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WORKING CONDITIONS AND EMPLOYEES' PERFORMANCE OF THE EDUCATIONAL SECTOR IN CAMEROON: DOES THE PSYCHOLOGICAL WELL-BEING MATTER?

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Abstract

This research aims to examine how working conditions influence employee performance in the educational sector of Yaoundé, Cameroon. We employed a quantitative research design, utilising a questionnaire as the primary data collection tool. We determined a sample size of 406 for a known population using the Yamane formula and selected it using stratified sampling techniques. The research analysed the gathered data using the ordinary least squares technique (OLS) with STATA 17. Findings indicated that working conditions positively and significantly affect employee performance. The coefficient for the working condition variable is 0.962 in the ML model and 0.800 in the OLS model, both statistically significant at the 1% level (p<0.001). Therefore, the study recommends that educational institutions should adopt a multi-

step approach: First, conduct a thorough assessment of the current working conditions to identify specific areas that need improvement. Second, prioritise upgrades to infrastructure and equipment to create a more conducive physical environment.
Keywords: Working Conditions, employees' performance, educational Sector, Yaounde, Cameroon

INTRODUCTION

The existence of teachers in the world of education greatly influences the production of excellent students (Lutfah et al., 2019). In recent years, improving teachers' working conditions has continued to draw the attention of scholars and policymakers. Performance improvement is closely linked with the challenge of increasing teacher motivation, developing an effective work culture, and creating a comfortable and conducive work environment so that teachers can and are willing to work optimally (Darling-Hammond, 2016; Lutfah et al., 2019). The intricate and ever-changing relationship between working conditions, psychological well-being, and employee performance significantly affects both employees and companies (Singla, 2024).

Researchers like Guest (2017), Marecki (2023), Monteiro & Joseph (2023), and Alkhodary (2023) assert that organisations that undervalue employee well-being often face higher turnover rates, diminished employee loyalty, and lower productivity. Since individuals devote a significant portion of their lives to work, the environment in which they operate greatly affects their performance and mental health (Yang et al., 2024; Priya et al., 2023; Xiyun et al., 2022). Therefore, investing in a healthy work environment benefit both employees and organisations, leading to lasting performance improvements. The global education sector struggles to support teachers' performance and mental health amid escalating demands on educators and insufficient resources for their support (Benevene et al., 2020; Wang, 2024; Viac & Fraser, 2020).

Several researchers have examined various factors related to working conditions that greatly impact employees' performance and psychological well-being (Ferrara et al., 2022; Alfes et al., 2021; Fogaça et al., 2021). It is suggested that these conditions significantly influence whether employee performance yields positive or negative outcomes (Chandrasekar, 2011; Samson, 2014). Numerous international organisations are actively discussing employees' rights, emphasising that better workplace conditions lead to improved employee performance and higher productivity (Flanagan, 2006; Croucher et al., 2013; Ali & Anwar, 2021). Companies that ensure adequate working conditions will boost their employees' performance, ultimately enhancing overall results (James et al., 2024; Mba, 2021). Conversely, if employees perceive

their work environment unfavourably, their performance can decline as their attitudes shift, leading them to overlook rules and contribute to reduced effectiveness.

The psychological impacts of burnout are also well documented. Depression (Ahola and Hakanen, 2007) and negative psychological well-being (Idris et al., 2012) are associated with burnout. In the workplace, burnout can be contagious to colleagues and teams, as there can be increased personal and task-related conflict (González-Morales et al., 2012). In terms of the work-home interface, individuals bring their work stress home and their home stress to work. Burnt-out employees are more likely to be tense, anxious, upset and frustrated; they withdraw from their families and have fewer friends, which tends to reduce their performance (Pluut et al., 2018). Burnout results in decreased individual, team and organisational performance (Bakker et al., 2014). This phenomenon includes inhibited creativity and innovation (Huhtala and Parzefall, 2007), as well as workplace mistakes, accidents, and injuries (Al-Ansi & Han, 2019; Nahrgang et al., 2011).

In the context of the secondary educational sector, research has highlighted that workers in this sector experience discomfort as they work in environments that are unfavourable to them, such as high job demands, excessive workloads, long working hours, low autonomy, and a poor work-life balance (Demerouti & Bakker, 2023). These unfavourable circumstances may worsen burnout, tension, anxiety, and even despair, lowering their overall job performance and mental health (Demerouti & Bakker, 2023). In addition, the impact extends to their psychological well-being. For example, teachers who work in high-stress environments with excessive job demands are more prone to physical ailments such as muscle tension and psychological ailments such as headaches and sleep disturbances, which reduce their performance (Anasori et al., 2021).

In Cameroon, unhealthy school environment characterised by heavy workload, poor workspace etc, has made it very difficult for teachers to create, grow, and develop excellent outputs. In Cameroon, an increasing number of employee reports show employees having symptoms related to psychosocial risks in the workplace, such as sleep issues, lack of concentration, irritability, nervousness, and anxiety (Serno et al., 2022). In addition to their effects on the health of individuals, psychosocial risks have an impact on the functioning of businesses (absenteeism, turnover, working atmosphere, etc.) and correspond to working situations where they are combined or not; that is, stress resulting from internal violence (moral or sexual harassment) and external violence (insults, threats, attacks) (Institut National de Recherche et de Sécurité, 2019).

The educational sector plays a crucial role in shaping the future of societies through the intellectuals produced by the schools. However, it faces significant challenges related to employee performance, largely influenced by working conditions. School institutions in Cameroon continue to put employees under extreme pressure, with heavy workloads, very long working hours and inflexible schedules (Demerouti & Bakker, 2023). This adversely affects the physical and psychological well-being of employees in the Cameroonian educational sector (Schaufeli et al., 2009). This situation does not only put workers' mental health in danger, but it also reduces their capacity to provide high-quality instructions. This research gap highlights the necessity for substantial considerations to be given to the working circumstances of employees in the educational sector, particularly regarding the significance of their psychological well-being. The contribution in question has three points of scientific relevance. First, it adds to the limited research on factors affecting teachers' performance, particularly within the context of the Cameroonian educational sector, which possesses scarce literature and empirical reviews. Secondly, it illuminates the connection between working conditions and teacher performance while considering their psychological well-being in the educational sphere, providing helpful perspectives for academics and practitioners alike. Thirdly, it is specifically relevant to emerging educational institutions that may encounter limited resource capabilities. Overall, this research delivers a thorough understanding of how working conditions impact the performance of employees in the educational sector. Thus, we formulate the following central hypothesis for the research, based on this assertion:

Working conditions have no significant effect on the employees' performance in the educational sector in Cameroon.

LITERATURE REVIEW

Conceptual Review

Hsiao & Lin (2018) defined working conditions as extrinsic or intrinsic factors. The labour market study offers an objective and subjective approach. The former focuses on salary, benefits, hours worked, location of work, career promotion, developmental opportunities, etc. The latter focuses on interpersonal relations, work culture, autonomous decision-making, work challenges, and so on. Obiora & Iwuoha (2013) defined working conditions as an entity comprising the totality of forces, actions, and other influential factors that are currently or potentially affecting the employee's activities and performance. The working environment is defined as a sum of the interrelationship that exists between the employees and the environment in which they work. Opperman (2002) defines the working environment as a combination of three key sub environments: the technical, human, and organisational

environments. The technical environment encompasses tools, equipment, technological infrastructure, and various physical or technical components. This environment provides the elements necessary for employees to fulfil their responsibilities effectively. The human environment includes colleagues, interpersonal relationships, teamwork, leadership, and management dynamics. The structure encourages informal workplace interactions, fostering knowledge sharing and idea exchange, crucial for attaining optimal performance. The organisational environment consists of systems, procedures, practices, values, and philosophies, all of which are managed by those in leadership positions.

Employee performance is defined as how employees complete their assigned work and perform required responsibilities (Omar, 2010). It is the result of the quality and quantity of work achieved by an employee while carrying out their duties by the responsibilities assigned to them (Robbins, 2010). Employee performance refers to how staff members fulfil their role's duties, complete required tasks, and behave in the workplace. Performance measurements include the quality, quantity, and efficiency of work. The internal challenges for SMEs encompass various aspects of enhancing the quality of human resources, management capabilities, organisation and technology, other production input factors, and a robust business climate that supports innovation, entrepreneurship, and business practices, as well as fair competition. Permana (2017) defines performance as the periodic evaluation of an organisation's operational efficiency, including its divisions and workforce, against established objectives, standards, and criteria. Consequently, performance represents the outcomes realised by an organisation over a defined accounting period and is measured against various benchmarks. It illustrates the organisation's ability to manage and allocate resources effectively (Lisa, 2019). Numerous factors influence the performance of small businesses, particularly both internal and external elements (Wang & amp; Wong, 2004). Success depends on the effective management of these dual factors through careful analysis of environmental variables and the formulation and implementation of business strategies.

Empirical Review

Leidner & Roch (2025) explored the teachers' perceptions about working conditions in online schools. They made use of data from the 2015 to 2016 National Teacher and Principal Survey to estimate multi-level models to determine the effects of the online environment. The results revealed that teachers working in online schools are less satisfied with their levels of classroom control; however, they report higher levels of administrative support and collegiality. Enrolment in online schools has significantly increased recently. Advancements in technology

have enabled online schools to provide education entirely online to K–12 students. Despite their growth, there has been little research on the working environments of online schools

Elias & Moise (2023) conducted a case study on teachers in public secondary schools in the city of Maroua by comparing their working conditions and their performance. They wondered about the impact of their working conditions on their performance. They proceeded with the hypothetico-deductive method, which consisted of observing a situation that turned out to be abnormal. This led to the conclusion that the influence of the working conditions of teachers on their performance in public secondary schools in the city of Maroua in Cameroon is negative. Indeed, salary treatment, the work environment and the management of career profiles influence the performance of teachers. These influencing factors have a direct effect not only on their work itself but also and above all on their motivation to work. Working conditions are therefore a powerful lever for teacher motivation and, consequently, for teacher performance. Improving teachers' performance undeniably involves improving their working conditions.

Iis et al. (2022) examined the effect of career development and work environments on the performance of employees. Data was obtained by distributing questionnaires to 100 employees, and the data was analysed using the Structural Equation Modelling (SEM) method. The results indicated that career development and the employee's work environment had a significant effect on work motivation and employee performance. In addition, career development and work environments also have a direct effect on performance. Work motivation partially mediates the effects of career development and the work environment on performance. The Department of Agriculture and Livestock is expected to improve career development to create a conducive work environment, which will improve employee performance at the Aceh Agriculture and Livestock Service Office.

Kumar et al. (2021) studied the relationship between COVID-19-induced work stressors and job performance, distress, and life satisfaction. Data was collected from 433 working professionals in private and public organisations during India’s third and fourth phases of lockdown via a survey that was distributed online. a partial least squares structural equation model was applied first to establish the validity of this study’s model (measurement model validity) and subsequently to test the hypothesised relationships in the model (structural model). Role overload and changes in lifestyle choice did not significantly affect job performance. Family distraction, occupational discomfort, and distress were significant in impacting job performance, with distress being the most significant one. The COVID-19 pandemic significantly increased distress levels and lowered job performance, leading to a reduction in life satisfaction.

Fonkeng (2018) examined the effect of work stress on employee performance in a microfinance institution in Cameroon. The study used a purposive and simple random technique to select a sample size of 80 participants. We collected the data through questionnaires and focus group discussions. The results of this study reveal that the participants endure an excessive amount of stress, which negatively affects their performance, as many of these participants think that management exerts pressure on them to increase their output.

Marinette (2017) investigated the connection between working conditions and teacher attrition in Cameroon's South West Region's secondary schools. This study used a cross-sectional survey research design that included quantitative and qualitative methods. All of the secondary school teachers in the South West Region made up the study's population. Of the sample population, 370 teachers were involved. We applied the method of simple random sampling. The devices for gathering data were a questionnaire and an interview guide. The Pearson Product-Moment Correlation Coefficients, mean scores, standard deviations, and percentages were the statistical tools used in the analysis. The results showed that an unfavourable work environment, inadequate pay, a lack of job satisfaction, and a poor leadership style from the principal all significantly contributed to teacher attrition. The study discovered that a multitude of factors work together to force teachers from their positions, creating the impression that teaching is not as respected as other professions in the research field.

METHODOLOGY

This study was carried out in some selected public secondary schools in the Centre region of Cameroon. The study made use of the ten Divisions of the Centre Region. The Centre Region headed by Yaoundé shares boundaries with the Littoral region to the west, Adamawa region to the north, East region to the east and South region to the south. This region is made up of 10 Divisions namely; Haute-Sanaga, Lekié, Mbam et Inoubou, Mbam et Kim, Méfou et Afamba, Méfou et Akono, Mfoundi, Nyong et Kéllé, Nyong et Mfoumou and Nyong et So'o and has a population of over 4,000,000 inhabitants. Yaoundé is the headquarter of Mfoundi Division and Centre Region of Cameroon. It is equally the political capital of Cameroon and has a land surface of 69000km2. The headquarters of the other Divisions include; Nanga Eboko for Upper Sanaga; Monatele for Lekié; Mfou for Mefou & Afamba; Ngoumou for Méfou et Akono; Bafia for Mbam et Inoubou; Ntui for Mbam et Kim; Eseka for Nyong et Kéllé; Akonolinga for Nyong et Mfoumou and Mbalmayo for Nyong et So'o Division. The Centre Region is characterised by a total number 1155 registered secondary schools, which comprise of 655 private secondary

schools and 500 public secondary schools (Regional Delegation of Secondary Education for Centre Region, 2024).

A primary data was collected directly from respondents through the use of self-administered closed-ended questionnaires. The study made use of a quantitative research design. The quantitative design was more suited for this study, considering the larger sample size for potential data. It transformed numerical data into usable statistics for further analysis of selected schools in the Centre Region of Cameroon. A quantitative approach provided the insight needed to adequately address the reality of working conditions within the context of educational sector in the Centre Region of Cameroon (Creswell & Poth, 2016).

The study concentrated on the employees, both junior and senior, at the selected secondary schools in the Centre Region of Cameroon. This study made use of the public secondary schools that operate in the Centre Region of Cameroon. There is a total of 28,839 teachers in the Centre Region of Cameroon, comprised of both civil servants and state-contract workers (Report from Regional Delegation of Secondary Education for Centre Region, 2024).

Considering the total population of 28839 for this study, therefore, following Yamane's formula (1967), a sample size of this study was estimated to be 395 and above is considered appropriate for a population size of 28839 because of its accuracy, being less time-consuming and cost-effective and a total of 403 teachers were selected for the current study, and the size was considered appropriate for a population of 28,839 teachers.

In this study, a stratified sampling technique was employed to collect data, as it ensures representation across various subgroups within the population of teachers in the Centre Region of Cameroon. Given the diversity in teaching institutions and teachers, stratification allows for proportional representation of these groups, leading to a more accurate estimation of the total number of teachers. This approach reduces sampling biases, ensures that each subgroup is adequately represented, and enhances the precision of the study's findings.

A total of 403 teachers were chosen using the stratified sampling approach. This approach was used because stratified sampling ensures a representation across various sub groups within the population of teachers in the Centre Region of Cameroon. There is diversity in teaching levels, subjects or institutions and thus stratification allows for a proportional representation of these groups, yielding a more accurate estimate of the total number of teachers. This reduces sampling biases, ensures that each sub-group is adequately represented in the sample and increases the precision of the study's findings. According to Cochran (1977) and Lohr (2019), stratified sampling is a technique in which the population is separated into discrete subgroups or strata according to specific characteristics. The researcher can then estimate statistical measures for each subgroup or stratum by sampling each

subgroup using probability sampling, cluster sampling, or simple random sampling. The Centre Region is made up of 10 Divisions, 500 public schools and 28,839 teachers and as such we had 2 strata, that is; number of schools per Division and number of teachers used per Division. A desired sample size of 100 public secondary schools was selected based on the fact that 15-20% of the total is adequate to determine the required sample size. The sample size for each stratum was determined through proportional allocation in which the following formula was used;
nh = (Nh/N) x n
Where; nh= sample size for stratum h, Nh= Population size of stratum h, N= total population size, n= total desired sample size of teachers (403), n= total desired sample size of schools (100).

The required number of schools and teachers for each stratum was selected through simple random sampling. The use of simple random sampling within each stratum minimises bias and enhances the validity of the findings, as it allows for an equal chance of selection among schools and teachers in each Division.

Table 1: Strata of Public secondary schools and teachers in the Centre Region

N^{o}	Division	Number of Public secondary schools per division	Number of teachers Used per division
1	Haute Sanaga	7	14
2	Lekie	18	43
3	Mbam et Inoubou	12	23
4	Mbam et Kim	9	20
5	Mefou et Afamba	12	64
6	Mefou et Akono	7	28
7	Mfoundi	9	133
8	Nyong et Kelle	11	20
9	Nyong et Mfoumou	7	25
10	Nyong et Soo	7	23
11	RDSE	-	10
	Total	100	403

Internal consistency was evaluated using Cronbach's alpha, and all four scales were determined to be trustworthy, above the recommended threshold of 0.7, indicating that the instrument is reliable and doesn't need to be modified.

The researchers employed both descriptive and inferential statistics to analyse the quantitative data. The researchers used SPSS version 20 software to describe the respondents

in this study and STATA to conduct a regression analysis of the collected data. The following model for multivariate regression analysis, which examines the working conditions affecting employee performance in the educational sector of the Centre Region of Cameroon, was analysed with the assistance of STATA software:

The model for this study was based on research by Andrade et al. (2015), Dias et al. (2022), and Nunes et al. (2014), which showed that working conditions, like job satisfaction and work-related stress, are important factors that affect employee performance in the education sector. These studies have provided a foundation for understanding how working conditions influence employee performance. The model employed in this study builds upon these earlier investigations and is presented as follows.

Consequently, the functional association between the variables in the model has the following form:

$Employees' performance = f(Working\ condition)$

More specifically, the economic model is specified in equation below:

$EP_t = \beta_0 + \beta_1 PWE_i + \beta_2 WL_i + \beta_3 JS_i + \beta_4 VIL_i + \beta_5 OLD_i + \beta_6 JP_i + \beta_7 M_i + \beta_8 YE_i + \mu_i$

Where, EP represents the employee performance, PWE=physical work environment, WL represents work load, JS represents job stress, VIL represents Ventilation intensity and lighting, OLD represents office layout and design, JP represents Job position, M represents Married, YE represents Years of experience are the explanatory variables in the multivariate analysis and the choice of these variables relies on the measurability of employee performance. The β_0 is a constant term and β_1 is are estimated parameter in the model, and *ui* is an error term.

RESULTS

Table 2: Summary of Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Employee performance	403	0.264	0.243	0	1
Working condition	403	0.246	0.278	0	1
Married	403	0.442	0.497	0	1
Classroom Teacher	403	0.218	0.414	0	1
Discipline Master	403	0.132	0.338	0	1
Vice Principal	403	0.203	0.403	0	1
Principal	403	0.176	0.381	0	1
Experience above 10 yrs	403	0.578	0.494	0	1

Table 2 presents the descriptive statistics of the variables in objective three. The total observation in the sample is 403. The result shows that working condition have a mean of 0.246 and a standard deviation of 0.278. The dependent variable employee performance has a mean of 0.264 and a standard deviation of 0.243. Working conditions and employee performance indexes were normalised within the range of 0 and 1 to eliminate the negative component of the variables, which posed an interpretation challenge. The results in Table 1 show strong evidence of moderate variability in the data and therefore suggest the variables are suitable to be subjected to further inquiry. In other words, there is evidence of substantial spread and randomness in the variables.

Table 3: Pairwise correlations (STATA Version 1 output)

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) Employee performance	1.000							
(2) Working condition	0.932*	1.000						
(3) Married	-0.083	-0.070	1.000					
(4) Classroom teacher	-0.059	-0.056	-0.035	1.000				
(5) Discipline master	-0.070	-0.050	-0.080	-0.206*	1.000			
(6) Vice principal	-0.016	-0.002	0.022	-0.267*	-0.197*	1.000		
(7) Principal	-0.011	-0.008	0.008	-0.244*	-0.180*	-0.234*	1.000	
(8) Experience_A10~s	0.047	0.056	-0.040	0.014	-0.039	0.007	0.026	1.000
*** p<0.01, ** p<0.05, * p<0.1								

The result in Table 3 shows that working conditions have a significant positive association with employee performance. The control variable, years of experiences, was also positively associated with employee performance, though not significantly. All other control variables were negative and non-significantly associated with employee performance

Figure 1 shows that working condition was an exogenous construct in this model, while employee performance was an endogenous construct. To achieve model minimisation using AMOS for structural equation modelling, the number of iterations required to assess convergence was set to 10. In this case, the model needed 10 iterations to arrive at the optimal solution, demonstrating the efficiency of the estimation process. The results show evidence of nomological validity as all the loadings of the manifest indicators were well above 0.5. The variables in the rectangular shape are the observed variables, while those in the bigger circle are the latent variables. Those in the smaller circle, numbered from 1 to 9, are the error

measurements that account for possible endogeneity in the model due to the inadequacy in capturing the concept.

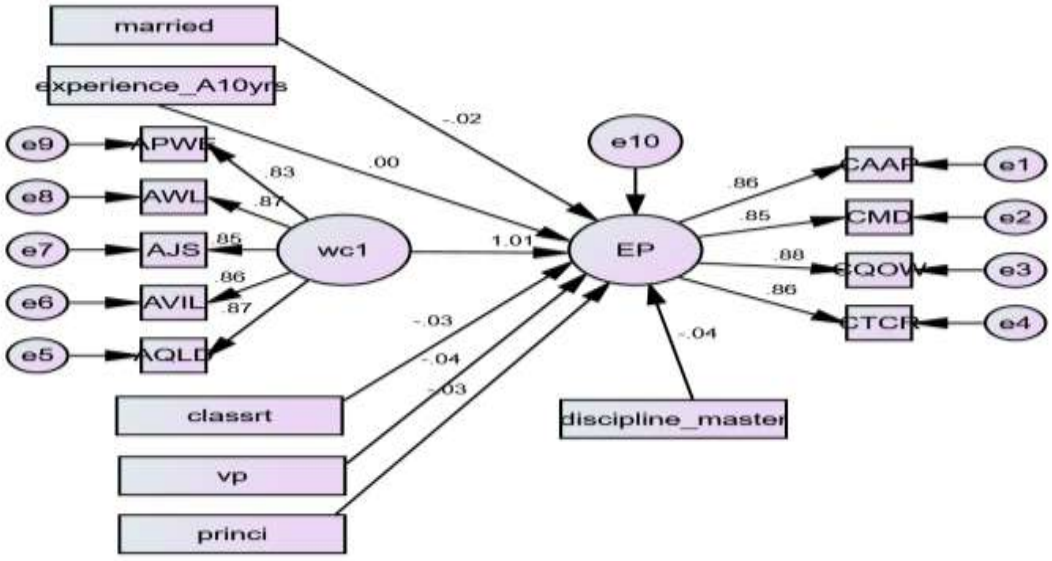

Figure 1: Structural Model of WC-EP (AMOS version 23 output)

The results presented in Table 4 below reveal strong connections between the independent and dependent variables, as indicated by the R-squared values of 0.874 and 0.871, reflecting that approximately 87.1% to 87.4% of the variability in the employee performance is explained by the working conditions. This high explanatory power suggests that the independent variables are highly relevant in predicting the outcome of interest. The P-values for overall significance are recorded as 0.000, confirming that the model is statistically significant, indicating that the independent variables significantly contribute to the variation in the dependent variable. The Breusch-Pagan P-values are also reported at 0.000, suggesting a significant presence of heteroscedasticity in the model, which indicates that the distribution of the residual errors is not constant across all levels of the independent variables. This is corrected by reporting robust standard error, the Variance Inflation Factor (VIF) values of 1.22 and 2.10 indicate no serious multicollinearity concerns, as they are below the typical threshold of 5. Collectively, these findings highlight the strength and reliability of the model, emphasising the significant impact of the working condition on the employee performance variable while noting the presence of heteroscedasticity that may require attention in further analyses.

Table 4: The effect of working conditions on employee performance in the educational sector of the Centre Region of Cameroon (AMOS version 23 and STATA Version 14 output)

	(ML)	(OLS)	(OLS)
Variables	**Employee Performance**	**Employee Performance**	**Employee Performance**
Working Condition	0.962***	0.800***	-
	(0.040)	(0.0229)	
Physical work environment	--	--	0.00817***
			(0.00315)
Workload	--	--	0.0154***
			(0.00276)
Job stress	--	--	0.0126***
			(0.00276)
Ventilation intensity and lighting	--	--	0.0165***
			(0.00288)
Office layout and design	--	--	0.0154***
			(0.00322)
Married	-0.121	-0.0105	-0.00820
	(0.155)	(0.00940)	(0.00940)
Classroom teacher	0.241	-0.0189	-0.0184
	(0.138)	(0.0123)	(0.0124)
Discipline Master	-0.386	-0.0309**	-0.0291*
	(0.169)	(0.0151)	(0.0159)
Vice Principal	-0.285	-0.0216	-0.0218*
	(0.141)	(0.0131)	(0.0131)
Principal	-0.234	-0.0168	-0.0182
	(0.149)	(0.0139)	(0.0139)
Experience above 10yrs	-0.027	-0.00262	-0.00248
	(0.115)	(0.00866)	(0.00859)
Constant		0.0809***	-0.354***
		(0.0120)	(0.0202)
Observations	403	403	403
R-squared	0.874	0.871	0.874
P > F (overall significance)	-	0.000	0.000
Breusch Pagan P-value	-	0.000	0.000
VIF		1.22	2.10

Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

The finding revealed that working condition has a positive and significant effect on employee performance. The coefficient for the working condition variable is 0.962 in the ML model and 0.800 in the OLS model, both of which are statistically significant at the 1% level ($p<0.001$). This indicates that better working conditions are associated with higher levels of employee performance in the educational sector. The magnitude of the effect is quite substantial, there is a likelihood that an improvement in working conditions will lead to an approximately 0.8-0.96 point increase in employee performance. This allows us to reject the null hypothesis that working conditions have no significant effect on employee performance in the educational sector in favour of the alternative hypothesis, which states that working conditions have a significant impact on employee performance in the educational sector. The result of this study aligns with that of Elaho & Odion (2022), who analysed working conditions and determined their impact on employee performance. This also corroborates the finding of Marinette (2017), who investigated the connection between working conditions and teacher attrition in secondary schools in Cameroon's South West region. The study indicated that an unfavourable work environment significantly contributes to teacher attrition.

The finding further shows that the physical work environment has a positive and significant effect on employee performance. The coefficient for physical work environment is 0.00817, which is statistically significant at the 1% level ($p<0.001$). This reveals that improvements in the physical work environment, such as better infrastructure, equipment, and facilities, are associated with higher levels of employee performance. The magnitude of the effect, though smaller than the overall working condition, is still positive and statistically significant. Harefa & Siboro (2024) also analysed the impact of the work environment on employee performance. Their findings revealed a robust positive relationship between the work environment and employee performance. The findings indicated that workload has a positive and significant effect on employee performance.

The finding reveals that workload has a positive and significant effect on employee performance. The coefficient for workload is 0.0154, which is statistically significant at the 1% level ($p<0.001$). This shows that a lower workload is associated with higher levels of employee performance. The magnitude of the effect is relatively larger compared to the physical work environment, suggesting that workload management is an important factor in improving performance. Ahmad et al. (2019) explored the impact of workload on job performance. Their findings show that the short-term impact of workload on job performance can be both positive and negative. For the long-term impact, findings indicated that job performance is more negatively affected by workload.

The finding further shows that job stress has a positive and significant effect on employee performance. The coefficient for job stress is 0.0126, which is statistically significant at the 1% level ($p<0.001$). This implies that lower levels of job stress are associated with higher levels of employee performance. This means that excessive amount of stress negatively affects employee performance. The magnitude of the effect is positive and significant, highlighting the importance of managing job-related stress in the educational sector. The result of this study aligns with that of Fonkeng (2018), who examined the effect of work stress on employee performance.

The finding further shows that physical ventilation intensity and lighting positively and significantly affect employee performance. The coefficient for ventilation intensity and lighting is 0.0165, which is statistically significant at the 1% level ($p<0.001$). This reveals that improvements in ventilation and lighting conditions are associated with higher levels of employee performance. The magnitude of the effect is relatively larger, indicating the importance of these environmental factors in the educational setting. Widjanarti *et al*. 2019) also analysed the impact of light intensity on worker performance. The result of their study showed that there was a significant correlation between light intensity and workers' performance.

The finding further shows that office layout and design positively and significantly affect employee performance. The coefficient for office layout and design is 0.0154, which is statistically significant at the 1% level ($p<0.001$). This indicates that better office layout and design are associated with higher levels of employee performance. The magnitude of the effect is similar to that of workload, highlighting the importance of the office layout in the educational sector. The results were similar to those of Ahmad et al. (2020), who investigated the impact of open and enclosed plan office layouts on employees' productivity.

CONCLUSION AND RECOMMENDATIONS

This research aimed at examining how working conditions influence employee performance in the educational sector of Yaoundé, Cameroon. A quantitative research design was employed using a questionnaire as the primary data collection tool. The gathered data was analysed using the ordinary least squares technique (OLS) with STATA. The coefficient for the working condition variable is 0.962 in the ML model and 0.800 in the OLS model, both statistically significant at the 1% level ($p<0.001$). This study's findings indicated that various working conditions significantly impact employee performance in the educational field. The coefficients suggest that improving working conditions can lead to enhanced employee

performance. To implement these findings into actionable policies, educational institutions should follow a multi-step strategy:

Firstly, they should carry out a thorough evaluation of current working conditions in the educational sector. This will enable the educational institutions to pinpoint areas which need improvement.

Secondly, they should frequently assess teachers' workloads and develop workload management strategies**.** The school administrators should conduct regular assessments in order to make sure that teachers' workloads are manageable. This will encourage balance and lessen job stress. Employee performance can be enhanced by putting tactics like fair job distribution among employees, flexible scheduling, support systems and explicit instructions on how to prioritise important activities into practice.

Thirdly, educational institutions should upgrade infrastructures and equipment to create a supportive physical environment. They should make investments in infrastructure upgrades by making sure that the facilities are up to date, secure, and suitable for instruction. This has the potential to improve teachers' effectiveness and personal development.

Furthermore, they should offer programs for education and professional development. School institutions should host seminars and workshops that improve the educators' abilities and self-assurance in their positions. This can help to improve teachers' personal development and performance.

Above all, educational institutions should increase teachers' autonomy**.** Educational institutions should support teachers in adapting their methods to each student's specific needs while providing the tools they require. Teachers may become more satisfied with their jobs and perform better as a result.

LIMITATIONS

The study's sample was drawn from public secondary schools in the Centre Region, and respondents were selected using stratified sampling with Yamane's algorithm. Although this method produced a large sample, it does not include private schools, elementary, and secondary educational institutions in Cameroon. Consequently, rather than representing the broader Cameroonian educational system, the results reflect the unique administrative, cultural, and resource conditions of the Centre Region, and thus caution should be exercised when generalising the findings nationally. The study was limited to a quantitative research approach, which restricts the depth of analysis that qualitative methods could provide.

Concerns regarding measurement error, construct validity, and comparability with other studies are raised by the fact that some scales used to assess working conditions,

psychological well-being, and employee performance were modified from instruments with proven psychometric qualities while others were validated in the Cameroonian context. Additionally, the teachers' performance measures used in this study may be susceptible to typical method bias and social desirability.

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REFERENCES

Ahmad, R., Lee, M. Y., Othman, A. E. A., Shaminan, A. S., Heng, C. S., Sumilan, H., & Ahmad, A. I. A. (2019). The impact of workload on job performance among doctors in Malaysian public hospitals. A case study. *International Journal of Business and Society*, *20*(3), 1276-1293. Ahola, K., & Hakanen, J. (2007). Job strain, burnout, and depressive symptoms: A prospective study among dentists. *Journal of affective disorders*, *104*(1-3), 103-110.

Ahmad, N., Jamin, A., Beta, R. M. D. M., Ismail, S., Sakarji, S. R., & Zain, Z. M. (2020). The importance of office layout for employee productivity. *Dinamika Pendidikan*, *15*(2), 164-171.

Alfes, K., Veld, M., & Fürstenberg, N. (2021). The relationship between perceived high-performance work systems, combinations of human resource well-being and human resource performance attributions and engagement. *Human Resource Management Journal*, *31*(3), 729-752.

Ali, A. Y. S., Ali, A. A., & Adan, A. A. (2013). Working conditions and employees' productivity in manufacturing companies in sub-Saharan African context: Case of Somalia. *Educational research international*, *2*(2), 67-78.

Ali, B. J., & Anwar, G. (2021). An empirical study of employees' motivation and its influence job satisfaction. *Ali, BJ, & Anwar, G.(2021). An Empirical Study of Employees' Motivation and its Influence Job Satisfaction. International Journal of Engineering, Business and Management*, *5*(2), 21-30.

Alkhodary, D. A. (2023). Exploring the relationship between organizational culture and well-being of educational institutions in Jordan. *Administrative Sciences*, *13*(3), 92.

Anasori, E., Bayighomog, S. W., De Vita, G., & Altinay, L. (2021). The mediating role of psychological distress between ostracism, work engagement, and turnover intentions: An analysis in the Cypriot hospitality context. *International Journal of Hospitality Management*, *94*, 102829.

Andrade, T. F. D., Barbosa, S. D. C., Souza, S., & Moreira, J. S. (2015). Human values and job satisfaction of teachers and technical-administrative staff at a public university. Revista Psicologia Organizações e Trabalho, 15(4), 397-406.

Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2023). Job demands-resources theory: Ten years later. Annual Review of Organizational Psychology and Organizational Behavior, 10, 25-53.

Benevene, P., De Stasio, S., & Fiorilli, C. (2020). Well-being of school teachers in their work environment. *Frontiers in Psychology*, *11*, 1239.

Brenner P (2004). Workers physical surrounding. Impact Bottom Line Accounting: Smarts Pros.com Bronkhorst, B. (2015). Behaving safely under pressure: The effects of job demands, resources, and safety climate on employee physical and psychosocial safety behavior. *Journal of safety research*, *55*, 63-72.

Chandrasekar, K. (2011). Workplace environment and its impact on organisational performance in public sector organisations. *International journal of enterprise computing and business systems*, *1*(1), 1-19.

Cochran, W. G. (1977). Sampling techniques. *Johan Wiley & Sons Inc*.

Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.

Croucher, R., Stumbitz, B., Quinlan, M., & Vickers, I. (2013). Can better working conditions improve the performance of SMEs? An international literature review.

Darling-Hammond, L. (2016). Research on teaching and teacher education and its influences on policy and practice. *Educational Researcher*, *45*(2), 83-91.

Dias, R. I., Webster, M. S., & Macedo, R. H. (2015). Helping enhances productivity in campo flicker (Colaptes campestris) cooperative groups. *The Science of Nature*, *102*, 1-9.

Elaho, O. B., & Odion, A. S. (2022). The Impact of Work Environment on Employee Productivity: A Case Study of Business Centers in University of Benin Complex. *Amity Journal of Management Research*, *5*(1), 782-797.

Elias, N., & Moise, A. G. (2023). Working Conditions and Performance of Employees in an Organizational Environment. A study Applied to Teachers in Public Secondary Schools in the City of Maroua in Cameroon. *Journal of Education and Practice,*

Ferrara, B., Pansini, M., De Vincenzi, C., Buonomo, I., & Benevene, P. (2022). Investigating the role of remote working on employees' performance and well-being: an evidence-based systematic review. *International Journal of Environmental Research and Public Health*, *19*(19), 12373.

Flanagan, R. J. (2006). *Globalization and labor conditions: working conditions and worker rights in a global economy*. Oxford University Press.

Fonkeng, C. (2018). Effects of job-stress on employee performance in an enterprise: A microfinance institution in Cameroon.

Fogaça, N., COELHO JUNIOR, F. A., Paschoal, T., Ferreira, M. C., & Torres, C. C. (2021). Relationship between job performance, well-being, justice, and organizational support: A multilevel perspective. *RAM. Revista de Administração Mackenzie*, *22*, eRAMG210108.

González-Morales, M.G., et al. (2012) Perceived Collective Burnout: A Multilevel Explanation of Burnout. Anxiety, Stress Coping, 25, 43-61.

Guest, D. E. (2017). Human resource management and employee well-being: Towards a new analytic framework. *Human resource management journal*, *27*(1), 22-38.

Harefa, M. H., & Siboro, B. (2024). The impact of the work environment on the productivity of the pastry department employees at the apurva kempinski bali.

Hsiao, J. M., & Lin, D. S. (2018). The impacts of working conditions and employee competences of fresh graduates on job expertise, salary and job satisfaction. *Journal of Reviews on Global Economics*, *7*, 246-259.

Huhtala, H., & Parzefall, M. (2007). A Review of Employee Wellbeing and Innovativeness: An Opportunity for Mutual Benefit. Creativity and Innovation Management, 16, 299-306.

James, B., Karoya, E., Nalusiba, R., Nyiraguhirwa, F., Nassiwa, A., & Nduhura, T. (2024). Working conditions, job stress and job performance of employees in public universities of Uganda. *International Journal of Academic Management Science Research*, *8*, 104-117.

Kumar, P., Kumar, N., Aggarwal, P., & Yeap, J. A. (2021). Working in lockdown: the relationship between COVID-19 induced work stressors, job performance, distress, and life satisfaction. *Current Psychology*, 1-16.

Leedy, P. D., & Ormrod, J. E. (2001). Practical Research: Planning and Design (7th ed.). Upper Saddle River, NJ and Thousand Oaks, CA: Merrill Prentice Hall and SAGE.

Leidner, C. M., & Roch, C. H. (2025). Examining US teachers' working conditions in online schools. *Educational Policy*, *39*(2), 390-427.

Iis, E. Y., Wahyuddin, W., Thoyib, A., Ilham, R. N., & Sinta, I. (2022). The effect of career development and work environment on employee performance with work motivation as intervening variable at the office of agriculture and livestock in Aceh. *International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS)*, *2*(2), 227-236.

Lisa, O. (2019). The effect of entrepreneurial behavior and organizational innovation on msmes performance. *JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen*, *16*(2), 160-172.

Lohr, S. L. (2021). *Sampling: design and analysis*. Chapman and Hall/CRC.

Lutfah, A., Hariyati, N., & Handayaningrum, W. (2019). Improved teacher performance through work culture and environment. *International Journal for Educational and Vocational Studies*, *1*(8), 859-863.

Marecki, Ł. (2023). Impact of work-life balance on employee productivity and well-being. *Journal of Management and Financial Sciences*, (50), 165-178.

Marinette, B. (2017). The impact of working conditions on teachers attrition in secondary schools in the south west region of Cameroon. *International Journal of Education and Research*, *5*(6), 59-78.

Mayende, T. S., & Musenze, I. A. (2018). Ethical leadership and staff retention: The moderating role of job resources in Uganda's healthcare sector. *SA Journal of Industrial Psychology*, *44*(1), 1-10.

Mba, A. (2021). Work Environment and Employee Performance in the Public Service: A Study of Chukwuemeka Odumegwu Ojukwu University, Anambra State, Nigeria. *ANAMBRA STATE, NIGERIA (December 4, 2021)*.

Monteiro, E., & Joseph, J. (2023). A review on the impact of workplace culture on employee mental health and well-being. *International Journal of Case Studies in Business, IT and Education (IJCSBE)*, *7*(2), 291-317.

Nahrgang, J.D., Morgeson, F.P. and Hofmann, D. (2011) Safety at Work: A Meta-Analytic Investigation of the Link between Job Demands, Job Resources, Burnout, Engagement, and Safety Outcomes. The Journal of Applied Psychology, 96, 71-94.

Nunes, F. G., Oliveira, V. D. C. D., & Nascimento, G. D. (2024). Healthcare professionals' well-being at work: a professional and organizational identity perspective. *Journal of Health Organization and Management*, *38*(6), 905-922.

Obiora, C. A., & Iwuoha, V. C. (2013). Work related stress, job satisfaction and due process in Nigerian public service. *European Scientific Journal*, *9*(20).

Omar, A. S. (2010). Commitment in multinational commercial banks in Kenya.

Opperman C. S. (2002). Tropical business issues.Partner Price Water House Coopers.

Permana, D., Rinawati, N., Titi, T., & Supartini, T. (2023). The Effect of Intrinsic Motivation and Competence on Employee Performance: Study at a Toll Road Development and Operator Company in Bandung. *Majalah Bisnis & IPTEK*, *16*(2), 209-217.

Priya, J., Machani, P., Agyei, I. T., Suryanarayana, N. V. S., Thandayuthapani, S., & Lourens, M. (2023). Effects of performance and target pressure on the psychological well-being of corporate employees. *Journal for ReAttach Therapy and Developmental Diversities*, *6*(8s), 218-227.

Robbins, P.S. and Judge, A.T. (2010). Organizational Behavior. Prentice Hall: Wiley.

Samson, G. N. (2014). Effect of workplace environment on the performance of commercial banks employees in Nakuru town.

Saunders, M., Lewis, P., & Thornhill, A. (2003). Research methods forbusiness students. *Essex: Prentice Hall: Financial Times*.

Serno, C., Bouman, Y. H., Hoed, J. J. D., Kip, H., & de Ruiter, C. (2024). Exploring Therapists' Perspectives on Acute Dynamic Risk Factors in Intimate Partner Violence by Family-Only Perpetrators: A Qualitative Study. *Journal of Family Violence*, 1-13.

Singla, A. (2024). Psychological Factors in Workplace Productivity and Employee Well-Being. *Shodh Sagar Journal of Inspiration and Psychology*, *1*(1), 21-25.

Viac, C., & Fraser, P. (2020). Teachers' well-being: A framework for data collection and analysis. *OECD Education Working Papers*, (213), 0_1-81.

Wang, Y. (2024). Exploring the impact of workload, organizational support, and work engagement on teachers' psychological wellbeing: a structural equation modeling approach. *Frontiers in Psychology*, *14*, 1345740.

Widjanarti, M. P., Setyawan, H., & Qadrijati, I. (2019). The effects of lighting intensity on the productivity of textile workers in Surakarta

Xiyun, S., Fathi, J., Shirbagi, N., & Mohammaddokht, F. (2022). A structural model of teacher self-efficacy, emotion regulation, and psychological wellbeing among English teachers. *Frontiers in Psychology*, *13*, 904151.

Yang, Y., Obrenovic, B., Kamotho, D. W., Godinic, D., & Ostic, D. (2024). Enhancing Job Performance: The Critical Roles of Well-Being, Satisfaction, and Trust in Supervisor. *Behavioral Sciences*, *14*(8), 688.