Contribution of Physical Environment on Employee's Performance in Moshi District Council, Tanzania

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Abstract
This study aimed to assess the contribution of the physical environment to employee performance at Moshi District Council in Tanzania. The study employed a convergent research design under a mixed-methods approach, integrating both quantitative and qualitative data. The sample of 358 employees was selected using stratified sampling technique across 13 departments. Also, 2 human resource officers were purposively selected. Data were collected using structured questionnaires for employees and interview guides for management. A pilot test involved 26 employees within a department at Moshi District Council that had a larger employee base was conducted to validate the data collection tools. Instrument validity was established through expert review, and reliability was confirmed with a Cronbach's Alpha of $\alpha = 0.78$. Quantitative data were coded, classified, and organized using SPSS version 27 and presented through descriptive statistics specifically frequencies, percentages, means, and standard deviations while qualitative data subjected to contextual analysis and presented in quotations. Ethical standards, were strictly observed. The study concluded that improving physical work conditions can improve employee productivity, focus, morale, and efficiency. It is recommended that Moshi District Council invest in infrastructure improvements, ergonomic upgrades, and regular environmental assessments to support sustained employee performance and organizational effectiveness.

Keywords: Physical environment, employee performance, public organizations, Total Quality Management

1. Introduction

Any organization acknowledge the vital role employees play in their success and recognize that prioritizing their well-being is important. Creating positive working conditions is an effective strategy, as employees dedicate a significant portion of their day to their jobs (Eisenberger, Rhoades & Wen, 2020). The design and atmosphere of the workplace directly affect employee performance and contribute to overall organizational effectiveness (Alameeri *et al*., 2021). The workplace environment includes physical, social, and organizational factors that influence how employees perform their tasks (Badrianto & Ekhsan, 2020). Despite this awareness, many government organizations worldwide, including those in Tanzania, continue to struggle with underperformance among employees.

The performance of employees within any organization, particularly in the public sector, is closely linked to the nature of their work environment. The physical conditions under which employees work including office layout, lighting, ventilation, ergonomics, and cleanliness are crucial factors that can significantly impact productivity, morale, and overall job satisfaction. Employees spend a substantial portion of their day at the workplace, making it imperative for employers to ensure an environment that is conducive to efficiency and well-being (Eisenberger *et al.,* 2020). However, in many public institutions, especially in developing countries, limited investment in physical infrastructure and facilities often undermines efforts to improve employee performance.

Ding and Liu (2022), found a similar situation in Shanghai, where 90% of workers acknowledged that their work environment significantly influences their attitudes and productivity. These findings reflect a widespread problem where many workplaces fail to create conditions that support optimal employee performance. Poor physical environments, including inadequate lighting, noise, and uncomfortable workstations, contribute to decreased productivity and increased stress (Hanif & Saleem, 2020). The challenge remains for organizations worldwide to prioritize and implement workplace designs that effectively support and enhance employee productivity and well-being.

From a Western African perspective, the state of physical environments in public service has also been a subject of concern. In Nigeria, AbdulKareem et al. (2020), observed that outdated equipment, congested offices, and poor lighting in many federal ministries severely limit

employee efficiency and contribute to workplace stress and low morale in Nigeria. When employees are forced to use obsolete technology or equipment, it hampers their productivity and impedes their ability to carry out tasks effectively. Consequently, this can lead to frustration and reduced efficiency among employees. A study conducted by Shuriye and Wambua (2020), in Kenya revealed that public employees' performance is significantly affected by limited workplace resources within their organizations. The shortage of resources in a workplace erodes job satisfaction and contributes to lower performance levels among employees who witness or experience such unethical behavior.

In Tanzania, several national policies and legal frameworks, such as the Employment and Labour Relations Act No. 6 of 2004 and the National Employment Policy, explicitly recognize the importance of promoting appropriate working conditions, including decent work environments, fair treatment, and safety at the workplace (Mollel, 2023). These frameworks are designed to align with international labor standards and support the rights of workers across both formal and informal sectors. Despite this, practical adherence remains limited, particularly within Local Government Authorities (LGAs). According to Swai and Tiengâ (2022), many LGAs continue to operate in dilapidated facilities lacking essential amenities. Joachim (2021), documented that excessive workloads, lack of proper office furniture, poor ventilation, and overcrowded rooms are common issues facing public servants. These challenges have a direct impact on job performance, employee retention, and institutional effectiveness. The disconnect between policy frameworks and actual conditions has raised serious questions about the government's commitment to improving the work environment in LGAs such as Moshi District Council.

Recent localized studies further illustrate the magnitude of the problem. Chacky and Shirima (2023), found that nearly 40% of employees experience reduced productivity due to inadequate physical workspace and poor ergonomic conditions. Mwakiluma (2024), highlighted that 35% of employees cite insufficient infrastructure and discomfort at work as barriers to team collaboration and efficiency. Also, organizational issues like ineffective leadership and unclear job roles exacerbate physical environment-related stress (Schein, 2020). Studies by Clement (2023), and Nderitu, shows the importance of workplace support, recognition, and participatory structures in enhancing performance, but these are undermined when the physical workspace is

neglected. Therefore, this study is critical in assessing how the physical environment contributes to employee performance, with a focus on Moshi District Council as a representative case of broader issues facing public sector offices in Tanzania.

1.2 Statement of the Problem

The physical environment has increasingly become a critical determinant of employee performance, particularly in public sector institutions. At the Moshi District Council in Tanzania, persistent underperformance among employees has raised concerns among stakeholders, including local government leaders, community members, and development partners. The public expects timely, efficient, and reliable services from the Council, yet reports indicate that poor physical working conditions such as inadequate office space, insufficient lighting, lack of ergonomic furniture, and poor ventilation are hindering staff efficiency and service delivery (Chacky & Shirima, 2023; Mwakiluma, 2024). This underperformance not only affects internal productivity but also erodes public confidence in the Council's ability to meet community needs (Nderitu & Ndeto, (2019); Clement, 2023).

The magnitude of the problem is evident in declining productivity levels, where the Moshi district council office reported to be 6th rank out 8th public organizations in the council (Moshi District Council Office, 2024). If the problem of underperformance is not addressed, the council may face further reductions in service quality, leading to a loss of public trust and confidence. There have been few studies Joachim (2021), Mollel (2023), Swai and Tiengâ (2022), have primarily focused on general workplace motivation and organizational performance. However, not much attention has been explained to understanding the connections between the examining the physical aspects of the work environment and employee performance in Tanzanian public organizations. Therefore, this study was conducted to assess how the physical environment contributes to the performance of employees.

1.3. Research Objective

The aim of this study was to examine the contribution of the physical workplace environment towards employees' performance in Moshi District Council.

1.4. Research Question

To what extent does physical environment contribute to employee's performance in Moshi District Council?

1.5. Significance of the Study

The findings of this study will provide practical information for administrators at Moshi District Council on how the physical environment contributes to employees' performance. It will guide improvements in workspace design to enhance productivity, efficiency, and job satisfaction. The study will also offer useful information to policymakers such as government officials, labor regulators, and public institution managers in formulating policies that promote safe and supportive physical working conditions in public institutions. Also, it contributes to existing literature by focusing specifically on the role of the physical environment on employees' performance, providing a basis for future research and policy development in similar public sectors.

1.6. Theoretical Literature Review

This study was guided by the Total Quality Management (TQM) Theory, developed by W. Edwards Deming, Joseph M. Juran, and Philip Crosby in the mid-20th century. The theory posits that quality improvement in products and services is achieved through continuous process optimization, employee involvement, and a culture of shared responsibility. It emphasizes that organizational success depends on creating a workplace environment that fosters collaboration, data-driven decision-making, and proactive quality enhancements. The theory assumes that customer satisfaction is the ultimate goal, and this can only be attained by systematically managing and improving workplace conditions, employee engagement, and organizational processes. TQM further assumes that a supportive physical and social work environment directly influences employee motivation, productivity, and overall performance.

The Total Quality Management Theory shows the importance of aligning workplace environment improvements with the specific needs of employees. It identifies that effective workplace enhancements must be tailored to factors such as office layout, safety, communication and employee feedback, thereby boosting performance. The theory also suggests that inefficiencies or dissatisfaction in the workplace may hinder productivity, requiring continuous assessment and adaptive solutions. However, the theory assumes that organizations have the resources, management commitment, and employee willingness to adopt TQM principles, which may not always be feasible in public sector settings like the Moshi District Council due to limited resources or resistance to change. It also lacks explicit guidelines for prioritizing

competing environmental improvements and does not fully account for external constraints such as budgetary limitations or bureaucratic inertia.

The Total Quality Management Theory can be applied to examine the influence of the physical environment on employee performance at the Moshi District Council. The theory's emphasis on continuous improvement and employee involvement allows the council to design workplace enhancements that respond to employee needs, such as ergonomic workspaces, safety measures, and open communication channels. Assessing key factors like workspace functionality, employee satisfaction, and process inefficiencies, the council can implement targeted improvements that foster a conducive work environment, elevate morale, and ultimately enhance performance.

2. Literature Review

Understanding the impact of the physical environment on employees' performance is crucial in contemporary organizational research. This section synthesizes empirical findings organized around key themes derived from the research objectives, shedding light on how workplace conditions influence employee productivity, satisfaction, and overall organizational outcomes.

Zhenjing et al. (2022), examined the impact of workplace environment on employees' performance: A Multi-Mediation Model in China. For this purpose, data were collected from the academic staff under a cross-sectional research design, and they were approached through convenience sampling technique. As per recommendations of established sample size criteria, the authors distributed a sum of 420 questionnaires among the respondents. Among these distributed questionnaires, only 330 were received back. The results indicated that a positive work environment had the power to improve employee performance. Similarly, a positive work environment also improved the employee commitment level and achievement-striving ability significantly. Both employee commitment and achievement-striving ability also improved employee performance. The study's findings thus far have shed light on the overall work environment's impact on employee performance, but have not explicitly delved into the specifics of the physical work environment. Consequently, the current study seeks to examine the contribution of the physical environment to employees' performance.

Shaari, Sarip and Ramadhinda (2022), examined the influence of physical environments on employee performance in Malaysia. The data for this study was collected through the use of a quantitative survey. There were 187 employees who participated in the study at a company operating in Batam. In order to analyze the data and determine the relationship between variables, a Pearson Correlation Analysis was used. The results of this research indicate that there is a significant relationship between the performance of employees and the physical environment in which they work. The study findings contributed much to the current study; however, the study findings lack qualitative findings which can be used to triangulate on quantitative data. Therefore, the current study employed mixed research methods which include both qualitative and quantitative data collection tools.

Lemma, Dugassa and Temesgen (2022), conducted a study about the effect of indoor physical environment on employee's performance in Ethiopia. Descriptive research design and quantitative research approach was used and sample of 100 employee's; 35 from Dejen Aviation Industry DAVI staff and 65 from DAVI factory. During the study, data was collected from the respondents' using close ended questionnaires. Data analysis was done using Statistical Package for Social Science (SPSS) software and information was presented through tables, bar charts and pie charts. The regression out revealed that all independent variables have a positive and significant impact on employee's performance in DAVI. The study findings limit the respondents to express themselves in the research tool which is the close ended questionnaire. The current study, the researcher used unstructured questionnaires that helped the respondents to express their feeling about the problem under investigation.

Njeri (2022), conducted a study about how aspects of the physical environment influence Employee Performance in Kenya Commercial Bank, Nairobi County, Kenya. The methodology employed a descriptive quantitative design, surveying all 159 employees in departments such as HR, Finance, Marketing, Operations, R&D, and ICT at KCB's Head Office. Data were collected using structured questionnaires validated through pilot testing, and analyzed using SPSS to produce descriptive statistics and Pearson correlation and multiple regression analyses. The main findings indicated that the physical environment including comfortable furniture, adequate lighting, and sufficient office space had a significant positive relationship with employee performance. Psychosocial and policy environments also contributed, but the physical workplace

was strongly emphasized. The study concluded that improving physical work conditions can enhance performance, recommending ergonomic furniture, better lighting, and more spacious workstations. However, this research lacked qualitative findings that could elucidate how employees perceive and experience these physical improvements. Therefore, the current study employed mixed research methods which include both qualitative and quantitative data collection tools.

Swai and Tieng'o (2022), examine the relationship between working environments and employee's performance in local government authorities: A Case of Bahi District Council, Tanzania. The study adopted the descriptive study design and quantitative research approach using the sample of 68 employees and six heads of departments. A self-administered questionnaire was employed as a tool for data collection where by both groups filled the questionnaire. The study establishes that current working environment was moderate as majority agreed on transport, communication and safe working environment while some disagreed-on ventilation and office space. The study's findings have predominantly focused on transportation as a sole aspect of the physical environment that positively influences employee performance. However, it is essential to broaden the scope and encompass other facets such as ergonomic design, spatial layout, ambient conditions (lighting, temperature), and amenities (break areas, fitness facilities) of the physical environment that can potentially enhance and bolster employees' performance. Therefore, the current study aimed to incorporate and explore various other forms of the physical environment that play a crucial role in supporting and improving employees' performance.

3. Methodology

This study employed a convergent research design under a mixed-methods research approach, enabling the simultaneous collection and analysis of both qualitative and quantitative data to provide a comprehensive understanding of the research problem (Creswell & Creswell, 2018). The design facilitated triangulation, enhancing the validity and reliability of findings by comparing and integrating diverse data sources. The study targeted a population of 3,500 employees within Moshi District Council, including 2 human resources managers. The sample size for 358 employees was determined using Yamane's (1967) formula, with a 5% margin of error. A combination of probability and non-probability sampling techniques was used to select

respondents. Stratified sampling was applied to select 358 employees from 13 departments, ensuring representation across all subgroups. Purposive sampling was used to select 2 key informants (human resources officers) for their specialized insights into workplace environment dynamics.

Data were collected using two primary instruments: structured questionnaires for employees and interview guides for key informants. Validity of the instruments was ensured through expert reviews by three business administration specialists from Mwenge Catholic University, who assessed content and face validity. Adjustments were made based on their feedback. A pilot test involving 26 employees was conducted to validate and refine the data collection tools; these participants were excluded from the main study. Reliability of the quantitative instruments was measured using Cronbach's Alpha (acceptable threshold $\alpha \geq 0.7$), while qualitative reliability was enhanced through triangulation and peer debriefing.

Quantitative data were coded, classified, and organized using SPSS (version 27), employing descriptive statistics (frequencies, percentages, means and standard deviations) to summarize responses. while qualitative data were analyzed through contextual analysis and presented as direct quotations.

4. Findings and Discussion

This section presents, interprets and discusses the study's findings about the contribution of physical environment on employees' performance in Moshi District Council.

4.1 Response Rate

Questionnaires were distributed to 358 sampled employees at Moshi District Council. The response rate is summarized in Table 1.

Table 1 Response rate

Categories	Sample Size	Respondents	Respondents rate
Employees	358	308	86%

Source: Field Data, (2025)

The study achieved an 86% response rate, with 308 out of 358 surveyed employees at Moshi District Council participating, which is considered high and strengthens the reliability of the findings. Fluctuations in response rates was attributed to factors such as heavy workloads,

which may leave employees with limited time to complete questionnaires, shift work complicating survey distribution and returns.

4.2 Demographic Information

The demographic information of Moshi District Council included gender, education qualification, and work experience, and the results are presented in Table 2.

Table 2 Demographic characteristics

Demographic characteristics		**f**	**%**	**Total**
Gender	Male	168	54.5	
	Female	140	45.5	308
Education qualification	Diploma	156	50.6	
	Bachelor's degree	127	41.2	
	Master's degree	12	3.9	
	Doctoral degree (PhD)	2	0.6	
	Other	11	3.6	308
Working experience	Below 5 years	128	41.6	
	5-10 years	113	36.7	
	Above 10 years	67	21.8	308

Source: Field Data, (2025)

As shown in table 2, out of the total 308 employees surveyed, 168 (54.5%) were male while 140 (45.5%) were female. This relatively balanced gender representation indicates that both male and female perspectives were adequately captured in the study. It also reflects a commendable level of gender inclusivity within the Moshi District Council workforce. In relation to the physical work environment, both genders are likely to have unique experiences and sensitivities especially regarding lighting, ventilation, sanitation, office space, and safety. The balanced input from both male and female employees allowed the study to gain a broader understanding of how physical conditions in the workplace influence overall job performance.

Thus, results in table 2 show the majority of the respondents held a diploma, accounting for 156 (50.6%), followed by 127 (41.2%) with a bachelor’s degree. A small number held a master’s degree (12 or 3.9%) and only 2 respondents (0.6%) had attained a doctoral degree, while 11 (3.6%) fell under other qualifications. The dominance of diploma and bachelor's degree

holders suggests that most employees possess formal professional training and are in roles requiring technical or administrative expertise. These education levels position them well to assess how aspects of the physical environment such as ergonomics, lighting, workspace design, and air quality affect their efficiency, accuracy, and general job satisfaction. Furthermore, individuals with higher qualifications may have greater expectations for quality workplace conditions, and their feedback likely reflects informed opinions on how infrastructure supports or impedes their productivity.

Work experience data showed that 128 (41.6%) of employees had less than 5 years of experience, 113 (36.7%) had between 5 to 10 years, and 67 (21.8%) had served for over 10 years. This distribution shows that the majority of employees were relatively new or mid-level in their service duration, with a smaller portion comprising long-serving staff. Employees with fewer years of experience may be more sensitive to first impressions of the work environment, which can influence their early performance, motivation, and retention. On the other hand, those with longer tenure offer deeper information into how physical conditions have changed over time and how they impact sustained performance. Their experiences help reveal whether existing workspaces support long-term comfort and productivity or contribute to burnout and dissatisfaction.

4.3 Cross tabulation between working experience and contribution of physical environment on employee's performance in Moshi District Council

The study aimed to conduct a cross-tabulation between employees' working experience and the contribution of the physical environment on employee performance at Moshi District Council. Examining the interaction between these variables provided useful insights into how employees with varying years of service perceive the impact of physical workspace conditions such as maintenance, ergonomic support, and ventilation on their productivity, comfort, and focus. Work experience serves as an important factor that influences employees' awareness and sensitivity toward environmental conditions, which in turn shapes how effectively they engage with and respond to their physical work surroundings in public institutions.

*Table 3 Cross tabulation between Working Experience * Contribution of Physical environment on Employees' Performance*

		Work experience			
		Below 5 years	5-10 years	Above 10 years	Total
To what extent does a well-maintained workspace contribute to employees' productivity?	Very Small Extent	1	2	0	3
	To Small Extent	8	2	1	11
	To a Moderate Extent	25	23	8	56
	To a High Extent	42	43	22	107
	To a Very High Extent	52	43	36	131
Total		128	113	67	308
To what extent does availability of ergonomic furniture enhance employees' comfort?	Very Small Extent	2	1	0	3
	To Small Extent	8	4	0	12
	To a Moderate Extent	31	30	9	70
	To a High Extent	51	52	29	132
	To a Very High Extent	36	26	29	91
Total		128	113	67	308
To what extent does proper ventilation improve employees' concentration?	Very Small Extent	5	4	0	9
	To Small Extent	10	9	0	19
	To a Moderate Extent	26	15	14	55
	To a High Extent	50	47	21	118
	To a Very High Extent	37	38	32	107
Total		128	113	67	308

Source: Field Data, (2025)

The cross-tabulation results in table 3 show a clear relationship between employees' working experience and their perceptions of how the physical environment contributes to their performance. The findings reveal that employees across all experience categories below 5 years, 5–10 years, and above 10 years largely agree that a well-maintained workspace, ergonomic furniture, and proper ventilation positively influence productivity, comfort, and concentration. Notably, those with 10 years and above of experience overwhelmingly acknowledged these environmental factors as highly impactful, suggesting that longer exposure to workplace conditions increases awareness of their influence on work efficiency.

Employees with 5–10 years of experience also expressed strong agreement with the positive role of physical work conditions, while those with less than 5 years showed slightly lower but still significant recognition. This indicates that the more years an employee has spent within the work environment, the more likely they are to recognize and value the importance of physical workspace components. Overall, working experience plays a key role in shaping employees' perceptions, implying that experienced employees can provide valuable insights when planning and improving workplace environments to enhance performance.

4.4 Contribution of physical environment on employees' performance

The study sought to examine the contribution of the physical environment on employees' performance in public organizations, with specific reference to Moshi District Council. Respondents were asked to indicate the extent to which various physical workplace conditions affect their performance, the results are as shown in table 4

Table 4. Responses on the contribution of Physical Environment on Employees' Performance in Public Organization (n=308)

Key: VSE = Very Small Extent (1), SE = To a Small Extent (2), ME = To a Moderate Extent (3), HE = To a High Extent (4), VHE = To a Very High Extent (5) and STD = standard deviation

S/N	The contribution of Physical Environment on Employees' Performance in	VSE		SE		ME		HE		VHE		Mean	STD
		f	%	f	%	f	%	f	%	f	%		

	Public Organization												
i.	To what extent does a well-maintained workspace contribute to employees' productivity?	3	1.0	11	3.6	56	18.2	107	34.7	131	42.5	4.14	.90
ii.	To what extent does availability of ergonomic furniture enhance employees' comfort?	3	1.0	12	3.9	70	22.7	132	42.9	91	29.5	3.96	.87
iii.	To what extent does proper ventilation improve employees' concentration?	9	2.9	19	6.2	55	17.9	118	38.3	107	34.7	3.95	1.02
iv.	To what extent has a clean office environment increases employees' morale?	9	2.9	12	3.9	50	16.2	147	47.7	90	29.2	3.96	.93
v.	To what extent does access to natural light in	12	3.9	10	3.2	54	17.5	143	46.4	89	28.9	3.93	.97

	the workplace boost employees' performance?												
vi.	To what extent does inadequate workplace hinder employees' ability to perform effectively?	14	4.5	22	7.1	65	21.1	110	35.7	97	31.5	3.82	1.09
vii.	To what extent does poor lighting negatively affect employees' productivity?	6	1.9	32	10.4	62	20.1	116	37.7	92	29.9	3.83	1.03
viii.	To that extent does excessive noise in the workplace reduce employees' efficiency?	12	3.9	25	8.1	68	22.1	114	37.0	89	28.9	3.78	1.07
ix.	To what extent does poor maintained office environment lower employees' morale?	17	5.5	26	8.4	64	20.8	114	37.0	87	28.2	3.74	1.12
x.	To what extent does lack of comfortable	16	5.2	35	11.4	59	19.2	104	33.8	94	30.5	3.73	1.16

seating contribute to employee fatigue?	

Source: Field Data, (2025)

The results in table 4 revealed that 34.7% of respondents agreed to a high extent, while 42.5% agreed to a very high extent that a well-maintained workspace contributes to employees' productivity, with only a small minority (1.0% VSE, 3.6% SE) perceiving minimal impact, supported by a mean score of 4.14 and a standard deviation of 0.90, indicating strong consensus. These findings suggest that insufficient maintenance of workspaces creates suboptimal conditions that hinder employee output. When workspaces are poorly maintained - with issues like broken furniture, dirty environments, or disorganized layouts employees waste time compensating for these deficiencies rather than focusing on core tasks. The high agreement across respondents indicates this is a systemic issue affecting productivity across most departments. These findings align with W. Edwards Deming's Total Quality Management (TQM) theory, which emphasizes the importance of optimizing work environments to improve efficiency and output. Deming's principle of "continuous improvement" supports the idea that a well-maintained workspace is a critical factor in fostering employee productivity. The results also corroborate Zhenjing et al. (2022), who found that a positive work environment significantly improves employee performance. This implies that public organizations, such as Moshi District Council, should prioritize regular maintenance and upkeep of workspaces to create an environment conducive to high productivity. Investing in workspace quality can lead to measurable improvements in employee output and organizational efficiency.

The results in table 4 showed that 42.9% of respondents agreed to a high extent, and 29.5% to a very high extent that the availability of ergonomic furniture enhances employees' comfort. Only 1.0% and 3.9% perceived it as having a very small or small effect. The mean score of 3.96 and standard deviation of 0.87 suggest that ergonomic furniture is widely regarded as a key contributor to workplace comfort. These findings suggest that insufficient ergonomic resources lead to physical discomfort that directly impacts work quality. When employees lack proper chairs, adjustable desks, or supportive equipment, they experience fatigue and

musculoskeletal strain that reduces their focus and endurance. This was supported by the Human Resource Officer A, who had this to add;

> *Honestly, the quality and availability of office facilities have a more significant impact on our performance than many people might realize. In HR, a lot of our work is administrative processing employee data, managing files, running reports so when the equipment is slow, outdated, or in poor condition, it really slows us down. I've experienced situations where something as basic as a malfunctioning printer delayed an entire recruitment process.* (Interview with Human Resource Officer A, February 18, 2025).

This narration shows how inadequate office facilities and poor ergonomic design can significantly hinder employee productivity and operational efficiency. The Human Resource Manager's account illustrates that even seemingly minor infrastructure issues like outdated equipment or faulty printers can have ripple effects that disrupt essential administrative processes such as recruitment. Such interruptions not only delay timelines but also affect employee morale and workflow. The broader implication is that organizations must recognize the link between physical environments and job performance, and invest in ergonomic tools and reliable infrastructure to enhance focus, reduce physical strain, and support timely task completion. From a TQM perspective, Deming's focus on "profound knowledge" includes understanding the system and the people within it. Providing ergonomic furniture aligns with this principle by addressing employees' physical well-being, which in turn enhances their ability to perform effectively. These results resonate with Shaari et al. (2022), who found the significant relationship between physical environments and employee performance. This implies that public organizations should invest in ergonomic furniture to improve employee comfort and reduce physical strain, thereby fostering a healthier and more productive workforce. Such investments can also reduce absenteeism and long-term health-related costs.

The results in table 4 indicated that 38.3% of respondents agreed to a high extent , and 34.7% to a very high extent that proper ventilation improves employees' concentration. A minority (2.9% VSE, 6.2% SE) perceived minimal impact, supported by a mean score of 3.95 and a standard deviation of 1.02, reflecting moderate consensus. These results show that insufficient air quality control creates physiological barriers to focus. When ventilation is poor,

employees experience stuffiness, drowsiness, and difficulty concentrating all of which degrade cognitive performance. Human Resource Officer A suggested that;

> *Air and ventilation are very important. If the office is too hot, or if there is no fresh air coming in, it gets hard to breathe. You start to sweat, you feel tired quickly, and you cannot think clearly. But when the room has a fan, or air conditioning, or even windows that open to let air in, then you feel comfortable. You can stay focused and do your job well.* (Interview with Human Resource Officer A, February 18, 2025).

This statement implicates the direct impact of air quality and ventilation on employee well-being and productivity. Poor ventilation contributes to physical discomfort, including overheating, fatigue, and a general sense of suffocation, which collectively impair cognitive function and concentration. These findings suggest that workplace design should prioritize air quality management as a fundamental component of occupational health and organizational efficiency. Deming's TQM theory shows the importance of creating optimal working conditions to maximize employee potential. Proper ventilation is a critical component of such conditions, as it directly impacts cognitive function and focus. These findings align with Lemma et al. (2022), who found that indoor physical environments significantly affect employee performance. This implies that public organizations should ensure adequate ventilation systems in workplaces to enhance employee concentration and overall performance. Addressing environmental factors like air quality can lead to tangible improvements in work outcomes.

The results in table 4 revealed that 47.7% of respondents agreed to a high extent, and 29.2% to a very high extent that a clean office environment increases employees' morale. Only 2.9% and 3.9% perceived it as having a very small or small effect, with a mean score of 3.96 and a standard deviation of 0.93, indicating strong agreement. These findings suggest that insufficient cleaning standards create environments that psychologically demotivate employees. When workspaces are dirty or cluttered, employees subconsciously absorb messages about organizational values and their own worth, leading to disengagement. Human Resource Officer B, added that;

> *When the office is clean when the floors are swept, the desks are dusted, the toilets are working and clean then we feel happy and proud to be at work. But if the office is dirty, with papers everywhere, dirty toilets, or trash not taken out, it makes you feel stressed.*

You don't feel like working in that place. It also gives a bad image, especially when visitors come. (Interview with Human Resource Officer B, February 20, 2025).

Added that;

Sometimes, when the cleaning is not done regularly, people even get sick. Dust causes sneezing, cough, even allergies. So, keeping the office clean is not just about looking nice, it is about health too. A clean and fresh office helps us stay healthy and do our job with peace of mind. (Interview with Human Resource Officer B, February 20, 2025).

The results imply that cleanliness plays a vital psychological role in workplace morale and productivity. A clean, well-maintained environment signals respect and professionalism, encouraging employee pride and motivation. Conversely, dirty or disorganized spaces create stress, reduce enthusiasm, and harm the organization's image, especially in the eyes of visitors sowing the need for consistent hygiene standards in the workplace. Deming's TQM principles highlight the role of a supportive environment in fostering employee satisfaction and morale. A clean office reflects organizational commitment to quality and respect for employees, aligning with Deming's emphasis on "pride of workmanship." These results are consistent with Swai and Tieng'o (2022), who identified workplace conditions as a key factor in employee performance. This implies that maintaining a clean office environment should be a priority for public organizations, as it directly boosts employee morale and, consequently, their performance. Regular cleaning protocols and employee involvement in maintaining cleanliness can further reinforce a positive workplace culture.

The results in table 4 revealed that 46.4% of respondents agreed to a high extent, while 28.9% agreed to a very high extent that access to natural light in the workplace boosts employees' performance. Only a small minority (3.9% VSE, 3.2% SE) perceived minimal impact, supported by a mean score of 3.93 and a standard deviation of 0.97, indicating strong consensus. These findings suggest that insufficient access to natural lighting creates suboptimal working conditions that hinder employees' cognitive performance and well-being. When workers are deprived of adequate daylight, their alertness, mood, and visual comfort are compromised, leading to reduced productivity and increased fatigue. These findings align with Total Quality Management (TQM) theory, which emphasizes optimizing workplace conditions to improve efficiency and employee well-being. Natural light is a key factor in creating a conducive work

environment, supporting Deming's principle of continuous improvement by addressing physical conditions that affect productivity. The results also corroborate Zhenjing et al. (2022), who found that workplace environmental factors significantly influence employee performance. This implies that public organizations, such as Moshi District Council, should prioritize designing workspaces with ample natural light to enhance employee performance. Architectural modifications, such as larger windows or open-plan layouts, could be considered to maximize daylight exposure, leading to improved focus and reduced fatigue.

The results in table 4 showed that 35.7% of respondents agreed to a high extent, and 31.5% to a very high extent that an inadequate workplace hinders employees' ability to perform effectively. A minority (4.5% VSE, 7.1% SE) perceived minimal impact, supported by a mean score of 3.82 and a standard deviation of 1.09, reflecting moderate consensus. These findings show that insufficient physical resources such as workspace, equipment, or proper layouts significantly hinder employees' ability to perform effectively. When employees lack adequate facilities, their workflow is disrupted, forcing them to compensate for environmental deficiencies rather than focusing on core responsibilities. The moderate standard deviation indicates some departments may be disproportionately affected, likely those with space-intensive tasks. From a TQM perspective, Deming's focus on "system optimization" underscores the need for functional and well-equipped workspaces. An inadequate workplace disrupts workflow and reduces efficiency, contradicting TQM principles that advocate for resource adequacy to achieve quality output. These findings align with Shaari et al. (2022), who identified workplace deficiencies as a barrier to employee performance. This implies that public organizations should conduct regular workplace assessments to identify and address inadequacies, such as insufficient space or outdated equipment. Investing in modern infrastructure and efficient workspace design can mitigate obstacles to employee effectiveness.

The results in Table 4 indicated that 37.7% of respondents agreed to a high extent, and 29.9% to a very high extent that poor lighting negatively affects employees' productivity. Only 1.9% VSE and 10.4% SE perceived minimal impact, with a mean score of 3.83 and a standard deviation of 1.03, indicating strong agreement. These findings suggest that insufficient lighting quality creates visual strain and mental fatigue that directly impair work output. When employees struggle with glare, shadows, or insufficient illumination, their error rates increase

and task completion slows. When asked about how do the physical working conditions, such as lighting, ventilation, and cleanliness, contributes to your ability to perform effectively, Human Resource Officer A answered that;

> *You know, when the office has good lighting, it helps us see clearly. We don't struggle to read papers or look at the computer screen. When the light is poor or too dim, it makes our eyes tired. We feel sleepy sometimes. But when the light is bright and natural, it keeps us more awake and active. It makes us feel fresh and helps us work faster.* (Interview with Human Resource Officer A, February 18, 2025).

The results show that good lighting significantly enhances employee focus, energy, and task efficiency. Poor illumination causes eye strain and fatigue, lowering concentration and slowing down productivity. As emphasized by the Human Resource Manager, bright and natural lighting creates a more alert and comfortable work environment, enabling staff to stay active, read clearly, and perform tasks with greater speed and accuracy. As Deming's TQM theory highlights the importance of optimal working conditions to maximize employee potential. Poor lighting is a critical issue that can lead to eye strain, fatigue, and reduced accuracy, directly opposing TQM's goal of error reduction and efficiency. These findings support Lemma et al. (2022), who found that ambient conditions significantly impact employee performance. This implies that public organizations should upgrade lighting systems to ensure adequate illumination, incorporating LED lighting or adjustable task lighting where necessary. Proper lighting can enhance focus, reduce errors, and improve overall productivity.

The results in table 4 revealed that 37.0% of respondents agreed to a high extent, and 28.9% to a very high extent that excessive noise in the workplace reduces employees' efficiency. A minority (3.9% VSE, 8.1% SE) perceived minimal impact, supported by a mean score of 3.78 and a standard deviation of 1.07, indicating moderate consensus. These findings show that insufficient acoustic controls create disruptive work environments that fracture concentration and increase cognitive load. When employees must constantly filter out background noise, their mental resources are diverted from primary tasks, leading to mistakes and rework. The moderate standard deviation implies noise sensitivity varies by role, with knowledge workers likely most affected. Deming's TQM principles stress the need for a distraction-free environment to maintain workflow consistency. Excessive noise disrupts

concentration, leading to lower quality output and increased errors, conflicting with TQM's emphasis on process stability. These results align with Swai and Tieng'o (2022), who identified noise as a key factor affecting workplace performance. This implies that public organizations should implement noise-reduction strategies, such as soundproofing, quiet zones, or white noise machines, to minimize disruptions. Addressing noise pollution can enhance focus and operational efficiency.

The results in table 4 showed that 37.0% of respondents agreed to a high extent, and 28.2% to a very high extent that a poorly maintained office environment lowers employees' morale. A minority (5.5% VSE, 8.4% SE) perceived minimal impact, supported by a mean score of 3.74 and a standard deviation of 1.12, reflecting moderate agreement. Insufficient maintenance resources lead to deteriorating work environments that demoralize staff. When employees must contend with broken equipment, peeling paint, or malfunctioning facilities, they perceive organizational neglect, undermining their engagement and pride in work. When asked about the physical layout and space of your workplace contributes to work performance, Human Resource Officer B stated that;

> *The space we have is not bad, but it is not used well. Sometimes the desks are placed in a way that makes it hard to walk around. If one person pulls back their chair, the other person cannot pass. We have to say "excuse me" all the time, and it breaks the flow of work. If the furniture was arranged better, and if we had a little more space to move around, the office would feel freer and more relaxed.* (Interview with Human Resource Officer B, February 20, 2025).

Added that;

> *Also, when we meet someone for interviews or private talks, we don't have a separate space. We talk to them in the open office, and sometimes other staff can hear. This makes people uncomfortable. In HR, privacy is very important. If we had a small meeting room or even a quiet corner, it would help a lot.* (Interview with Human Resource Officer B, February 20, 2025).

The statement show that poor space utilization and lack of maintenance negatively affect work performance and employee morale. Crowded layouts disrupt movement and concentration, while the absence of private spaces compromises confidentiality, especially in HR tasks.

Deming's TQM theory advocates for a well-maintained workplace to foster employee pride and engagement. A neglected environment signals organizational indifference, undermining morale and productivity. These findings resonate with Shaari et al. (2022), who linked workplace upkeep to employee satisfaction. This means that public organizations should enforce regular maintenance protocols, including cleaning, repairs, and aesthetic upgrades, to sustain a positive work atmosphere. A well-kept office can boost morale and reinforce organizational commitment to employee well-being.

5. Conclusion and Recommendations

5.1 Conclusion

Based on the findings of the study, the physical environment contributes to employee performance in public organizations, particularly within the Moshi District Council. Well-maintained workspaces, access to natural light, proper ventilation, ergonomic furniture, cleanliness, and manageable noise levels were identified as key factors contributing to employees' productivity, concentration, morale, and overall comfort. Employees who worked in clean, well-lit, and well-ventilated environments with ergonomic support and sufficient space reported higher job satisfaction, reduced fatigue, and improved performance outcomes. In contrast, poor lighting, excessive noise, uncomfortable seating, and cramped workspaces were associated with decreased focus, lower efficiency, and diminished morale. These results show the importance of creating and maintaining a conducive physical environment to improve employee well-being and support operational effectiveness in public institutions including Moshi District Council.

However, the study relied on self-reported perceptions of employees regarding their physical work environment and performance, which may be subject to response bias or personal interpretation. Factors such as organizational culture, management practices, and individual differences were not fully controlled, which could also influence employee performance independently of the physical environment.

5.2 Recommendations

Based on the conclusions, it is recommended that public organizations, particularly Moshi District Council, should prioritize improving the physical environment to enhance employee performance. This includes ensuring the regular maintenance and cleanliness of

workspaces, providing adequate natural lighting and proper ventilation, and investing in ergonomic furniture to minimize physical strain and fatigue.

Also, management should implement effective noise control strategies such as soundproofing and designated quiet zones to reduce distractions and support focus-intensive tasks. It is also important for organizations to conduct regular workplace assessments and encourage employees to provide feedback on environmental conditions. Including these recommendations into institutional planning and allocating sufficient budgetary resources will enable public organizations to create healthier, more efficient, and employee-friendly environments. Policymakers should consider formulating national standards for public sector workplace environments to guide infrastructure improvements across institutions.

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