

RESEARCH ARTICLE

INFLUENCE OF CAREER DEVELOPMENT ON EMPLOYEES' SKILL DEVELOPMENT IN TABORA WATER AND SANITATION AUTHORITY (TUWASA), TANZANIA

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Abstract: This research examined the impact of career development on skill enhancement within the Tabora Water and Sanitation Authority (TUWASA) in Tanzania. A descriptive study design was employed, surveying 67 operational staff members through structured questionnaires. The multiple linear regression analysis revealed significant positive associations for skill advancement ($B = 0.256$, $p = 0.034$, $Beta = 0.269$), continuous learning initiatives ($B = 0.265$, $p = 0.030$, $Beta = 0.276$), and career planning interventions ($B = 0.292$, $p = 0.029$, $Beta = 0.289$) with skill development. However, professional networking ($B = 0.113$, $p = 0.365$, $Beta = 0.119$) and cross-functional exposure ($B = 0.005$, $p = 0.969$, $Beta = 0.005$) showed no statistically significant associations. The regression model exhibited a moderate predictive capability ($R = 0.515$), explaining approximately 26.6% of the variance in skill development. The ANOVA results confirmed the model's significance in predicting skill development ($F = 4.410$, $p = 0.002$). These findings emphasize the necessity for TUWASA and similar organizations to prioritize structured programs promoting skill advancement, continuous learning, and robust career planning strategies to augment their workforce's skill sets. Recommendations include tailored initiatives focusing on training programs, workshops, and fostering a culture supporting continuous learning and career development to maximize skill enhancement among employees.

Keywords: *Career Development, Skill Development, Skill Advancement, Continuous Learning, Career Planning, Professional Networking, Cross-Functional Exposure.*

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INTRODUCTION

In the dynamic landscape of modern workplaces, the intertwining dynamics of career development and skill enhancement represent a cornerstone of organizational success (Getachew et al., 2020). As businesses navigate an era characterized by rapid technological advancements and evolving market demands, the nexus between career growth and skill acquisition among employees stands as a linchpin for sustained competitiveness (Tripathy, 2020).

Career development initiatives, including skill advancement, continuous learning, career planning, professional networking and cross-functional exposure, play a pivotal role in shaping the skill sets and proficiencies of individuals within an organizational framework (Vande Griek et al., 2020).

Skill development refers to the continuous enhancement and acquisition of

competencies, knowledge, and abilities that enable individuals to perform tasks with increased effectiveness and efficiency (Heard et al., 2020). It directly correlates with improved job performance by fostering higher quality and timely service delivery. Effectiveness in skill development is evidenced through the ability to accomplish tasks accurately and proficiently, while efficiency denotes the capability to achieve objectives with optimized resource utilization (Chaturvedi et al., 2020).

Improved job performance indicates a higher standard of work output, showcasing the application of acquired skills to produce superior results (Heard et al., 2020). Furthermore, quality service delivery is ensured by possessing and honing the necessary skills, while timely service delivery underscores the efficient application of these

skills within specified timeframes, collectively contributing to an individual's overall skill development (Chaturvedi et al., 2020).

Research across diverse global regions, including America, Europe, Asia, and Africa, consistently highlights the profound impact of career development initiatives on the enhancement of employees' skill sets. Studies by Blustein et al., (2022) in America emphasized that comprehensive career development programs significantly correlate with skill acquisition and retention, fostering a more competent and adaptable workforce. Similarly, findings by Akkermans et al., (2015) in Europe showcased that structured career paths and professional development opportunities within organizations directly contribute to skill enrichment, thereby improving employees' job-related proficiencies and adaptability to changing work environments.

In Asia, research conducted by Sugiarti, (2022) underscored that investing in career development strategies positively influences skill development, empowering individuals to acquire new competencies aligned with evolving market demands.

Moreover, studies in Africa highlighted that effective career development interventions not only enhance skill acquisition but also contribute to addressing skill gaps, thereby fostering sustainable human capital development across diverse sectors in the region (Dialoke & Nkechi, 2017; Githu, 2018; Ifeoma et al., 2023). These multi-regional studies collectively illustrate the universal significance of career development initiatives in nurturing and advancing employees' skill sets on a global scale.

In Tanzania, the government's commitment to enhancing the skills of its public service employees through career development initiatives has been evident in its comprehensive reforms under the New Public Management framework. With a vision to transform the public service into a national institution of excellence, the government introduced the Public Service Management and Employment Policy (PSMEP) in 1999, emphasizing training and development as integral aspects of human resource management.

These reforms aimed at improving service

delivery and aligning skills development with organizational and individual career growth objectives (URT, 2019). Emphasizing continuous training as a fundamental component, the PSMEP mandates public service organizations to design training programs tailored to their specific skill requirements and allocate resources accordingly.

However, despite these concerted efforts and policy implementations aimed at fostering skill development within Tanzania's public service, persistent challenges remain evident. This is evidenced by ongoing shortcomings in the effective execution of these measures, as reflected in reports of inadequate skill levels among public service employees.

Insufficient alignment between training programs and the evolving skill demands of various roles within the public sector, limited access to quality training opportunities, and constraints in resource allocation have contributed to the existing gaps in skill development. Additionally, the efficacy of implemented programs in meeting both organizational and individual career development goals may have faced obstacles, resulting in an apparent discrepancy between intended outcomes and the current skill levels of public service personnel. This problem is also evident at TUWASA (URT, 2022).

Similarly, this area of research has been largely neglected as prior studies predominantly concentrated on delineating challenges, strategies, and factors affecting skill development, overlooking the nuanced influence of career development variables (Msuya, 2019; Samuel, 2016). Elements such as skill advancement, continuous learning initiatives, career planning interventions, fostering professional networks, and promoting cross-functional exposure within the context of career development have remained underexplored in previous research endeavors, thereby leaving a significant gap in understanding the interplay between career development and skill enhancement.

This study aims to bridge this gap by comprehensively examining how these specific career development variables impact and contribute to skill development within Tanzania's public service. The findings are poised to furnish invaluable insights that can

inform policy improvements, strategic interventions, and more effective implementation frameworks, thereby fostering a more robust and targeted approach towards skill enhancement initiatives within the public sector.

LITERATURE REVIEW

Li and Zhang (2020) assessed the impact of career development on skill development in Chinese IT companies through a longitudinal study. The findings revealed a significant positive relationship between career development opportunities, such as job rotation, training programs, and mentoring, and employees' skill development. Active engagement in career development activities led to greater skill enhancement and adaptability to changing job requirements, contributing to improved service delivery within IT companies.

Nguyen and Le (2021) investigated the contribution of career development to skill development in Vietnamese manufacturing firms using a mixed-methods approach. The study revealed that employees who actively participated in career development programs, such as skill training workshops and career planning sessions, demonstrated significant improvements in their skills and competencies. Additionally, the research highlighted the positive impact of career development on job satisfaction and motivation, leading to enhanced service delivery in manufacturing firms.

Green et al. (2019) conducted research titled "The Influence of Training on Skills, Productivity, and Wages: Insights from a Randomized Experiment." Their study revealed substantial positive impacts of the training program on the skills, productivity, and wages of participants compared to the control group.

Consequently, the study suggests that organizations would benefit from investing in training initiatives to improve various employee outcomes, particularly in terms of skills enhancement, productivity gains, and wage increases. An evident strength of this study lies in its robust experimental design employing a randomized controlled trial (RCT), thereby reinforcing the causal relationship between training and the observed positive effects on the mentioned outcomes.

METHODOLOGY

The research employed a descriptive study design at the Tabora Water and Sanitation Authority (TUWASA) in the Tabora region, targeting a population of approximately 81 individuals, with a sample size of 67 operational staff selected through systematic random sampling. Structured questionnaires were utilized to collect primary data, ensuring validity through pilot testing and reliability through Cronbach's alpha test (threshold set at 0.7).

The collected quantitative data underwent analysis using SPSS software version 26, employing descriptive statistics such as frequencies, percentages, mean, and standard deviation to summarize participant responses and inferential statistics like multiple linear regression to examine the relationship between employer contribution variables, specifically career development, and skill development. Ethical considerations were paramount, with permissions sought from relevant authorities, informed consent obtained from participants, confidentiality maintained through data anonymization, and steps taken to minimize potential harm or discomfort to participants.

RESULTS AND DISCUSSION

The study examined the influence of career development on skill development at TUWASA. The career development variables were; skill advancement, continuous learning initiatives, career planning interventions, professional networks on cross-functional exposure. The relationship was examined using the multiple linear regression model as presented below.

The Model Summary Results

The multiple linear regression analysis revealed a model that accounted for a substantial portion of the variance in skill development within the context of career advancement factors in the Tabora Water and Sanitation Authority (TUWASA). The overall model exhibited a moderate level of predictive capability ($R = 0.515$), indicating that approximately 26.6% of the variability in skill development could be explained by the combined influence of the predictors, which encompassed skill advancement, continuous learning initiatives, career planning interventions, professional

networks, and cross-functional exposure. The adjusted R-square value, standing at 0.205, suggested that after adjusting for the number of predictors in the model, around 20.5% of the variability in skill development remained, signifying the model's modest ability to generalize to the broader

population. The standard error of the estimate, measuring the model's accuracy in predicting skill development, was calculated at 0.81433, indicating the average deviation of the observed values from the model's predicted values.

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.515 ^A	.266	.205	.81433

a. Predictors: (Constant), skill advancement, continuous learning initiatives, career planning interventions, professional networks, cross-functional exposure

Regression Coefficients Results

The regression coefficients derived from the multiple linear regression analysis aiming to predict skill development at the Tabora Water and Sanitation Authority (TUWASA) showcase several key findings. Skill advancement demonstrates a significant positive association ($B = 0.256$, $p = 0.034$, $Beta = 0.269$), suggesting that higher levels of skill advancement positively impact skill development. Similarly, both continuous learning initiatives ($B = 0.265$, $p = 0.030$, $Beta = 0.276$) and career planning interventions ($B = 0.292$, $p = 0.029$, $Beta =$

0.289) exhibit significant positive associations with skill development, indicating that increased engagement in continuous learning programs and robust career planning efforts correspond to higher levels of skill development among employees. Conversely, neither professional networking ($B = 0.113$, $p = 0.365$, $Beta = 0.119$) nor cross-functional exposure ($B = 0.005$, $p = 0.969$, $Beta = 0.005$) displayed statistically significant associations with skill development, suggesting that these factors might not significantly impact skill enhancement within TUWASA in this analysis.

Table 2: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.009	.562		1.795	.078
	Skill advancement	.256	.118	.269	2.168	.034
	Continuous learning initiatives	.265	.119	.276	2.222	.030
	Career planning	.292	.131	.289	2.233	.029
	Professional networking	.113	.124	.119	.912	.365
	Cross functional exposure	.005	.134	.005	.039	.969

a. Dependent Variable: Skill Development

ANOVA Results

The analysis of variance (ANOVA) results for the regression model assessing skill development at the Tabora Water and Sanitation Authority (TUWASA) indicate significant overall model performance. The regression model, comprising skill advancement, continuous learning initiatives, career planning interventions, professional networks, and cross-functional exposure as predictors, accounted for a

significant proportion of the variance in skill development, as evidenced by the regression sum of squares (SSR) of 14.624, degrees of freedom ($df = 5$), and mean square (MS) = 2.925. The F-ratio, calculated at 4.410 with a corresponding significance level of 0.002, suggests that the overall model significantly predicts skill development. Conversely, the residual sum of squares (SSE) was 40.451 with 61 degrees of freedom, resulting in a mean square of 0.663, indicating the unexplained variance within the model.

Overall, the total sum of squares (SST) equaled 55.075, indicating the total variability in the dependent variable, skill development, with this model demonstrating

a statistically significant explanatory capacity regarding the relationship between the specified predictors and skill development within T UWASA.

Table 3: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.624	5	2.925	4.410	.002 ^b
	Residual	40.451	61	.663		
	Total	55.075	66			
a. Dependent Variable: Skill Development						
b. Predictors: (Constant), skill advancement, continuous learning initiatives, career planning interventions, professional networks, cross-functional exposure						

In summary, the study conducted at the Tabora Water and Sanitation Authority (TUWASA) unveiled crucial insights into the relationship between career development factors and skill enhancement among employees. Results indicated that skill advancement, continuous learning initiatives, and career planning interventions significantly and positively influenced skill development, highlighting their importance in fostering employees' skill growth. However, professional networking and cross-functional exposure did not exhibit significant associations with skill development in this context.

Overall, the regression model demonstrated significance in predicting skill development, emphasizing the impact of specific career development factors on enhancing skills within TUWASA's workforce.

These findings complement the human capital theory applied in this study which argues that investing in training aligned with organizational goals improves job-specific skills, helping employees adapt to changing demands.

Likewise, the findings resonate with the research conducted by Green et al. (2019) and Karanja and Mugenda (2019), shedding light on the broader significance of training programs in various contexts. Green et al. (2019) conducted a study using a randomized controlled trial (RCT) design, which is known for its rigor in establishing causal relationships.

Their research demonstrated that training programs had substantial and positive effects on participants' skills, productivity, and wages compared to a control group. These findings align with the perception among TUWASA employees that

the training they receive plays a meaningful role in enhancing their skills. The recommendation from the study to invest in training programs for improved employee outcomes, particularly in terms of skills and productivity, reinforces the idea that such investments can yield tangible benefits.

Karanja and Mugenda (2019) conducted a study in Tanzania, utilizing a mixed-methods approach, combining quantitative data from surveys with qualitative insights from interviews. Their research indicated that training and development programs positively influenced employee performance in the Tanzanian organizations they studied. This underscores the broader relevance of training and development initiatives in enhancing employee performance and achieving organizational objectives. The recommendation to tailor training and development to specific organizational needs aligns with the perception within TUWASA that training contributes significantly to skill development.

In summary, the alignment of findings between TUWASA and the studies by Green et al. (2019) and Karanja and Mugenda (2019) emphasizes the universal importance of training in fostering skill development and enhancing employee performance. These studies provide valuable insights into the positive impact of training programs on various outcomes, from skills and productivity to wages and performance.

While they have strengths and limitations specific to their research designs and contexts, they collectively support the notion that investing in training programs can yield substantial benefits for both employees and organizations.

CONCLUSION AND RECOMMENDATIONS

The findings underscore the nuanced influence of career development factors on skill enhancement within the Tabora Water and Sanitation Authority (TUWASA). Notably, skill advancement, continuous learning initiatives, and career planning interventions emerged as pivotal contributors to fostering heightened skill development among employees.

While professional networking and cross-functional exposure displayed no significant impact on skill enhancement in this context, the overall regression model exhibited significance in predicting skill development. These outcomes emphasize the need for TUWASA, and potentially similar organizations, to prioritize structured programs promoting skill advancement, continuous learning opportunities, and robust career planning strategies to effectively bolster the skill sets of their workforce.

Building upon these findings, it is recommended that TUWASA and similar institutions consider implementing tailored initiatives aimed at promoting skill advancement, continuous learning, and comprehensive career planning for their employees. Strategies should focus on providing avenues for employees to acquire and advance skills relevant to their roles through targeted training programs, workshops, and mentorship opportunities.

Additionally, fostering a culture that values continuous learning and supports career development can significantly contribute to skill enhancement. While professional networking and cross-functional exposure didn't exhibit significant associations, exploring alternative approaches or refining existing strategies in these areas might be beneficial. Regular evaluations and adjustments to these programs based on feedback and evolving skill demands will be essential for maximizing their effectiveness in enhancing the skill repertoire of TUWASA's workforce.

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