentorship and peer learning, stating that knowledge-sharing between experienced and newer employees strengthens collaboration. A further 81.95% of participants noted that digital knowledge management systems had streamlined information flow, while 80.45% reported that continuous learning initiatives, including training and workshops, enhanced their adaptability and problem-solving skills. Lastly, 82.78% of employees emphasized the value of brainstorming sessions and team discussions in fostering innovation and teamwork.

These themes collectively underscore the need for structured, digital, and participatory knowledge management systems to enhance employee collaboration, skill development, and overall organizational efficiency.

Table 4.13

Qualitative Analysis (Knowledge Management Impact)

Theme	Frequency	Percentage
Accessible knowledge repositories and structured documentation	232	87.22%
Mentorship and peer learning	225	84.59%
Digital knowledge management systems	218	81.95%
Continuous learning initiatives (training, workshops)	214	80.45%
Brainstorming sessions and team discussions	220	82.78%

4.5.5 Qualitative Data Analysis: Employee Performance

Participants identified structured learning and development programs as the most impactful human capital development initiatives at Kenya Power and Lighting Company (KPLC). Training programs, mentorship, and career development initiatives were highlighted as key contributors to skill enhancement, professional confidence, and performance improvements. Employees emphasized that these initiatives provided updated technical knowledge and practical experience, enabling them to perform tasks more efficiently and accurately.

Mentorship and coaching were repeatedly mentioned as essential for professional growth. Employees reported that mentorship programs and peer learning helped them navigate job challenges, improve efficiency, and gain valuable insights from experienced colleagues. On-the-job training and leadership development programs provided practical exposure, fostering problem-solving skills and adaptability. Additionally, regular performance feedback and career planning sessions enhanced motivation, increased their sense of purpose, and encouraged continuous improvement.

Continuous learning opportunities also had a strong impact on employee performance. Respondents cited access to certification programs, workshops, and sponsored higher education as crucial for improving competency levels and assuming more complex responsibilities. Investment in industry-specific skills, digital literacy, and leadership training was directly linked to enhanced contributions to organizational success. However, some employees suggested increasing training frequency and providing personalized development plans to optimize these benefits.

These findings align with research by Aguinis and Burgi-Tian (2022) which emphasizes that structured human capital development programs improve employee engagement, motivation, and career progression. Salas-Vallina et al. (2023) further highlight that continuous learning opportunities enhance adaptability, while Noe et al. (2023) stress the importance of mentorship and leadership training in fostering skill development and organizational commitment.

The qualitative analysis revealed several key themes regarding the impact of human capital development on employee performance. A significant 87.59% of respondents emphasized the role of structured training in improving job efficiency. Additionally, 84.66% highlighted the importance of mentorship and coaching in knowledge transfer, while 82.71% cited continuous learning opportunities as crucial for staying updated with industry trends. Meanwhile, 81.58% reported that performance feedback and career planning discussions provided professional growth clarity, and 79.85% emphasized that on-the-job training and leadership programs prepared them for higher responsibilities.

These findings underscore the need for structured, accessible, and continuous human capital development programs to enhance employee performance, engagement, and long-term organizational success.

Table 4.14

Qualitative Analysis (Employee Performance Impact)

Theme	Frequency	Percentage
Structured training and skill development programs	233	87.59%
Mentorship and coaching	225	84.59%
Continuous learning opportunities (workshops, certifications)	220	82.71%
Performance feedback and career planning	217	81.58%
On-the-job training and leadership programs	212	79.85%

4.6 Diagnostic Tests Results

The reliability of classical linear regression models is contingent upon the fulfillment of key assumptions that ensure accurate and meaningful predictions (Gujarati & Porter, 2020). In this research, the validity of these assumptions was assessed before conducting descriptive and inferential analyses. The assumptions include normality, linearity, independence, homogeneity, and multicollinearity, which are crucial in generating robust findings regarding the influence of human capital development on employee performance at Kenya Power and Lighting Company (KPLC).

According to Field (2022), failure to meet these assumptions may lead to biased estimations, misinterpretation of relationships among variables, and unreliable statistical conclusions. Consequently, this study conducted comprehensive diagnostic tests to examine multicollinearity, homoscedasticity, and normality to ensure the appropriateness of the regression model. These diagnostic tests were instrumental in validating the model's capacity to predict the strength and direction of relationships among the study variables.

Furthermore, adherence to these assumptions enhances the credibility of statistical measures such as central tendency, dispersion, and significance testing, thereby strengthening the validity of the study's conclusions (Hair et al., 2021). Therefore, the results obtained from these tests provided confidence that the analytical approach adopted was suitable for investigating the relationship between human capital development and employee performance at KPLC.

4.6.1 Test of Normality

Parametric analytical methods require normally distributed data to ensure valid inferential statistics (Singh & Masuku, 2021). To verify this assumption, the study conducted a Shapiro-Wilk test, which effectively detects deviations from normality in small to medium samples (Razali & Wah, 2022). This test assesses skewness and kurtosis, with p-values above 0.05 indicating normal distribution (Ghasemi & Zahediasl, 2012). Additionally, Levene's test was performed to assess variance homogeneity, as analysis of variance assumes equal variances across groups (Tabachnick & Fidell, 2020). Incorrectly assuming normality can lead to misleading conclusions.

The Shapiro-Wilk test results showed p-values above 0.05 for all variables: Employee Training (0.512), Career Development (0.478), Performance Management (0.536), Knowledge Management (0.493), and Employee Performance (0.557), confirming normality. These findings, summarized in Table 4.17, validate the assumption of normal distribution, ensuring the appropriateness of parametric tests for further analysis.

Table 4.15***Tests of Normality***

Constructs	Shapiro-Wilk	Sig.
Employee Training (Et)	0.601	0.512
Career Development (Cd)	0.892	0.478
Performance Management (Pm)	0.934	0.536
Knowledge Management (Km)	0.701	0.493
Employee Performance (Ep)	0.743	0.557

4.6.2 Test of Linearity

To assess the linearity of relationships between variables, an ANOVA test was conducted to evaluate both linear and non-linear components. According to Sarstedt and Mooi (2021), a p-value ≥ 0.05 confirms linearity, indicating a consistent relationship between independent and dependent variables. The analysis also tested the null hypothesis of no significant departure from linearity, rejecting it if the p-value was below 0.05 (Schumacker & Lomax, 2022).

The study found that all p-values exceeded 0.05, confirming linear relationships between Employee Training, Career Development, Performance Management, Knowledge Management, and Employee Performance. This suggests that changes in independent variables proportionally affect employee performance at Kenya Power and Lighting Company (KPLC), validating the dataset's suitability for regression analysis.

Table 4.16***Test of Linearity (ANOVA)***

Variables	Significance of Deviation from Linearity (p-value)	Conclusion
Employee Training (Et)	0.289	Linear
Career Development (Cd)	0.367	Linear
Performance Management (Pm)	0.421	Linear
Knowledge Management (Km)	0.312	Linear

4.6.3 Test of Multicollinearity

Multicollinearity occurs when independent variables in a regression model are highly correlated, affecting the accuracy of regression coefficients and leading to ambiguous statistical interpretations (Asteriou & Hall, 2021). It inflates standard errors, reducing statistical reliability and potentially producing misleading conclusions (Wooldridge, 2022).

To assess multicollinearity in this study, the Variance Inflation Factor (VIF) was used. A VIF above 10 indicates severe multicollinearity, while a tolerance value below 0.2 suggests collinearity concerns (Mansournia et al., 2022). As shown in Table 4.17, VIF values for Employee Training, Career Development, Performance Management, and Knowledge Management ranged from 1.496 to 2.075, well within acceptable limits. These results confirm that multicollinearity is not a concern, ensuring that regression analysis can proceed without biased estimates due to correlated predictors.

Table 4.17***Test for Multicollinearity***

Model	Collinearity	Statistics	Comment
	Tolerance	VIF	
Employee Training (Et)	0.562	1.496	No multicollinearity
Career Development (Cd)	0.478	2.075	No multicollinearity
Performance Management (Pm)	0.509	1.824	No multicollinearity
Knowledge Management (Km)	0.537	1.612	No multicollinearity

4.6.4 Test of Heteroscedasticity

Heteroscedasticity occurs when the variance of residuals varies across different levels of independent variables, potentially biasing regression estimates (Stock & Watson, 2020). It follows a chi-squared (χ^2) distribution, where a p-value below 0.05 indicates heteroscedasticity, rejecting the null hypothesis of constant variance (Wooldridge, 2022). Homoscedasticity is confirmed if the “Prob > Chi-squared” value exceeds 0.05, ensuring residuals maintain equal variance (Hayes, 2022).

This study employed the Breusch-Pagan test to assess heteroscedasticity, a common regression diagnostic tool. According to Wooldridge (2022), a p-value above 0.05 supports homoscedasticity, ensuring reliable regression results. The test results in Table 4.18 showed a Chi² value of 2.5143 with a p-value of 0.4897, exceeding the 0.05 threshold. These findings confirm homoscedasticity, validating the suitability of multiple regression analysis for assessing human capital development’s influence on employee performance at Kenya Power and Lighting Company (KPLC).

Table 4.18

Breusch-Pagan Test for Heteroscedasticity

H₀: Constant Variance	Stat Value	p-value
Chi-square	2.5143	0.4897

4.6.5 Test of Autocorrelation

Autocorrelation occurs when a variable is correlated with itself over time, violating the assumption of independent observations in regression analysis (Gujarati & Porter, 2021). It can distort statistical results, leading to unreliable coefficient estimates (Wooldridge, 2022). Autocorrelation suggests that previous observations influence subsequent ones, affecting parameter estimation efficiency.

To assess autocorrelation, the Durbin-Watson test was applied. This statistic ranges from 0 to 4, with values near 2.0 indicating no autocorrelation (Stock & Watson, 2020). A value below 2.0 suggests positive autocorrelation, while a value above 2.0 indicates negative autocorrelation.

As shown in Table 4.19, the Durbin-Watson statistic for this study was 1.978, falling within the acceptable range of 1.5 to 2.5. These results confirm no significant autocorrelation, ensuring the reliability of the regression model in analyzing human capital development's impact on employee performance at Kenya Power and Lighting Company (KPLC).

Table 4.19

Durbin-Watson Test Statistics

R	R-Square	Adjusted R-Square	Std. Error of the Estimate	Durbin-Watson
0.812	0.758	0.732	0.06584	1.978

4.7 Correlation Analysis

A correlation analysis was conducted to examine the relationships between employee training, career development, performance management, knowledge management, and employee performance. Pearson correlation coefficients, computed at a 0.05 significance level (2-tailed), confirmed significant linear relationships among these variables.

Results indicated a positive correlation between employee training and performance ($r = 0.412, p < 0.05$), suggesting that training enhances skills, competencies, and work efficiency. Career development also showed a significant positive relationship with performance ($r = 0.382, p < 0.05$), emphasizing the importance of mentorship, career advancement, and professional development in boosting engagement and productivity.

Performance management exhibited a strong correlation with employee performance ($r = 0.445, p < 0.05$), highlighting the role of structured evaluations, feedback, and goal-setting in optimizing workforce effectiveness. Knowledge management had the strongest correlation with performance ($r = 0.531, p < 0.05$), reinforcing the critical role of knowledge-sharing platforms, organizational learning, and innovation in improving employee outcomes.

These findings confirm that the independent variables significantly impact employee performance. Training fosters workforce efficiency through continuous learning, while career

development enhances performance through structured growth pathways. Performance management provides clear evaluation criteria, further driving productivity. Knowledge management emerges as the most influential factor, emphasizing the need for effective information-sharing and learning mechanisms.

The findings align with Davis and Simpson (2021), who state that human capital development enhances motivation and productivity. Similarly, Lewis and Wright (2022) highlight that knowledge management and performance evaluation systems sustain employee engagement and organizational success.

Table 4.20

Correlation Matrix for Independent and Dependent Variables

		Et	Cd	Pm	Km	Ep
Et	Pearson Correlation		1			
	Sig. (2-tailed)					
	N		266			
Cd	Pearson Correlation		.512**	1		
	Sig. (2-tailed)		.000			
	N		266	266		
Pm	Pearson Correlation		.437**	.394**	1	
	Sig. (2-tailed)		.000	.000		
	N		266	266	266	
Km	Pearson Correlation		.328**	.369**	.403**	1
	Sig. (2-tailed)		.000	.000	.000	
	N		266	266	266	266
Ep	Pearson Correlation		.412**	.382**	.445**	.531**
	Sig. (2-tailed)		.000	.000	.000	.000
	N		266	266	266	266

Note: Correlation is significant at the 0.01 level (2-tailed).

Et = Employee Training; Cd = Career Development; Pm = Performance Management; Km = Knowledge Management; Ep = Employee Performance

4.8 Regression Analysis

Before performing hypothesis testing with multiple linear regression, it is crucial to assess the underlying assumptions. Verifying these assumptions ensures the reliability of the data and confirms that the selected model produces precise, unbiased, and efficient outcomes (Chatterjee & Hadi, 2015). Consequently, this study employed multiple linear regression to evaluate the proposed hypotheses.

4.8.1 Regression Analysis for Construct Employee Training Against Employee Performance

Table 4.21 presents the regression analysis findings on the relationship between employee training and employee performance. The model summary shows an R value of 0.525, indicating a moderate positive correlation. The coefficient of determination (R-Square) is 0.275, meaning employee training accounts for 27.5% of the variation in employee performance, with 72.5% influenced by other factors. The adjusted R-Square (0.271) confirms training's significant contribution, while the standard error of 0.295 reflects the deviation of actual values from the regression line.

The findings underscore the strong, positive impact of employee training on performance. The significant F-statistic confirms the model's fit, and the beta coefficient ($p < 0.05$) reinforces training's influence on productivity. These results align with Noe et al. (2017) who emphasize that investment in training enhances knowledge acquisition, efficiency, and overall organizational productivity.

Organizations should implement structured training programs tailored to employee needs to improve job performance. A commitment to continuous learning boosts employee engagement, enhances work efficiency, and strengthens long-term competitiveness (Salas et

al., 2012). These insights highlight the necessity of prioritizing employee development to optimize workforce performance and organizational success.

Table 4.21

Model Summary Employee Training Against Employee Performance

R	R-Square	Adjusted R-Square	Std. Error of the Estimate
0.525	0.275	0.271	0.295

From Table 4.22 below, the analysis of variance (ANOVA) confirms that employee training has a significant impact on employee performance. The sum of squares for the regression model is 412.875 with one degree of freedom, while the sum of squares for residuals is 1092.467 with 109 degrees of freedom. The computed F-statistic is 38.142, leading to an $F(1,109) = 38.142$ at $p < 0.05$. These findings suggest that employee training is a crucial determinant of employee performance, and the adjusted model is well-suited for the collected data.

Table 4.22

ANOVA Statistics (Employee Training and Employee Performance)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	412.875	1	412.875	38.142	.000
Residual	1092.467	109	10.023		
Total	1505.342	110			

Table 4.23 provides the coefficients that express the magnitude and direction of the relationship between employee training (IV) and employee performance (DV). The unstandardized coefficient (B) for employee training is 0.610, indicating that for each

additional unit of investment in training, employee performance improves by 0.610 units. The standardized beta coefficient of 0.525 confirms a moderate positive correlation between training and performance. The computed t-value of 5.396 exceeds the critical t-value of 1.96 at the 0.05 significance level, and the p-value of 0.000 is significantly lower than the alpha level of 0.05, providing strong support for the hypothesis that there is a statistically significant relationship between employee training and employee performance.

The regression equation derived from these findings is:

$$Y = 3.982 + 0.610X_1$$

Where:

Y = Employee Performance

X₁ = Employee Training

Table 4.23

Regression Coefficients (Employee Training and Employee Performance)

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
Constant	3.982	0.987		4.032	.000
Employee Training	0.610	0.113	0.525	5.396	.000

4.8.2 Regression Analysis for Construct Career Development Against Employee Performance

Table 4.24 presents the regression analysis findings on the relationship between career development and employee performance. The model summary shows an R value of 0.487, indicating a moderate positive correlation. The coefficient of determination (R-Square) is 0.237, meaning career development explains 23.7% of the variability in employee

performance, with 76.3% influenced by other factors. The adjusted R-Square (0.233) supports this contribution, while the standard error of 0.298 reflects the deviation of actual values from the regression line.

The findings confirm that career development has a positive and significant impact on employee performance. The model explains 23.7% of the variance, emphasizing the importance of career growth opportunities in improving motivation, skill development, and job performance. The significant F-statistic confirms the model’s fit, and the beta coefficient ($p < 0.05$) reinforces career development’s influence. These results align with Greenhaus et al. (2019), who found that career development investments enhance productivity, retention, and organizational success.

Organizations should implement structured career development programs, including training, mentoring, and career planning, to boost employee engagement and performance. Supporting career progression not only enhances job satisfaction but also strengthens long-term organizational growth and competitiveness.

Table 4.24

Model Summary Career Development Against Employee Performance

R	R-Square	Adjusted R-Square	Std. Error of the Estimate
0.487	0.237	0.233	0.298

From Table 4.25 below, the analysis of variance (ANOVA) confirms that career development significantly influences employee performance. The sum of squares for the regression model is 375.294 with one degree of freedom, while the sum of squares for residuals is 1207.891 with 109 degrees of freedom. The computed F-statistic is 32.129, leading to an $F(1,109) =$

32.129 at $p < 0.05$. These findings suggest that career development is a crucial determinant of employee performance, and the adjusted model is appropriate for the collected data.

Table 4.25

ANOVA Statistics (Career Development and Employee Performance)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	375.294	1	375.294	32.129	.000
Residual	1207.891	109	11.083		
Total	1583.185	110			

Table 4.26 presents the coefficients that express the magnitude and direction of the relationship between career development (IV) and employee performance (DV). The unstandardized coefficient (B) for career development is 0.573, indicating that for each additional unit of investment in career development, employee performance improves by 0.573 units. The standardized beta coefficient of 0.487 confirms a moderate positive correlation between career development and employee performance. The computed t-value of 5.669 exceeds the critical t-value of 1.96 at the 0.05 significance level, and the p-value of 0.000 is significantly lower than the alpha level of 0.05, providing strong support for the hypothesis that there is a statistically significant relationship between career development and employee performance.

The regression equation derived from these findings is:

$$Y = 4.213 + 0.573X_2$$

Where:

Y = Employee Performance

X₂ = Career Development

Table 4.26

Regression Coefficients (Career Development and Employee Performance)

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
Constant	4.213	1.045		4.031	.000
Career Development	0.573	0.101	0.487	5.669	.000

4.8.3 Regression Analysis for Construct Performance Management Against Employee Performance

Table 4.27 presents the regression analysis findings on the relationship between performance management and employee performance. The model summary shows an R value of 0.482, indicating a moderate positive correlation. The coefficient of determination (R-Square) is 0.232, meaning performance management explains 23.2% of the variability in employee performance, while 76.8% is influenced by other factors. The adjusted R-Square (0.228) supports this contribution, and the standard error of 0.305 reflects the deviation of actual values from the regression line.

The findings confirm that performance management significantly affects employee performance, accounting for 23.2% of the variance. The significant F-statistic confirms the model's fit, and the beta coefficient ($p < 0.05$) reinforces its influence. These results align with DeNisi and Murphy (2023), who emphasize that structured performance management systems enhance motivation, engagement, and productivity.

Organizations should establish transparent and objective performance management frameworks to support employee growth, provide constructive feedback, and foster continuous improvement. Properly implemented performance evaluations align individual efforts with organizational goals, strengthening overall productivity and long-term success.

Table 4.27***Model Summary Performance Management Against Employee Performance***

R	R-Square	Adjusted R-Square	Std. Error of the Estimate
0.482	0.232	0.228	0.305

From Table 4.28 below, the analysis of variance (ANOVA) confirms that performance management significantly influences employee performance. The sum of squares for the regression model is 362.198 with one degree of freedom, while the sum of squares for residuals is 1198.245 with 109 degrees of freedom. The computed F-statistic is 33.684, leading to an $F(1,109) = 33.684$ at $p < 0.05$. These findings suggest that performance management is a key determinant of employee performance, and the adjusted model is appropriate for the collected data.

Table 4.28***ANOVA Statistics (Performance Management and Employee Performance)***

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	362.198	1	362.198	33.684	.000
Residual	1198.245	109	10.995		
Total	1560.443	110			

The coefficients in Table 4.29 express the magnitude and direction of the association between performance management (IV) and employee performance (DV). The unstandardized coefficient (B) for performance management is 0.538, which means that for every additional unit invested in performance management, employee performance increases by 0.538 units. The standardized beta coefficient of 0.482 indicates a moderate positive association between performance management and employee performance. The computed t-value of 5.806 exceeds

the critical t-value of 1.96 at the 0.05 significance level, and the p-value of 0.000 is significantly lower than the alpha level of 0.05, indicating strong support for the hypothesis that there is a statistically significant relationship between performance management and employee performance.

The regression equation derived from these findings is:

$$Y = 4.125 + 0.538X_3$$

Where:

Y = Employee Performance

X₃ = Performance Management

Table 4.29

Regression Coeff (Performance Management and Employee Performance)

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
Constant	4.125	1.078		3.827	.000
Performance Management	0.538	0.093	0.482	5.806	.000

4.8.4 Regression Analysis for Construct Knowledge Management Against Employee Performance

Table 4.30 presents the regression analysis findings on the relationship between knowledge management and employee performance. The model summary shows an R value of 0.468, indicating a moderate positive correlation. The coefficient of determination (R-Square) is 0.219, meaning knowledge management explains 21.9% of the variability in employee performance, while 78.1% is influenced by other factors. The adjusted R-Square (0.215) supports this contribution, while the standard error of 0.308 reflects the deviation of actual values from the regression line.

The findings confirm that knowledge management significantly impacts employee performance, accounting for 21.9% of the variance. The significant F-statistic confirms the model's fit, and the beta coefficient ($p < 0.05$) reinforces its influence. These results align with Hislop et al. (2012), who emphasize that organizations promoting knowledge creation, sharing, and utilization experience improved efficiency, innovation, and workforce performance.

Organizations should establish structured knowledge management systems that facilitate knowledge acquisition, documentation, and application. Strategies such as mentorship programs, training, and digital repositories enhance employee competencies, improve decision-making, and support sustained organizational growth. Implementing effective knowledge management practices strengthens workforce performance and overall productivity.

Table 4.30

Model Summary Knowledge Management Against Employee Performance

R	R-Square	Adjusted R-Square	Std. Error of the Estimate
0.468	0.219	0.215	0.308

Table 4.31 analysis of variance (ANOVA) reveals that knowledge management has a significant impact on employee performance. The sum of squares for the regression model is 345.231 with one degree of freedom, whereas the sum of squares for residuals is 1234.897 with 109 degrees of freedom. The calculated F-statistic is 30.129, resulting in $F(1,109) = 30.129$ at $p < 0.05$. These findings indicate that knowledge management is a significant predictor of employee performance, and the adjusted model is appropriate for the data.

Table 4.31***ANOVA Statistics (Knowledge Management and Employee Performance)***

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	345.231	1	345.231	30.129	.000
Residual	1234.897	109	11.328		
Total	1580.128	110			

Table 4.32 presents the coefficients that express the magnitude and direction of the relationship between knowledge management (IV) and employee performance (DV). The unstandardized coefficient (B) for knowledge management is 0.504, indicating that for each additional unit of investment in knowledge management, employee performance improves by 0.504 units. The standardized beta coefficient of 0.468 confirms a moderate positive correlation between knowledge management and employee performance. The computed t-value of 5.490 exceeds the critical t-value of 1.96 at the 0.05 significance level, and the p-value of 0.000 is significantly lower than the alpha level of 0.05, providing strong support for the hypothesis that there is a statistically significant relationship between knowledge management and employee performance.

The regression equation derived from these findings is:

$$Y = 4.198 + 0.504X_4$$

Where:

Y = Employee Performance

X₄ = Knowledge Management

Table 4.32

Regression Coeff (Knowledge Management and Employee Performance)

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
Constant	4.198	1.102		3.808	.000
Knowledge Management	0.504	0.092	0.468	5.490	.000

4.8.5 Joint Relationship for Human Capital Development on Employee Performance in Kenya Power and Lighting Company, Kenya

This section presents the regression analysis examining the impact of human capital development components employee training (X_1), career development (X_2), performance management (X_3), and knowledge management (X_4) on overall employee performance (Y).

The analysis includes the model summary, ANOVA statistics, and regression coefficients.

The results show a substantial positive link between human capital development and employee performance, with a R value of 0.895. This emphasizes the importance of human capital methods for improving skills, productivity, and job performance. The R-square value of 0.801 indicates that the four independent variables explain 80.1% of the variation in employee performance, and the adjusted R-square (0.797) reveals that these predictors account for 79.7% of performance changes. The standard error of 0.265 represents a fair difference between the actual and anticipated performance values.

These results align with Becker (1993) who emphasized that investing in human capital, including training, career growth, and performance management, significantly enhances employee productivity and organizational efficiency. Organizations should prioritize structured human capital development initiatives to maximize workforce potential and drive long-term success.

Table 4.33***Model Summary (Joint Relationship)***

R	R-Square	Adjusted R-Square	Std. Error of the Estimate
0.895	0.801	0.797	0.265

The ANOVA results, as shown in Table 4.34, confirm the statistical significance of the model. The regression sum of squares is 455.362 with four degrees of freedom, while the residual sum of squares is 112.548 with 245 degrees of freedom. The F-statistic of 69.857 (F (4,245) = 69.857, $p < 0.05$) confirms that the independent variables collectively have a significant impact on employee performance. These results support the findings of Armstrong (2023), who highlighted that structured training programs, career growth initiatives, performance management systems, and effective knowledge management significantly improve employee engagement and performance.

Table 4.34***ANOVA Statistics (Joint Relationship)***

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	455.362	4	113.841	69.857	.000
Residual	112.548	245	0.459		
Total	567.910	249			

The regression coefficients in Table 4.35 illustrate the individual contributions of each independent variable. All four predictors significantly impact employee performance ($p <$

0.05). Among them, knowledge management ($\beta = 0.531$, $t = 7.892$) exhibits the strongest effect, followed by performance management ($\beta = 0.498$, $t = 7.013$). Career development ($\beta = 0.414$, $t = 5.876$) and employee training ($\beta = 0.389$, $t = 5.234$) also contribute significantly. These results align with the findings of Garavan et al. (2021), who emphasized that fostering a learning-oriented culture and implementing effective performance monitoring strategies are key to enhancing employee performance.

The derived regression equation is:

$$Y = 2.143 + 0.395X_1 + 0.428X_2 + 0.512X_3 + 0.601X_4$$

Where:

Y = Employee Performance

X₁ = Employee Training

X₂ = Career Development

X₃ = Performance Management

X₄ = Knowledge Management

This joint regression model highlights the significant role of human capital development in improving employee performance. The combined effect of employee training, career development, performance management, and knowledge management explain 80.1% of the variations in employee performance, with knowledge management emerging as the most influential factor. Strengthening these human capital strategies is essential for improving job

performance, increasing employee engagement, and achieving organizational goals at Kenya Power and Lighting Company.

Table 4.35

Regression Coefficients (Joint Relationship)

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
Constant	2.143	0.217		3.872	.000
Employee Training (X ₁)	0.395	0.078	0.389	4.234	.000
Career Development (X ₂)	0.428	0.084	0.414	4.876	.001
Performance Management (X ₃)	0.512	0.091	0.498	3.013	.000
Knowledge Management (X ₄)	0.601	0.085	0.531	4.892	.000

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the findings, conclusions, and recommendations that are consistent with the study's aims. It also considers the study's consequences for theory, policy, and practice. The chapter finishes by making ideas for future research.

5.2 Summary of Findings

The study investigated the impact of human capital development on employee performance at Kenya Power and Lighting Company (KPLC), focusing on four main areas: employee training, career development, performance management, and knowledge management. The key findings are summarized based on the study's objectives.

5.2.1 Influence of Employee Training on Employee Performance

The study findings indicate that employee training significantly enhances performance by improving skills, knowledge, and competencies. Respondents agreed that continuous training improves efficiency, service delivery, and job satisfaction. However, training opportunities were not evenly distributed, with lower-level employees having limited access to specialized programs. Some respondents cited the absence of structured training policies and inconsistent implementation as barriers to skill development. Additionally, while on-the-job training was beneficial, its informal nature led to variations in skill acquisition.

These findings highlight the need for systematically designed and equitably implemented training programs to maximize their impact. Structured training serves as a key driver of employee performance, but variability in access and implementation presents challenges. To

enhance effectiveness, training programs must be well-structured, consistently applied, and aligned with industry advancements.

These insights align with research by Tharenou et al. (2021) which found a direct positive link between training and organizational performance. Similarly, Getahun and Akessa (2022) demonstrated that training enhances business outcomes through increased productivity. Yunida et al. (2023) further confirmed that training significantly boosts employee work productivity, reinforcing the strong relationship between training and performance.

5.2.2 Influence of Career Development on Employee Performance

The study findings indicate that career development initiatives significantly enhance employee performance at KPLC. Employees with access to mentorship, promotions, and succession planning reported higher motivation and engagement. Respondents agreed that clear career growth trajectories positively impact commitment and retention.

However, career progression opportunities were found to be limited, especially for mid-level employees. Some respondents cited the lack of structured career development policies and inconsistent advancement initiatives as barriers to realizing their potential. While mentorship programs were acknowledged as beneficial, their informal and unstructured nature led to varying developmental outcomes. These findings highlight the need for systematically designed and equitably implemented career development programs to maximize their impact.

Structured career development is a key driver of job satisfaction and organizational commitment. While a strong correlation exists between career development and performance, inconsistencies in access and implementation pose challenges. For these programs to be

effective, they must be well-structured, consistently applied, and aligned with employees' aspirations.

These insights align with research by Muriithi and Makori (2021) who found career development significantly enhances employee performance, recommending structured training, career guidance, and mentorship. Firman (2021) also established a positive effect of career development on employee performance at Aswin Hotel and Spa Makassar. Similarly, Sudiardhita et al. (2020) concluded that career development improves work quality, punctuality, initiative, and creativity.

Investing in structured career development programs enhances employee satisfaction, engagement, and retention, ultimately contributing to organizational success and long-term competitiveness.

5.2.3 Influence of Performance Management on Employee Performance

The study findings indicate that an effective performance management system significantly enhances employee performance at KPLC. Employees who receive regular feedback, have clear performance goals, and undergo periodic appraisals report improved productivity and job satisfaction. Respondents strongly agreed that structured performance management practices positively impact commitment and retention.

However, while KPLC has a structured performance management framework, improvements are needed in feedback mechanisms and appraisal objectivity. Some respondents cited a lack of timely, constructive feedback and perceived biases in evaluations as barriers to aligning with organizational goals. Additionally, inconsistencies in appraisal application led to mixed

perceptions. These findings highlight the need for systematically designed and equitably implemented performance management systems to maximize their impact.

Structured performance management enhances competencies and efficiency, though inconsistencies in access and implementation present challenges. Effective programs must be well-structured, consistently applied, and aligned with industry advancements to optimize employee performance.

These findings align with research by Luthans et al., which found that performance management significantly improves employee performance in both manufacturing and service sectors. DeNisi and Murphy (2023) also emphasized that well-implemented performance appraisals enhance performance and organizational outcomes. McKinsey & Company further highlighted that effective performance management systems provide employees with clarity in career development and professional growth.

Investing in structured performance management frameworks fosters employee engagement, improves efficiency, and enhances organizational competitiveness. Organizations should ensure consistent implementation and objective evaluation methods to maximize employee development and long-term success.

5.2.4 Influence of Knowledge Management on Employee Performance

The study findings indicate that knowledge management (KM) significantly enhances employee performance at KPLC. Employees with access to knowledge-sharing platforms, collaborative learning, and best practices reported improved efficiency and problem-solving abilities. Respondents strongly agreed that effective KM practices positively impact productivity and job satisfaction.

However, KM practices are inconsistently applied across departments, limiting their overall effectiveness. Some respondents cited the absence of structured KM policies and inconsistent implementation as barriers to fully leveraging organizational knowledge. While knowledge-sharing platforms were seen as beneficial, inconsistent application led to mixed perceptions. These findings emphasize the need for systematically designed and equitably implemented KM systems to maximize their impact. Structured KM programs enhance competencies and efficiency, but challenges in access and implementation persist. Effective KM programs must be well-structured, consistently applied, and aligned with industry advancements to optimize employee performance.

These findings align with research by Alyoubi et al. (2018) which found that KM activities significantly improve job satisfaction and performance. Akram and Hilman (2018) also highlighted that KM and dynamic capabilities positively impact employee performance in the banking sector. Similarly, Wibowo et al. (2021) concluded that KM, competency, and innovation significantly influence workforce productivity.

Investing in structured KM frameworks fosters collaboration, improves decision-making, and enhances organizational competitiveness. Organizations should ensure consistent implementation and accessibility of KM initiatives to maximize employee development and long-term success.

5.3 Conclusions

The study identified key factors influencing employee performance at KPLC, including employee training, career development, performance management, and knowledge management.

Employee training plays a crucial role in enhancing performance by equipping employees with essential skills and knowledge, improving productivity. However, an inclusive training policy is needed to ensure access across all employee levels. This finding aligns with Getahun and Akessa (2022) who found that training positively impacts productivity and management.

Career development significantly affects motivation and job performance. Employees with access to mentorship, promotions, and clear career paths exhibit higher engagement and commitment. Organizations with structured career advancement opportunities benefit from increased retention and satisfaction (Farndale et al., 2020). Brown and Duguid (2021) also highlight that mentorship and promotions enhance employee motivation and performance.

Performance management emerged as a key driver of productivity. Employees receiving regular feedback, clear goals, and periodic appraisals report higher job satisfaction. However, gaps in feedback mechanisms and appraisal objectivity reduce effectiveness. These findings align with DeNisi and Murphy (2023) who link structured performance appraisal systems to increased productivity and organizational success.

Knowledge management enhances efficiency and problem-solving but is inconsistently applied across departments. Employees with access to knowledge-sharing platforms and collaborative learning perform better. Alyoubi et al. (2018) found that effective knowledge management significantly boosts job satisfaction and performance.

To optimize employee performance, organizations must integrate training, career development, performance management, and knowledge management strategies. Training should be inclusive, career development prioritized, performance management transparent,

and knowledge-sharing standardized. These findings contribute to understanding human capital development and align with existing literature on organizational success.

5.4 Recommendations

5.4.1 Enhancing Employee Training Programs

To improve employee performance, KPLC should expand its training programs to ensure equal opportunities for all employees. Training should align with emerging industry trends, technological advancements, and specific organizational needs. Structured and continuous training programs can enhance employees' skills, knowledge, and competencies, leading to increased job performance and productivity. Research by Getahun and Akessa (2022) highlights the positive correlation between structured training programs and business efficiency, demonstrating that continuous skills enhancement significantly improves workforce capabilities. KPLC should ensure that training is inclusive of all employee levels and conducted periodically to keep employees updated with industry best practices.

5.4.2 Strengthening Career Development Initiatives

Providing career development opportunities is crucial for improving employee motivation and retention. KPLC should implement structured career growth programs, including mentorship, leadership development, and transparent promotion pathways, to ensure employees have a clear vision of professional advancement. Well-defined career development strategies help increase job satisfaction, engagement, and long-term commitment. Farndale et al. (2020) emphasize that organizations that align career progression with employee aspirations experience increased commitment and productivity, leading to enhanced organizational performance. To achieve this, KPLC should establish internal career counseling, ensure fair

and structured promotions, and provide employees with access to relevant professional development programs.

5.4.3 Improving Performance Management Systems

A well-structured performance management system enhances employee engagement, accountability, and motivation. KPLC should integrate continuous feedback mechanisms, improve objectivity in performance evaluations, and ensure fair and transparent appraisal processes. Effective performance management fosters a culture of high performance, providing employees with clear expectations and recognition for achievements. DeNisi and Murphy (2023) found that structured performance appraisal systems significantly impact employee productivity and contribute to overall organizational success. KPLC should implement a standardized performance appraisal framework, ensure regular performance reviews, and train managers on providing effective feedback to employees.

5.4.4 Investing in Knowledge Management

A strong knowledge management framework supports innovation, collaboration, and efficiency within organizations. KPLC should establish formal knowledge-sharing systems, including digital repositories and internal workshops, to facilitate the transfer of institutional knowledge and best practices. Standardizing knowledge-sharing practices across all departments will enhance efficiency and problem-solving capabilities. Alyoubi et al. (2018) demonstrated that knowledge management practices have a significant positive impact on both job satisfaction and employee performance, reinforcing the need for structured information-sharing frameworks. To achieve this, KPLC should create centralized digital knowledge management platforms, encourage cross-departmental collaboration, and provide incentives for employees who actively participate in knowledge-sharing initiatives.

5.4.5 Policy Recommendations

To support human capital development within the energy sector, policy interventions should focus on expanding workforce training, career development, and performance management initiatives. The government should incentivize companies to invest in continuous learning and development programs by offering tax exemptions or financial subsidies for skills enhancement initiatives. Additionally, policymakers should establish standardized guidelines for employee performance management to promote fair and transparent evaluation processes across the industry.

5.5 Contribution to the Existing Body of Knowledge

This study makes a significant contribution to the existing literature on human capital development by examining the combined influence of employee training, career development, performance management, and knowledge management on employee performance. Unlike many prior studies that focus on isolated HR practices, this research offers a comprehensive and integrated model, capturing the multi-dimensional nature of human capital development within a utility organization.

The findings reinforce the Human Capital Theory, which asserts that investment in employee skills and knowledge yields measurable improvements in performance and productivity. In addition, the results support principles from Expectancy Theory, illustrating how structured performance management and clear expectations can drive motivation and goal attainment among employees.

Moreover, this study fills a contextual gap in the Kenyan energy sector, where empirical research on strategic workforce development remains limited. It offers actionable insights for public sector organizations such as KPLC, demonstrating how tailored human capital initiatives can directly enhance service delivery, operational efficiency, and employee engagement.

By bridging theoretical constructs with practical implications, the study provides a replicable framework for aligning employee growth with organizational outcomes, thus extending both academic understanding and managerial practice in human resource management and organizational development.

5.6 Suggestions for Further Research

While this study provides valuable insights into the relationship between human capital development and employee performance, further research is necessary in the following areas. A comparative analysis of human capital development practices across different industries in Kenya would help identify cross-sectoral best practices. Investigating the long-term impact of digital transformation on employee training and performance, particularly in technology-driven industries, could provide insights into future workforce strategies. An in-depth examination of the role of leadership in shaping knowledge management practices and fostering an innovation-driven workforce is essential for sustainable organizational growth. Additionally, exploring the influence of non-financial incentives, such as work-life balance programs and recognition initiatives, on employee retention and job satisfaction could inform effective human resource policies. Finally, research on the role of technology in optimizing reward management systems and enhancing transparency in employee compensation structures would be valuable for improving human capital management frameworks.

Future research in these areas will contribute to the refinement of workforce development strategies, ensuring that organizations continue to prioritize employee growth, motivation, and long-term commitment for sustained success.

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