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Optimising workspaces for employee productivity: A contemporary analysis of commercial banks in Bamenda, Cameroon

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Abstract

In commercial banks globally, there is a prevailing misconception that employee productivity is linked primarily to compensation packages. However, this study investigates the impact of workplace factors, specifically, the physical environment, psychosocial dynamics, policy environment, and work-life balance, on employee productivity in commercial banks, with a focused case study on Bamenda, Cameroon. The main objective is to assess how these workplace factors influence employee productivity in commercial banks in Bamenda. Using a quantitative research design, data were collected from 130 employees across the various commercial banks existing in Bamenda, Cameroon, through structured questionnaires. The analysis employed Ordinary Least Squares (OLS) regression, revealing that the physical work environment and work-life balance significantly enhance employee productivity, with coefficients of 0.302 and 0.197, respectively, and p-values of 0.004 and 0.041. Psychological environment and policy environment did not exhibit significant effects, with coefficients of 0.077 ($p = 0.377$) and -0.045 ($p = 0.177$), respectively. The model demonstrated an R^2 of 0.243, indicating that approximately 24.3% of the variation in employee productivity can be explained by these factors. The findings emphasise the necessity for commercial banks to prioritise improvements in workplace conditions and cultivate a supportive work-life balance to optimise employee performance. It is recommended that management should focus on enhancing the physical workspace and promoting policies that facilitate a healthier work-life balance, and fostering a culture that enhances employee satisfaction and productivity.

Keywords: Employee Productivity, Physical work environment, Policies environment, Psychological environment, Work-life-balance

1. Introduction

The concept of employee productivity has evolved significantly over the past few decades, particularly within the commercial banking sector. Globally, advancements in workplace design and ergonomics are increasingly recognised as critical factors influencing employee output. In the United States, for instance, the finance and insurance sector, which includes commercial banks, contributed approximately 7.2% to the country's GDP in 2020 (Asfaw, 2022). This success is partly attributed to effective workplace designs that emphasise employee well-being and comfort, resulting in enhanced productivity. In Europe, similar patterns emerge, as banking institutions heavily invest in ergonomic furniture and training programs to meet strict occupational health regulations. For example, banks in the UK contributed £132 billion to the GDP in 2019, largely by fostering a productive work environment through proper ergonomic practices (Huggins et al., 2021).

In contrast, the situation in Africa presents a different challenge. While commercial banks are pivotal for job creation and economic development on the continent, with the banking sector contributing approximately 7.9% to South Africa's GDP, there remains a significant gap in office ergonomics (Saville et al., 2023). Many banks in Sub-Saharan Africa have begun to recognise the importance of ergonomic practices, providing adjustable workstations, ergonomic

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tools, and conducting training to improve employee comfort (Messigah & Adeogun, 2019). However, the level of implementation varies widely, with larger banks generally more equipped to adopt these practices than smaller institutions. The implementation of ergonomic practices is crucial, given that banks serve as major income sources for many individuals, second only to subsistence farming (Alawaqleh, 2021).

In Cameroon, the financial landscape is faced with unique challenges that impact employee productivity. Despite efforts to revitalise the traditional banking system, including the government's aim to increase the banking rate from 12.2% in 2020 to 80% in 2030 (Nkafu.org, 2023), the workplace environment and ergonomic conditions remain underdeveloped. According to the Ministry of Finance, 58% of the working population prefers tontines to traditional banking methods, citing reasons such as simplified credit conditions and unfavorable banking practices. This consumer behavior underscores the necessity for financial institutions to create conducive work environments to attract and retain talent. The COVID-19 pandemic emphasised the need for ergonomic solutions to support employees in their roles. Banks faced increased pressure to ensure safety and efficiency, which highlights the critical link between effective ergonomic practices and overall productivity (Mishra et al., 2021; Islam et al., 2023).

Generally, the evolution of employee productivity within commercial banks demonstrates a global recognition of the significance of ergonomics and workplace design. From established banking systems in the U.S. and Europe, where successful ergonomic interventions enhance productivity, to the growing awareness in Africa and Cameroon of the vital role a supportive workplace plays, the journey reveals a need for ongoing improvement. As banks address employee productivity, investments in ergonomic practices and a focus on workplace design will be essential to foster an environment that promotes well-being and enhances performance across the board.

2. Background of the study

In the context of commercial banks in Cameroon, the expected level of employee productivity is influenced by international standards that emphasise the importance of a productive labourforce. Global benchmarks suggest that an optimal employee productivity level in the commercial banking sector should be reflected in employee output meeting or exceeding targets established by industry leaders. According to the World Bank, the productivity of employees in the commercial banking sector can average around 5% to 7% of GDP contribution per employee (World Bank, 2014). However, the actual level of employee productivity in Cameroonian commercial banks remains significantly lower, with estimated outputs contributing only approximately 2% to GDP per employee (Kamta et al., 2021). This reveals a substantial gap of about 3% to 5% between the expected and actual productivity levels, highlighting inefficiencies primarily attributed to a plethora of challenges faced by Cameroonian commercial banks at a time when the domestic banks face tough competition from multinational banks.

Stakeholders, including government bodies, banking institutions, and employee unions, have made concerted efforts to enhance employee productivity within this sector. Initiatives engaged in recent times by these stakeholders include: training programs aimed at improving workplace ergonomics, financial literacy programs for employees to improve job-related skills, and policies aimed at promoting employee well-being. Additionally, regulatory frameworks have been established to ensure workplace safety and health, although compliance remains uneven across banks (Kouam et al., 2024). Despite these efforts, challenges persist due to budget constraints, inadequate infrastructure adaptations, and existing organisational cultures that resist change.

This study intends to evaluate the effectiveness of the existing framework on workspace management to address and potentially close the employee productivity gap within the Cameroonian commercial banking sector, specifically paying attention to commercial banks in Bamenda. It will assess how improvements in ergonomics, psychosocial environments, and work-life balance can enhance overall employee productivity. On the basis of the above facts, this study sets out to provide answers to the following research questions: How does the optimisation of workspaces affect employee productivity in commercial banks in Bamenda-Cmeroon? This is further addressed by the following specific questions;

- How does the physical work environment affect employee productivity in Commercial Banks based in Bamenda-Cameroon?
- In what ways does the psychosocial environment affect employee productivity in Commercial Banks based in Bamenda-Cameroon?
- To what extent do organisational policies affect employee productivity in Commercial Banks based in Bamenda-Cameroon?
- How does work-life balance affect employee productivity in Commercial Banks based in Bamenda-Cameroon?

3. Literature review

3.1. Conceptual literature

Workspaces refer to the design and arrangement of environments where individuals perform their tasks, emphasising the importance of creating an efficient and comfortable setting (Hedge, 2016). The physical environment encompasses tangible aspects such as workstation layout, furniture, and overall aesthetics, which can significantly impact employee satisfaction and performance (Budiyanto & Yusuf, 2020). The psychological environment relates to the mental and emotional context of the workplace, including factors like stress levels, social support, and workplace culture, all of which influence employee well-being and productivity (Bakker & Demerouti, 2018). The policies environment involves the frameworks and regulations established by commercial banks to govern workplace practices, impacting job security,

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career development, and work conditions (Vischer, 2018). Work-life balance pertains to the ability of employees to harmonise their professional responsibilities with personal life, which is essential for reducing stress and enhancing job satisfaction (Sundstrom et al., 2016). Employee productivity is a measure of the efficiency and effectiveness of an individual's output, reflecting the quality and quantity of work performed, (Campbell, 1990), while commercial banks represent financial institutions that provide a range of services, including savings, loans, and investment products, driving economic activity and requiring high levels of employee performance to thrive in a competitive market, (Homburg et al., 2017).

3.2. Theoretical literature

Several theories elucidate the relationship between workspace optimisation and employee productivity in commercial banks. The Job Demand-Control-Support Model, according to Pelfrene et al. (2001), highlights that ergonomic interventions can enhance job control and social support while alleviating physical strain, ultimately reducing stress and improving productivity. The Person-Environment Fit Theory, according to Kristof-Brown and Guay (2011), posits that compatibility between individual characteristics and their work environment leads to higher job satisfaction and productivity, emphasising the importance of creating a workspace that aligns with employees' needs (Kristof-Brown et al., 2011). Herzberg's Two-Factor Theory, according to Alshmemri et al. (2017), distinguishes between intrinsic motivators and hygiene factors, suggesting that a supportive work environment that fosters job satisfaction while meeting basic hygiene needs can enhance productivity (Robbins & Judge, 2013). Lastly, the Spillover Theory, as illustrated by Vasumathi (2018), notes that positive experiences in the workplace can positively impact employees' personal lives and vice versa, indicating that a supportive workspace contributes to employee well-being and productivity (Bakker et al., 2009). Collectively, these theories underpin the importance of optimising commercial banking workspaces to foster employee satisfaction, well-being, and enhanced productivity.

4. Empirical literature

4.1. Empirical review on the effect of the physical work environment on employee productivity in commercial banks in Bamenda, Cameroon

The influence of the physical environment on employee productivity has been explored by various authors, each offering unique insights and findings relevant to workspace optimisation. Saidu (2021) investigated the impact of the physical environment on productivity, specifically within the Nigerian Central Bank. Employing a probability sampling technique, he sampled 60 permanent employees and used frequency and percentage tables for data analysis. The study concluded that a larger physical workspace, adequate equipment availability, and a culture of open communication significantly enhance employee productivity. However, the researcher noted that these findings may not be applicable to commercial banks in Cameroon.

In Sri Lanka, Premarathne et al. (2021) focused on the garment sector to examine how the physical environment influences employee performance. He randomly selected 150 employees and utilised structured questionnaires for data collection, analysed through univariate, bivariate, and multivariate techniques with SPSS. The results indicated that a positive physical environment significantly impacts employee performance, but these findings may not translate to the banking sector in Cameroon.

Hafeez et al. (2019) assessed the relationship between the physical environment and employee commitment in call centers, surveying 65 front-line employees using validated questionnaires. Their statistical analysis revealed that employee well-being mediates the relationship between the physical environment and employee commitment. However, the focus on employee commitment rather than performance limits the applicability of their findings to productivity discussions. Equally, Temessek (2019) explored how perceptions of the work environment meet employees' social, extrinsic, and intrinsic needs. The study emphasised that a supportive environment contributes to employee satisfaction, loyalty, and retention, but did not directly address performance metrics.

Al-Omari and Okasheh (2017) examined the physical environment's effect on job performance at an engineering firm in Jordan by studying 85 employees. Their findings indicated that situational constraints such as noise, office furniture, ventilation, and lighting adversely affect job performance. Nevertheless, the results offer limited relevance for commercial banks in Cameroon, given the context.

4.2. Empirical review on the effect of the psychosocial environment on employee productivity in commercial banks in Bamenda, Cameroon

In Nairobi County, Kenya, Njeri (2018) assessed the impact of the work environment on employee performance within the mobile telecommunications sector. The study involved a target population of 1,626 individuals across three companies, with data collected via semi-structured questionnaires and analysed descriptively. The findings revealed that the physical workplace, management style, training opportunities, and work-life balance influence employee performance, although some factors diverged from those in the current study.

The effect of the psychosocial environment on employee productivity has been investigated by various researchers, each contributing valuable insights relevant to the workspace context. In Nandi County-Kenya, Koskei & Mbaraka (2021) examined the relationship between psychological climate and employee performance within government ministries using an explanatory research design. A sample of 144 employees was selected through stratified random sampling from a population of 240. Data were collected via structured questionnaires, revealing that a positive

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psychological climate significantly enhances job performance. However, this study's focus on government ministries differs from the banking sector.

Eyo and Bassey (2021) explored psychosocial factors and their impact on library staff performance in Nigeria's federal colleges, utilising a correlational survey research approach. Covering 195 library employees through total enumeration, data were gathered using a specially designed questionnaire. The findings indicated significant interactions between self-perception, work-family conflict, job satisfaction, and work stress with library staff performance, though the educational context limits the applicability of these results to banks.

Wanjala (2018) investigated the effect of the sociopsychological environment on teachers' dedication in public primary schools within Mwatate Sub-County, Kenya. The descriptive research method encompassed a target population of 315 instructors and 63 head teachers. Data were collected through questionnaires, with results indicating a significant correlation between the working environment and job dedication levels. However, the findings are not generalisable to the banking sector.

Kagwi (2018) assessed the influence of psychosocial factors on employee performance at the Huduma Centre in Nyeri County, studying a sample of 48 employees with a descriptive research design. Using questionnaires for data collection, the results indicated that workplace psychosocial factors significantly affect organisational success. However, the study's focus on a different public service context means that the findings are not applicable to commercial banks.

Ogiamien and Izuagbe (2016) examined how organisational and psychological factors affect staff productivity in South-South Nigerian private university libraries. Utilising a descriptive research technique, they sampled 83 respondents from eight private universities. The findings indicated a stronger association between organisational factors, such as culture and commitment, and job performance in libraries compared to psychological variables. Nonetheless, this study's focus on educational institutions limits its relevance to banking environments.

4.3. Empirical review on the effect of organisational policies on employee productivity in commercial banks in Bamenda, Cameroon

Moreover, the effect of the policies environment on employee productivity has been explored by various authors, each contributing relevant findings from different contexts. In Kenya, Bonareri (2019) investigated the relationship between HR policies and employee performance at Elgon Tea Factory in Transzoia County. Utilising a descriptive evaluation, all 107 factory employees participated in the survey. The results showed a statistically significant moderate positive relationship between training and development policies and employee performance, as well as between reward policies and performance. However, the focus on a manufacturing context limits the applicability of these findings to the banking sector.

In North East Nigeria, Funminiyi (2018) examined the impact of workplace environmental elements on employee loyalty and commitment through a survey approach. Data were collected from 205 employees, including managers, supervisors, and non-management staff from various manufacturing enterprises. The findings indicated a positive correlation between employee productivity and feedback, as well as a positive impact of incentives on employee commitment. However, the study's emphasis on employee commitment rather than productivity restricts its relevance to the current research.

Gaite et al. (2022) researched HR policies, including reward systems and communication, on employee performance in two hotels in Botswana. Their investigation concluded that the existing HR practices were ineffective at improving employee performance. While Hotel A had more established HR policies than Hotel B, both failed to adequately meet employee needs, leading to dissatisfaction that hampered organisational goals and decreased productivity. This focus on the hotel industry limits the transferability of the findings to the banking sector.

Ikechukwu et al. (2019) studied the influence of the work environment on employee productivity in Edo State, Nigeria. The research aimed to determine how workplace conditions contribute to issues like tardiness and absenteeism. The results highlighted that a pleasant work environment significantly enhances employee morale, productivity, and a sense of belonging, suggesting that a supportive work setting can foster organisational growth.

Above all, the impact of work-life balance on employee productivity has been studied in various contexts, revealing important insights into how balancing work and personal life can affect performance. Preena and Preena (2021) conducted research in a Sri Lankan shipping company to determine the influence of work-life balance on employee performance. They employed a quantitative approach, utilising questionnaires for primary data collection and analysing results through descriptive and inferential statistics. The study found a significant relationship between work-life balance and employee performance, confirmed by regression analysis. However, the focus on a specific industry in Sri Lanka limits the generalisability of the findings.

4.4. Empirical review on the effect of work-life balance on employee productivity in commercial banks, Bamenda, Cameroon

Annan (2020) explored the impact of work-life balance on employee performance among 75 workers at the Ghana Audit Service using a correlational research methodology. Data were collected through a pre-planned questionnaire and analysed using linear regression, mean, and standard deviation. The results indicated that stress, work overload, and erratic schedules contribute to an unbalanced work-life situation, significantly affecting employee performance. The

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study revealed no significant differences in work-life balance between male and female audit staff. Nonetheless, the correlational design differs from the descriptive approach used in the current study.

In Kenya, Lula (2018) assessed the effect of work-life balance on employee performance in the Cabinet Affairs Office using a descriptive research method. A sample of 70 respondents was selected via simple random sampling, and semi-structured questionnaires were employed for data collection. The findings indicated that work-family considerations and job demands interfered with family life, causing stress among employees due to long workdays. However, as this study focused on the public sector, its findings may not apply to banks.

Agunda (2024) suggested that organisations promoting work-life balance foster higher employee happiness, which translates to increased engagement and retention. Flexible work arrangements allow employees, especially working mothers, to manage work-life demands effectively. While this study focused on employee satisfaction, the current research concentrates on productivity.

Chibuzor (2024) investigated work-life balance and employee performance in commercial banks within Lagos State, using a descriptive survey research approach. A sample of 262 was determined using Taro Yamane's formula. The findings indicated that effective leave policies positively influence employee service delivery capabilities and highlight the importance of work-life balance policies for enhancing productivity. Nonetheless, since this study pertains to Nigerian commercial banks, its applicability to banks in other regions, such as Cameroon, is limited.

Mwangi et al. (2016) examined the effect of work-life balance on productivity among public sector employees in Nairobi. Using descriptive research methods, data from 106 Supreme Court personnel were collected through structured questionnaires. The study found that family leave and flexible schedules positively impacted productivity by enabling employees to balance work and home commitments, leading to increased loyalty and motivation. However, the focus on the public sector restricts the generalisability of these findings to the banking industry.

4.5. Literature gap

The existing literature presents a significant gap in understanding the relationship between office ergonomics and employee productivity, specifically within commercial banks in Cameroon. Current theories largely overlook the unique characteristics and organisational structures of the banking sector, focusing instead on broader workplace environments across various industries and countries. Methodologically, most studies employ descriptive or correlational approaches and fail to consider the distinct cultural and socioeconomic contexts in Cameroon that may influence this relationship. Additionally, there is insufficient exploration of specific ergonomic policies and practices within Cameroonian banks, such as workspace design and equipment provision. The population studied in previous research often excludes bank employees, lacking insights relevant to this industry. Thus, targeted research is needed to examine these aspects and develop tailored interventions aimed at enhancing employee productivity within the specific context of Cameroonian commercial banks.

5. Research method

This section of the study explained the scope and geographic focus, as well as the methods employed for data collection, the population involved, and the sample drawn from that population. Subsequently, we detailed the models used for analysis and explained the rationale behind the inclusion of particular variables in the study. Lastly, we discussed the analytical techniques employed to process the gathered data in line with the specified models.

5.1. Scope and area/population and sample

The study explored the relationship between office workspace and employee productivity within commercial banks operating in Bamenda, Cameroon. It specifically assessed the influence of the physical environment, psychosocial environment, policies, and work-life balance on employee productivity. Data was collected from employees across various departments, including human resources, finance, marketing, and operations, within these banks. The research focused on the staff based in the Bamenda area of the North West Region, which has a rich agricultural base and a population of approximately 1.97 million as of 2015. The process of collecting data for the study lasted two months, from November 2024 to January 2025.

The research employed a descriptive research design to explore the impact of various factors on employee productivity within commercial banks in Bamenda, Cameroon, focusing on employees in operations, marketing and sales, research and development, information communication technology, and control departments, as these individuals possess relevant insights into the workplace environment. A sample of 130 bank staff was selected from all commercial banks in Bamenda, utilising a non-probability sampling technique based on the researcher's judgment. Data collection was primarily conducted using structured questionnaires designed to gather quantitative information through closed-ended questions, including a Likert scale for respondents to indicate their agreement levels. Questionnaires were administered both physically and online, with a tracking system implemented to ensure all distributed forms were returned.

5.2. Justification of inclusion of variables and techniques of data analysis

5.2.1. Model specification

This research has two main variables: employee productivity, which is the dependent variable, and office ergonomics (workplace environment), which is the independent variable. Four sub-variables were used to explain the independent

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variable (office ergonomics). These include: physical environment, psychosocial environment, policies environment, and work-life balance. Measuring or operationalising a variable consists of defining the indicators or measurement items and choosing different modalities of an attribute in the studied reality. The modalities here correspond to the scales that make it possible to evaluate the indicator. This is to present in a simple way the use of data collected in the field in our research and its scale of measurement. There are four main scales, which include: nominal, ordinal, interval, and ratio. The level of measurement of qualitative data is a nominal or ordinal scale; the quantitative data, for their part, have a level of interval or ratio measurement.

This research makes use of the ordinal scale because, by definition, the Likert Scale is Ordinal. This scale has two properties: identification and scheduling. It is always possible for this scale to establish the rank of the modalities. The modalities which compose an ordinal scale are provided with a structure of order established according to a given criterion. For example, on a 4-point semantic satisfaction scale, the numbers 1 to 4 have no other meaning than to indicate a rank. For its descriptive statistical treatment, it makes use of the Frequency and the median gold.

$$EP_i = \alpha + \beta_1 PHE_i + \beta_2 PSE + \beta_3 PE_i + \beta_4 WLB_i + e_i$$

Where,

EP= Employee Productivity

α = constant term

PHE= physical environment

PSE= psychosocial environment

PE= Policies Environment

WLB= Work-Life Balance

$\beta_1, \beta_2, \beta_3$ = Beta coefficients indicating various levels of importance (weight of each factor)

e = Error term

5.2.2. Technique of estimation

The study employed the Ordinary Least Squares (OLS) technique for parameter estimation, which is highly relevant due to its advantageous properties as the best linear unbiased estimator (BLUE). OLS ensures that the estimated coefficients represent true population parameters accurately and possess minimum variance, making it an efficient choice for inference. Given that the dependent variable, employee productivity is continuous well-suited for OLS, the technique is particularly appropriate for capturing the relationships modeled in the study. Furthermore, OLS's widespread use in the literature reinforces its validity, providing confidence in its applicability to the data analysis undertaken in this research.

6. Data analysis

6.1. Model determination

The goodness of fit results is as displayed in Table 1. The regression model provided an adjusted R^2 value of 0.216. This implies that the predictors used in this model can explain 21.6% in variation of dependent variable. The remaining percentage can be accounted for by other variables other than those used in this study. The findings present a Durbin-Watson value of 1.5, which is within the range 1.5 to 2.5, indicating that the model doesn't suffer from autocorrelation.

Table 1: Model summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.493 ^a	.243	.216	.25571	1.469

a. Predictors: (Constant), Work life balance, Policies environment, Physical work environment, Psychological environment

b. Dependent Variable: Employee productivity

Source: SPSS V20

6.2. Test of significance

The test of significance was estimated by use of ANOVA as indicated in Table 2. The model gave an ANOVA regression sum of squares of 2.411 and a residual sum square of 7.52. The mean square for regression is 0.603, and a residual mean of 0.065. The output provided an F-statistic value of 9.218 with a p-value of 0.000. The F-statistic is therefore highly significant, meaning that the model is properly specified. From the ANOVA result, the processed data had a significance level of 0.000 which shows that the data is ideal for making a conclusion. This is an implication that all the variables used in the model are significant in predicting employee productivity. Therefore, it can be assumed that the model used in the study is significant since the confidence interval used was 95% leaving an allowance of 5%.

Table 2: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.411	4	.603	9.218	.000 ^b
	Residual	7.520	115	.065		

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Total	9,930	119		
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a. Dependent Variable: Employee productivity
 b. Predictors: (Constant), Work life balance, Policies environment, Physical work environment, Psychological environment

Source: SPSS V20

6.3. Normality, linearity, and outlier testing

Figure 1 indicates that scores on each variable were normally distributed, and the linearity test shows the relationship between the two variables was linear. This can be checked by inspecting the histogram of scores on each variable to describe a symmetrical bell-shaped curve, which has the greatest frequency of scores in the middle, with smaller frequency towards the extremes. And the p-p plot in Figure 2 indicates linearity between variables as the data set lies along the line. According to Noh *et al.* (2020), the existence of outliers can influence the value of the estimated regression coefficient and it should be removed before running the regression analysis while multivariate outliers can be detected by using cooks distance, in order to check normality whether the residual or error terms were normally distributed or not and linearity, a graph is plotted using SPSS regression graph and the assumption of linearity and normality is shown by the graphs below and both linearity and normality testing are accepted and no outliers were detected in the study.

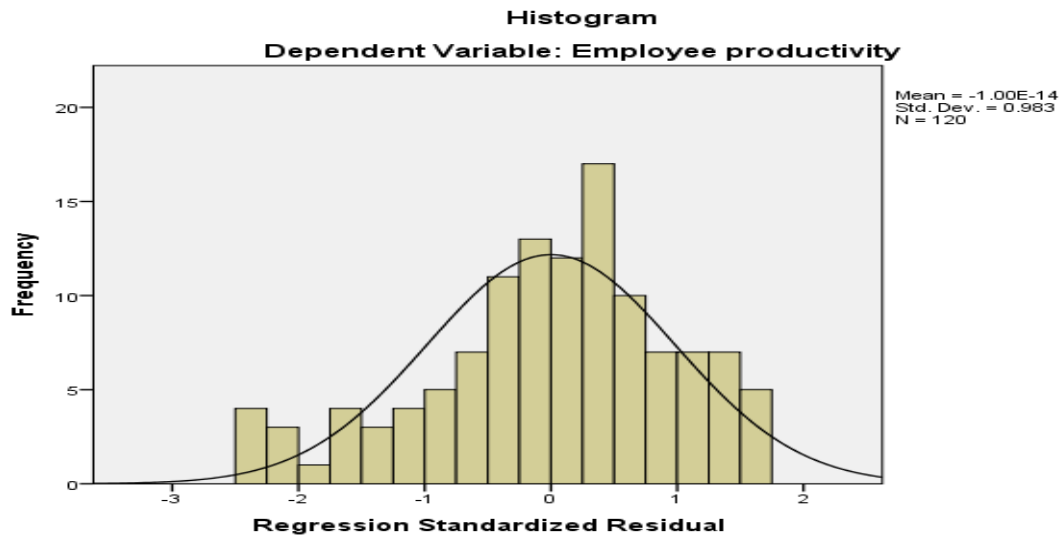


Figure1: Histogram
 Source: SPSS V12

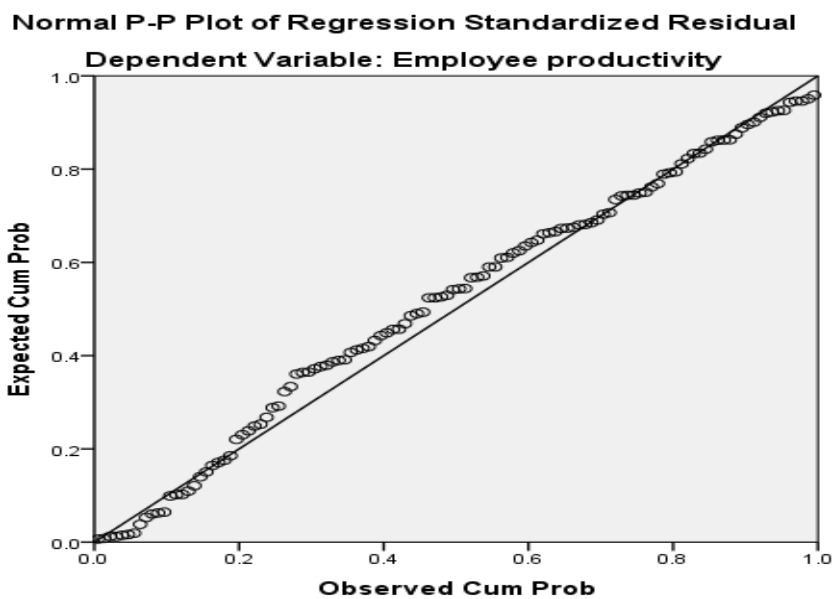


Figure 2: P-P Plot
 Source: SPSS V12

6.4. Homoscedasticity

Figure 3 Shows that the variability in scores for independent variables would be similar at all values of the dependent variable, and it can be checked by using a scatter plot. It shows a fairly even cigar shape along its length. Since the data set is not clustered in one place but scattered all over, it shows that the residual is not suffering from heteroscedasticity, and

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therefore, the assumption of homoscedasticity is met.

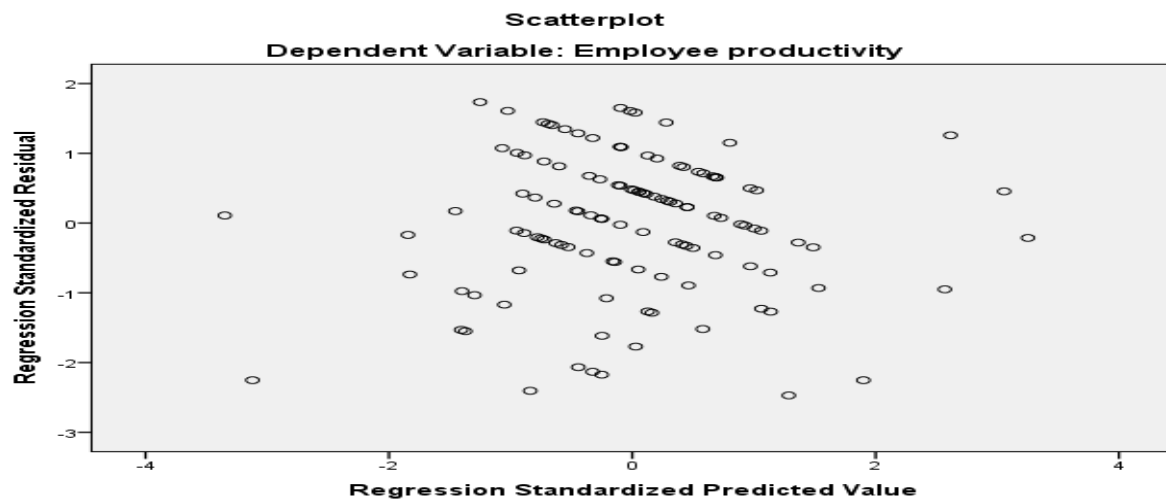


Figure 3: Scatterplot
Source: SPSS V12

6.5. Multicollinearity test

The presence of multicollinearity for more than two or more independent variables can be checked from the coefficients of the variables. Table 16 multi-co-linearity statistics indicate that the variance inflation factor (VIF) < 5 or the tolerance > 0.2. According to Yanık & Sinayiř (2021), the importance of testing for the existence of multicollinearity is to check whether the independent variable is correlated with each other by checking the tolerance and variance inflation factor (VIF) value. When there is high multi-collinearity and instability of the beta coefficient, VIF is higher than 5 or the tolerance is less than 0.2. From Table 3 below, the independent variables show the absence of multicollinearity since all the VIFs are less than 5. Therefore, it is possible to use correlation and multiple regression analysis.

Table 3: Coefficients^a

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2.094	.367		5.711	.000		
Physical work environment	.302	.104	.292	2.905	.004	.653	1.531
Psychological environment	.077	.087	.093	.887	.377	.594	1.683
Policies environment	-.045	.033	-.114	-1.357	.177	.925	1.081
Work life balance	.197	.095	.212	2.065	.041	.622	1.608

a. Dependent Variable: Employee productivity
Source: SPSS V12

7. Findings and Discussion

All assumptions for linear regression, linearity, normality, multicollinearity, homoscedasticity, and autocorrelation were met. From the findings in Table 3 above, the physical work environment has a positive and significant effect on employee productivity, with a coefficient of 0.302 at the 1% significance level. This implies that a 1-unit increase in the physical work environment leads to a 0.3-unit increase in employee productivity. The psychological environment, however, shows a non-significant positive effect with a coefficient of 0.077 and a P-value of 0.37, indicating a minimal impact of 0.1 units on productivity per 1-unit increase. Additionally, the policies environment exhibits a non-significant negative effect on employee productivity, with a coefficient of -0.45 and a P-value of 0.17, suggesting a decrease of 0.4 units in productivity for each 1-unit increase. In contrast, work-life balance demonstrates a significant positive effect with a coefficient of 0.197 and a P-value of 0.045, meaning a 1-unit increase leads to a 0.2-unit increase in productivity, significant at the 5% level.

Consequently, it can be concluded that employee productivity in commercial banks in Bamenda can be enhanced through effective management of the physical work environment and work-life balance. Therefore, we reject the null hypotheses concerning the significant effects of physical environment and work-life balance on employee productivity. No conclusions can be drawn regarding the other variables due to their insignificant effects on productivity. The regression

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findings of the current study align with previous empirical works regarding the impact of the physical environment and work-life balance on employee productivity. For instance, Saidu (2021) emphasised that a larger physical workspace and adequate equipment significantly enhance productivity within the Nigerian Central Bank, which corroborates the current study's finding that the physical work environment positively affects productivity with a coefficient of 0.302. Similarly, Premarathne *et al.* (2021) argued that a positive physical environment enhances employee performance, supporting the significance of this factor in the banking sector context. In terms of work-life balance, both Chibuzor (2024) and Annan (2020) found that effective work-life balance policies lead to improved employee performance, which resonates with the current study's coefficient of 0.197, indicating the importance of work-life balance in driving productivity. Conversely, the findings concerning the policies environment and psychological environment diverge from previous studies. For instance, while Bonareri (2019) found a positive relationship between HR policies and employee performance, the current study revealed a non-significant negative effect of the policies environment, suggesting that existing policies may not be effectively enhancing productivity in the banking sector. Similarly, the study by Koskei & Mbaraka (2021) highlighted a significant influence of psychological climate on job performance; however, the current research indicated a non-significant effect of the psychological environment on productivity, suggesting that the manifestations of these variables in the banking sector may differ from other sectors like government or education.

The Job Demand-Control-Support Model and the Person-Environment Fit Theory strongly align with the findings regarding the physical environment, indicating that ergonomic improvements and workspace compatibility enhance employee productivity in commercial banks. Additionally, the Spillover Theory supports the significant effect of work-life balance on employee productivity in commercial banks, suggesting that positive workplace experiences contribute to overall employee well-being. Conversely, the findings related to the psychological environment, guided by Herzberg's Two-Factor Theory, reveal limitations, as the non-significant findings imply that not all elements of the work climate are beneficial for employee productivity in commercial banks. Similarly, the mixed findings concerning the policies environment challenge the Person-Environment Fit Theory's assumptions, suggesting that current policies may not effectively meet employee needs, thereby failing to enhance employee productivity as intended.

8. Summary of major findings and recommendations

8.1. Summary of major findings

The study revealed that the physical work environment and work-life balance significantly enhance employee productivity in commercial banks in Bamenda, Cameroon, with respective coefficients of 0.302 and 0.197, indicating strong positive relationships. In contrast, the psychological environment and policies environment did not show significant effects on productivity, suggesting that these factors may not be adequately realised in the banking sector context.

8.2. Recommendations

Based on these findings, it is recommended that commercial banks prioritise enhancing the physical workspace by investing in ergonomic improvements and ensuring that employees have access to necessary equipment and a supportive work-life balance. Additionally, management should develop and implement policies that specifically address employees' needs in relation to productivity and well-being, ultimately fostering a culture that promotes satisfaction and performance in the banking sector.

9. Conclusion

On the basis of the above findings, it is evident that the objectives of the study were successfully met and the research questions addressed comprehensively. Empirical and theoretical evidences were also sufficiently available and adequately substantiated the validity these findings, empowering the researcher to formulate recommendations firmly rooted to the findings obtained taking into account the magnitude and signs of the findings. On the basis of such scientific backings, this researcher recommends that stakeholders should rely on the preceding recommendations.

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