

The Learning-Productivity Link: Evidence from Continuous Professional Development Initiatives

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ABSTRACT

Continuous Professional Development (CPD) initiatives are increasingly adopted by Organizations to enhance employee skills and organizational outcomes. This paper examined the relationship between CPD and employee productivity within the Kenya Development Corporation (KDC), using a descriptive census of 110 respondents drawn from a 120-person population. Data were collected with a structured five-point Likert questionnaire, piloted for validity and reliability, and analyzed using descriptive statistics, Pearson correlation and multiple regression techniques. The findings showcased that CPD had a strong positive correlation with productivity and, together with other Human Resources Development (HRD) programs, explained a substantial proportion of productivity variance in KDC. The results further indicated that employees who frequently participated in CPD programs exhibited improved task efficiency, innovation capability, and service quality. Moreover, the regression results underscored CPD as one of the most influential predictors among the HRD variables assessed. The study recommends institutionalizing CPD, aligning it with structured career pathways, enhancing access to accredited training opportunities, and strengthening monitoring and evaluation frameworks to sustain long-term productivity gains and organizational competitiveness.

Key words: Continuous Professional Development; employee productivity; human resource development; mentorship; succession planning

1.0 Background of the Study

Continuous Professional Development (CPD) has increasingly become a critical mechanism for equipping employees with updated skills, enhanced competencies, and the adaptive capacity required to thrive in dynamic work environments. Despite extensive organizational investments in learning initiatives, many institutions continue to struggle with performance gaps, declining productivity levels, and limited alignment between employee capabilities and evolving job expectations. This study therefore examined the extent to which CPD initiatives contribute to improved employee performance and organizational productivity, offering empirical insights into their effectiveness within contemporary workplaces. However, existing literature remains fragmented, with limited evidence linking specific CPD practices to measurable productivity outcomes, thereby highlighting a need for more focused, context-based research.

Globally, Continuous Professional Development (CPD) has been widely adopted across advanced economies such as the USA, UK, Canada, and various Asian countries as a strategic tool for enhancing workforce competency and productivity. In the United States, organizations increasingly integrate CPD into performance management systems, resulting in improved innovation capacity and operational efficiency (Smith, 2022). Similarly, in the UK and Canada, CPD is mandated within key professions, where evidence shows that continuous learning reduces skill obsolescence and boosts service quality in both public and private sectors (Davis, 2022). Across Asia, particularly in countries like Singapore and South Korea, CPD initiatives have accelerated digital readiness and workforce productivity, demonstrating their critical role in supporting competitiveness in rapidly evolving economies (Rahman et al., 2023).

Across Africa, Continuous Professional Development (CPD) has become a central strategy for enhancing workforce capabilities and improving productivity, particularly as countries respond to changing economic and technological demands. In South Africa, CPD programs in public and private institutions have been shown to strengthen service delivery, improve employee competence, and reduce performance gaps (Meyer & Kotze, 2019). Nigeria and Rwanda have equally expanded CPD initiatives to address skill shortages and enhance organizational efficiency, with evidence indicating that consistent training improves employee motivation and task efficiency (Dialoke & Nkechi, 2017). In Ghana, CPD has been linked to higher performance among professionals, especially in healthcare and education highlighting its role in driving productivity and institutional effectiveness across the region (Osei et al., 2019).

In Kenya, the adoption of Continuous Professional Development (CPD) has expanded across public institutions, banking, education, and small and medium enterprises (SMEs) as organizations respond to growing demands for improved service quality and workforce competence. Public institutions increasingly implement CPD to strengthen employee performance and align staff capabilities with ongoing digital and administrative reforms, resulting in enhanced service delivery and operational efficiency (Choi et al., 2022). In the

banking and education sectors, CPD initiatives have been shown to boost productivity by improving technical expertise, customer service, and instructional effectiveness among professionals (KEPSA, 2022). A study by Maow and Muli, (2023) on employee development practices found that developmental programs which cover training, promotion and job enrichment have a moderate effect on employee effectiveness. SMEs in Kenya are also progressively embracing CPD to close skill gaps and drive competitiveness, demonstrating that continuous learning remains a key determinant of productivity and organizational growth in the country (Osei et al., 2019).

2.0 Statement of the Problem

Although KDC has invested in multiple Human Resources Development (HRD) programs, employee productivity remains an identified challenge within the Corporation, raising concerns about implementation and impact. Prior reports and audits (Office of the Auditor General, KDC report) highlighted persistent low productivity despite trainings, which suggests gaps between investment and measurable outcomes. Existing literature shows mixed results across contexts some HRD interventions yield strong productivity gains while others fail due to poor design or cultural mismatch requiring an organisation-specific inquiry at KDC. Consequently, the current study interrogated whether CPD and related HRD programs meaningfully improve productivity at KDC and, if so, which program components and delivery modes are most effective.

Despite programme rollouts, circumstantial evidence and prior studies in Kenya suggest that training does not automatically translate into sustained productivity improvements unless accompanied by supportive managerial practices. International and regional studies indicate that CPD can close skills gaps and improve service quality, but contextual factors (implementation fidelity, follow-up, alignment to job roles) mediate outcomes. At KDC, inconsistent implementation of HRD activities and limited monitoring may be undermining potential benefits, hence the need for a systematic empirical assessment. This study therefore documents implementation features, measures employee perceptions and links HRD measures (including CPD) to productivity indicators to fill that evidence gap.

Prior Kenyan studies have concentrated on private firms or specific sectors, leaving State Corporations under-researched despite their public reputation, which creates a contextual knowledge gap. The KDC case offers an opportunity to evaluate CPD effects inside a public Development Finance Institution (DFI) undergoing restructuring, merger or strategic reform, providing lessons transferable to similar institutions. By applying correlation and regression analysis to staff survey data, the study aimed to quantify associations and identify program components most strongly linked to productivity outcomes. The findings are intended to inform

management, policy makers and HR practitioners at KDC and comparable entities about prioritising CPD investments and complementary reforms.

Implementation challenges such as staff availability, data sensitivity and response biases were anticipated and mitigated through ethical clearances, management buy-in, pilot testing and in-person administration to ensure high response rates. These methodological safeguards strengthen the reliability of findings while acknowledging limitations of cross-sectional survey designs in establishing causality. The problem statement thus motivates a focused inquiry into CPD's efficacy and its interplay with mentorship, leadership development and succession planning in driving measurable productivity gains.

3.0 Theoretical Framework

Human Capital Theory provides the principal economic justification for investing in CPD and other HRD programs, arguing that education and training raise employees' productive capacity and thus organisational output. Becker, Schultz (1961) and later scholars argue that investments in employees (skills, certifications, on-the-job training) produce returns that justify the costs, a lens directly applicable to CPD initiatives at KDC. The literature also notes limitations human capital investments interact with workplace culture, motivation and job design, meaning training alone may not suffice to raise productivity. For KDC, human capital theory underlines CPD as an investment but signals the need for alignment with organizational roles and performance systems.

Social Learning Theory (Bandura,1977) complements human capital perspectives by emphasising learning through observation, modelling and peer interaction mechanisms very relevant to mentorship and CPD workshops. CPD that incorporates peer workshops, simulations, and on-the-job mentoring leverages social learning to reinforce new behaviours, making training more transferable to daily tasks. The literature cautions that observation and modelling work best when accompanied by opportunities for practice and feedback, highlighting the need for CPD designs that include follow-up and practical application. For KDC, embedding peer learning and mentorship into CPD can enhance knowledge transfer and habit formation among staff.

Expectancy Theory explains how employees' beliefs about the payoff from training influence their engagement and effort; if staff expect CPD to lead to promotions, recognition or better performance, they are more likely to invest effort in applying what they learn. The theory suggests practitioners must clearly communicate linkages between CPD and career outcomes (instrumentality and valence) to maximise motivation and eventual productivity gains. Critics note that expectancy-based designs may underweight intrinsic motivation and social context, but when combined with human capital and social learning approaches, expectancy considerations

help ensure higher participation and application. For KDC, ensuring CPD is linked to appraisal, recognition and career pathways is thus central to achieving desired productivity outcomes.

4.0 Empirical Review

Empirical studies on mentorship programs generally report positive associations with employee productivity, as mentors provide role modelling, guidance and targeted feedback that speed skill acquisition and confidence. Osei et al. (2019), examined relationship between Continuous Professional Development and employee productivity among nurses registered with Professional Development bodies in Ghana whereby they established that there was significant difference in clinical experience of nurses registered bodies in connection to job performance. Studies across Kenya, Nigeria and India show mentorship enhances motivation and on-the-job performance, though effectiveness often depends on voluntary pairing, mentor quality and program structure. The KDC literature review similarly identifies mentorship as a key enabler of knowledge sharing and tailored learning, suggesting mentorship complements CPD by reinforcing applied learning. However, contextual differences in sector and implementation necessitate organisation-level evaluation, which this study provides for a State Corporation setting.

Henarathgoda (2020) examined how leadership development programs determined how employees successfully perform their jobs at Sri Lanka's Tire Manufacturing sector, the researcher applied correlation alongside regression analysis to evaluate data the findings demonstrated that application of leadership development practices had a significant impact on how employees performed their work. Leadership development programs have mixed empirical effects: many studies find positive impacts on team climate, innovation and employee performance, while some show negligible or even negative outcomes when programs emphasise control over empowerment. The literature highlights that well-designed leadership initiatives (coaching, delegation, participatory practices) tend to support productivity, whereas top-down approaches can demotivate staff. At KDC, evidence suggested leadership programs were in place but may have emphasized managerial control rather than transformational skills, a possible explanation for observed negative associations in the analysed data. This underscores the importance of program content and leadership style in determining downstream productivity effects.

A study that examined the influence of succession planning and organizational performance in a Kenyan state owned college by Munai, and Muli, (2023) employed a survey method to study a conceptual model in Bukura Agricultural College in Kakamega County. The study integrates succession planning, career management measurement and staff performance as the key variables of the model. The results indicated that structured talent management and internal recruitment and lateral transfers, institutional long term and short term training and development

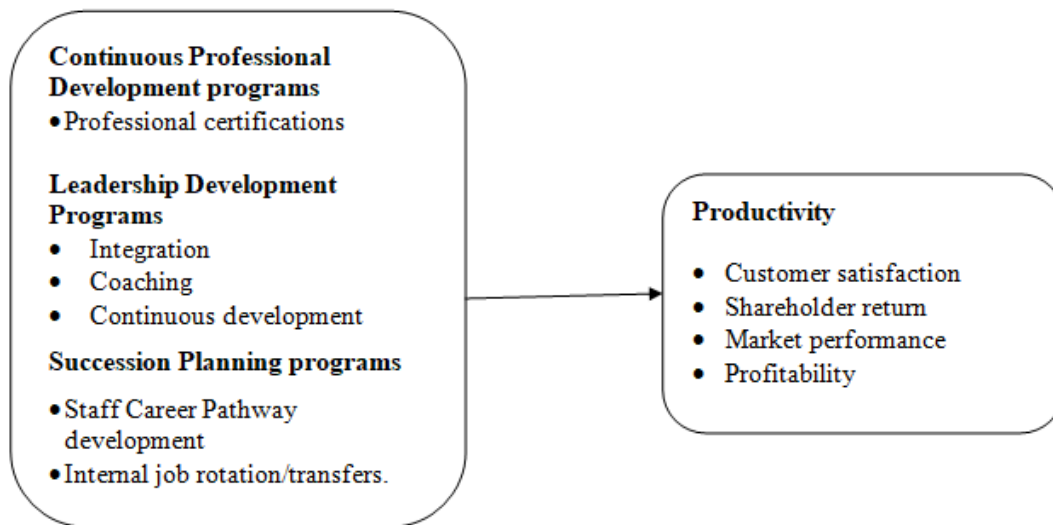
programs positively enhance organizational performance through learning. The study continued to affirm other empirical work carried out in the banking, education and corporate sectors that succession planning practices that target professional development are positively linked to performance outcomes. For KDC, succession planning emerged as moderately positively correlated with productivity, suggesting potential benefits that are currently constrained by inconsistent implementation and monitoring. Hence, succession planning should be strengthened and better integrated with CPD and mentorship to yield stronger productivity returns.

Studies specifically on Continuous Professional Development (CPD) consistently report that participation in CPD (certifications, conferences, webinars, workshops) improves practical skills, service quality and responsiveness to changing industry standards. Regional evidence from Ghana, Nigeria and South Africa shows CPD’s association with improved job performance and service delivery, particularly when CPD is regular, relevant and accredited. The empirical review for KDC corroborates these findings: CPD exhibited the strongest positive correlation with productivity among HRD programs analysed, highlighting CPD as a high-value lever for organisational improvement when properly institutionalised. Nevertheless, CPD’s effectiveness depends on alignment with job roles, follow-up support and recognition within career and appraisal systems.

5.0. Conceptual Framework

Independent Variable

Dependent variables



Source: Author (2025)

6.0 Methodology

The researcher applied descriptive research design concerned with critical components of research study including, how, where, when, what of phenomenon (Siedlecki, 2020). Descriptive design was ideal and effective in providing responses on development programs without manipulating data provided by respondents at the Kenya Development Corporation to examine the relationship between Continuous Professional Development (CPD) and employee productivity, consistent with approaches used in similar human resource development studies (Smith, 2022). Target population of interest in this study comprised all 120 staff at KDC in Nairobi City County, Kenya. The respondents were selected because they were believed to have adequate information that answered the research questions. Entire set of individuals study sample can be selected from and have information that can respond to the questionnaire (Asiamah et. al. 2017) The employees were categorized as Senior leadership, Supervisory level and Support staff at junior levels. The study was conducted using a census given the population size was small. This approach was suitable for such population of less than 200 respondents, as it allowed complete exposure and accurate representation in the study (Mugenda & Mugenda, 2008). Ruggles, et. al (2019), describe a census as a research process that involved all individuals within a given population in the study. A census was appropriate for this study, as it permits the collection of data from all sections within the population eradicating the need for generalization and allowing conclusions based on comprehensive input.

Data collection employed a structured questionnaire developed from validated CPD and productivity measurement scales used in prior empirical studies (Rahman et al., 2023). Instrument reliability was tested using Cronbach's alpha, where a threshold of 0.70 was used to confirm internal consistency of the constructs (Davis, 2022). Content and construct validity were ensured through expert review and alignment with the CPD indicators, customer satisfaction, shareholder return, market performance and profitability. Pilot testing was conducted on a small sample outside the main study population to refine question clarity and structure.

Quantitative data were collected through self-administered questionnaires to the respondents within KDC. Data were analysed using descriptive statistics, correlation analysis, and multiple regression to determine the strength and direction of the relationship between CPD and employee productivity (PwC, 2023). Ethical considerations were observed by ensuring confidentiality, voluntary participation, and informed consent from all respondents. The study also adhered to institutional research guidelines to ensure responsible data handling and compliance with ethical research standards.

7.0 Results

7.1 Response Rate

The study recorded a high response rate with 91.7% of the distributed questionnaires returned fully completed, A response rate of 91.7% is considered excellent for organizational-based research. According to Mugenda and Mugenda (2019), a response rate above 70% is adequate for analysis and reporting. The high rate in this study was facilitated by strong Management support, clear communication of research objectives, and the researcher’s in-person follow-up with respondents. The high participation reflects staff interest in human resource development initiatives at KDC, which aligns with the Corporation’s emphasis on learning and growth.

The substantial return rate also enhanced the reliability and representativeness of the study findings, ensuring adequate participation of KDC employees. As a result, the data collected provided a strong foundation for analysing the link between CPD and employee productivity in the Kenyan context.

7.2 Profile of Respondents

The respondents’ demographic characteristics were analyzed to understand the composition of participants involved in the study. The profile included gender, age, education level, job category, and years of experience, reflecting the diversity of employees participating in CPD across Kenyan organizations. These demographic variables help explain variations in exposure to CPD initiatives and potential differences in productivity outcomes. Table 3 presents the demographic profile of respondents.

Table 3 Demographic Profile of Respondents

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	57	52%
	Female	53	48%
Age Group	18–25 years	5	4.55%
	26–35 years	20	18.18%
	36-45years	40	36.36%
	46-55 years	35	31.82%
	Above 55years	10	9.09%
Education Level	Diploma	17	15%
	Bachelor’s Degree	60	55%

	Master’s Degree	33	30%
Work Experience	Below 2 years	10	9.1%
	3–5 years	50	45.5%
	6-10 years	33	30%
	Above 10 years	17	15.4%

Source: Research Data (2025)

The demographic profile of respondents, as shown in Table 3, indicates a fairly balanced gender distribution, with 52% male and 48% female participants, suggesting minimal gender bias in the sample. The majority of respondents (36.36%) were aged 36–45 years, followed by 46–55 years (31.82%), reflecting a workforce dominated by mid-career professionals. Regarding education, most participants held a bachelor’s degree (55%), highlighting a relatively high educational attainment among respondents. Finally, work experience was concentrated between 3–5 years (45.5%), suggesting that the sample predominantly comprised employees with moderate professional experience.

7.2 Analysis of Human Development Programs

The analysis further showed the summary of the results on the Human Development Programs of employees provided by KDC. The results are shown in Table 2

Table 2 Analysis of Human Development Programs

Variable	No.	Mean	Standard Deviation	Interpretation
Mentorship Programs	110	3.84	0.72	High -indicating that the programs are effective and reliable.
Leadership Programs	110	3.25	0.81	Moderate – mixed views with varied responses.
Succession Planning Programs	110	3.41	0.77	Moderate – fairly positive highlighting mixed perceptions
Continuous Professional Development (CPD)	110	4.12	0.68	Very High – strongly endorsed reflecting its’ importance for sustaining employee growth.
Employee Productivity	110	3.97	0.74	Above average -implying that the initiatives collectively contribute positively to performance outcome.

Source: Research Data (2025)

The analysis of human development programs in table 2 above shows that all CPD initiatives yielded positive outcomes, with mean scores ranging between 4.12 and 3.25, The results depict that CPD (M= 4.12, SD 0.68) is the most strongly endorsed program, reflecting its’ significance to employee growth. Mentorship programs (M=3.84, SD = 0.72) were also valued highly, suggesting their effectiveness in fostering employee development. Employee productivity (M= 3.41, SD 0.74) was rated above average, implying that the interventions collectively and positively contribute to performance outcomes. In contrast, leadership programs (M=3.25, SD 0.81) and succession planning (M = 3.41, SD= 0.77) received moderate ratings, highlighting mixed perceptions pointing to areas that requires further enhancement.

7.3 Employee Productivity

The study focused on the productivity of the employees and the descriptive results are summarized as shown in the Table 3

Table 3: Employee Productivity

Employee Productivity Indicator	Mean (M)	Standard Deviation (SD)	Interpretation
Task Efficiency	4.28	0.61	Employees complete tasks quickly and accurately.
Quality of Work Output	4.22	0.66	Work is consistently high-quality with minimal errors.
Timeliness of Service Delivery	4.19	0.72	Employees meet deadlines reliably and handle workloads well.
Innovation & Problem-Solving Ability	4.11	0.75	Employees apply new skills to solve emerging workplace challenges.
Teamwork & Collaboration	4.25	0.58	Strong coordination and cooperation across departments.
Adaptability to New Systems & Processes	4.17	0.70	Employees adjust efficiently to technological and procedural changes.

Source: Research Data (2025)

The findings indicate that employee productivity levels are high across all measured indicators, with mean scores ranging from 4.11 to 4.28 on a five-point scale. Task efficiency recorded the highest mean score (M = 4.28, SD = 0.61), demonstrating that employees perform their roles quickly and accurately. Teamwork and work quality also showed strong results, suggesting that employees collaborate effectively and produce consistently high-quality outputs. Innovation had the lowest mean, though still strong (M = 4.11), indicating room for further enhancement through targeted CPD opportunities. Overall, the relatively low standard deviations show

uniformity in employee experiences, confirming that productivity is consistently high across the organization.

7.6 Inferential Statistics

Under inferential statistics the study conducted both correlation and regression analysis. The findings are indicated in Table 4

4.1 Correlation Analysis

Pearson correlation results showed that Continuous Professional Development (CPD) had the strongest positive correlation with employee productivity ($r = 0.801$, $p < 0.01$), indicating a strong linear association between CPD participation and perceived productivity improvements. Mentorship programs were also strongly and positively correlated with productivity ($r = 0.712$, $p < 0.01$), supporting the role of guided peer learning and role modelling. Succession planning displayed a moderate positive correlation ($r = 0.524$, $p < 0.01$), suggesting benefits but also room to improve consistency and coverage. Leadership programs, surprisingly, showed a significant negative correlation with productivity ($r = -0.637$, $p < 0.01$), which the study interprets as possible evidence that current leadership interventions emphasise control over empowerment or are poorly aligned with staff needs. These correlation patterns suggest CPD and mentorship are the most promising levers for immediate productivity gains within KDC.

Table 4: Summary correlation

Independent variable	Correlation with Productivity (r)
Continuous Professional Development (CPD)	0.801*
Mentorship programs	0.712*
Succession planning	0.524*
Leadership programs	-0.637*

p < 0.01 for all values.

Source: Field data (2025).

4.2 Regression Analysis

Multiple regression analysis indicated that the combined HRD variables (leadership, succession planning and CPD) explained about 91.6% of the variance in employee productivity ($R^2 = 0.916$), pointing to a very strong model fit in the sampled context. The ANOVA results showed

the model was statistically significant, indicating the set of HRD predictors reliably relates to productivity outcomes. Coefficient estimates confirmed the directions seen in correlations: CPD and mentorship had positive coefficients while leadership carried a negative coefficient in the estimated model, after controlling for other HRD factors. These results suggest that while HRD programs jointly matter for productivity, their design and orientation (empowering vs. controlling; practical vs. theoretical) determine whether their net effect is positive. The high R^2 also signals that unobserved organisational variables are likely captured to some extent by the HRD measures used, but the cross-sectional design cautions against strong causal claims.

The findings give a clear direction to KDC management that continuous professional development programs in the institution are worth investing into so as to boost the human capital productivity levels. KDC being a state owned institution can however be the model parastatal in Kenya where other government institutions can engage to learn on the management of employee developmental learning opportunities for productivity. In conclusion, employee development programs intended for their professional growth results to continuous long life learning and progressively lead to sustained productivity and performance of the organization. This therefore clearly demonstrates the link between learning and productivity in organizations.

8.0 Conclusion

The study concludes that Continuous Professional Development (CPD) plays a significant role in enhancing employee productivity across various sectors in Kenya. The correlation and regression results showed that CPD strongly predicts productivity outcomes, demonstrating the strategic value of continuous learning. Employees who engage in CPD exhibit greater task efficiency, improved service delivery, and stronger adaptability to organizational changes. These findings reinforce global and regional evidence showing that CPD is an essential driver of workplace performance and institutional effectiveness. Furthermore, the study highlights that nearly half of the variation in employee productivity can be explained by CPD participation, indicating a substantial return on investment in learning initiatives. Organizations that integrate CPD into their performance systems experience higher levels of innovation and sustained competitiveness. The findings also reveal that CPD benefits are maximized when programs are relevant, well-structured, and aligned with organizational goals. Consequently, CPD remains a critical component of human capital development for strengthening workforce competence and driving long-term organizational growth.

9.0 Recommendations

The study recommends that organizations in Kenya institutionalize structured CPD frameworks that clearly link learning activities to performance indicators. Employers should invest in needs-

based training, mentorship programs, and digital learning platforms to ensure CPD remains relevant and accessible to employees. It is also important to adopt comprehensive evaluation mechanisms that track the impact of CPD on productivity outcomes. Such evaluations will enable organizations to refine their training programs and enhance their strategic value. Additionally, policymakers and professional bodies should strengthen guidelines and standards governing CPD to ensure consistency, quality, and accountability in training initiatives. Public institutions should allocate adequate resources for continuous learning, particularly in sectors undergoing digital and regulatory transformation. SMEs should be supported through subsidies and partnerships to access affordable CPD programs that enhance workforce capacity. Ultimately, prioritizing CPD across all sectors will contribute to improved productivity, service delivery, and national economic competitiveness.

REFERENCES

- Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). University of Chicago Press.
- Choi, M., Kim, S., & Park, J. (2022). Continuous learning reforms and employee performance in public institutions. *Journal of Public Administration and Development*, 44(2), 115–128.
- Davis, R. (2022). Professional skill renewal through continuous development: Evidence from the UK and Canada. *International Journal of Professional Training*, 18(3), 220–234.
- Dialoke, I., & Nkechi, A. (2017). Training, motivation and employee performance in Nigeria: The role of continuous professional development. *African Journal of Management Studies*, 5(1), 45–59.
- Human Capital Theory. (n.d.). In Becker & Schultz's economic perspectives on workforce investment. (Original work by Becker & Schultz).
- Kenya Private Sector Alliance (KEPSA). (2022). *Training and development impact report: Productivity in Kenyan banking and education sectors*. KEPSA Publications.
- Meyer, M., & Kotze, T. (2019). Professional development and service delivery in South African institutions. *South African Journal of Human Resource Development*, 12(1), 15–28.
- Maow, R. M., & Muli, J. (2023). Employee development practices and employee effectiveness in commercial banks in Garissa County, Kenya. *The Strategic Journal of Business & Change Management*, 10(4), 1272-1289.

- Munai, A. C., & Muli, J. (2023). Effects of career management on employee performance at Bukura Agricultural College, Kakamega County. *The Strategic Journal of Business & Change Management*, 10 (4), 68 – 76. <http://dx.doi.org/10.61426/sjbcm.v10i4.2735>
- Office of the Auditor General (Kenya). (2020). Kenya Development Corporation human resource audit report. Government Printer.
- Osei, P., Mensah, D., & Antwi, E. (2019). Continuous professional development and service quality in Ghana. *Journal of African Human Capital Development*, 7(2), 89–104.
- PwC. (2023). Human capital insights report: Productivity trends in East Africa. PricewaterhouseCoopers.
- Rahman, A., Wong, T., Lee, H., & Kumar, S. (2023). CPD-driven digital readiness in Asian economies: Evidence from Singapore and South Korea. *Asian Journal of Workforce Development*, 9(1), 55–72. <https://doi.org/10.1111/medu.13922>
- Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, 51(1), 1–17.
- Smith, J. (2022). Integration of CPD in performance management systems: Implications for productivity in the U.S. *Journal of Workforce Innovation*, 33(4), 310–328.
- Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper and Row.