



Impact of Organizational Culture on Organizational Productivity in Nigerian Tertiary Institutions

Saidu Mohammed Yusuf, Wasilu Suleiman
Department of Business Administration,
Faculty of Management Sciences, Bauchi State University, Gadau

ABSTRACT

This study investigated the impact of organizational culture on organizational productivity in Nigerian tertiary institutions. Organizational culture was conceptualized as the independent variable while organizational productivity the dependent variable. When examining the variables, the study used a cross-sectional survey. The primary data source was an independently performed questionnaire. Selected Universities and Polytechnics within North East states of Nigeria provided the population for the study, which included 1,970 academic staff members. 314 people were selected from this population as samples using the Krejcie and Morgan (1970) table. The convenient sample technique was employed as the sampling method in this investigation. The reliability of the study instrument was established using the Cronbach Alpha coefficient, with all items scoring over 0.70, and was confirmed by the supervisor's review and approval. Both descriptive and inferential statistical methods were used to analyse and report the data that were collected. The linear regression was used to test the hypotheses. The tests were run with a 0.05 threshold of significance and a 95% confidence interval. The results showed that organizational culture had a significant impact on organizational productivity. The paper recommended that management of tertiary institutions should encourage a positive culture which fosters collaborative and engaged workforce. When employees feel a sense of belonging, trust, and alignment with company values, they are more likely to be motivated, innovative, and productive.

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INTRODUCTION

Organizational productivity refers to the efficiency and effectiveness with which an organization utilizes its resources to achieve its objectives. Organizational productivity is the link between inputs and outputs and increases when an increase in output occurs with a lesser than comparative increase in input. It also occurs when equal amount of output is generated using fewer inputs, Boehm, Flaaen & Pandalai-Nayar, (2019).

Productivity is used to measure the performance of organizations. According to Tauouab and Issor (2019), productivity can be

seen as a measure of performance that encompasses both efficiency and effectiveness. In the same vein, productivity levels say a lot about the prosperity of a nation or organization. Cook and Davíðsdóttir, (2021) stated that the prosperity of a nation as well as social and economic welfare of its citizens is determined by the level of effectiveness and efficiency of its various sub components.

Organizational culture is a pervasive force that shapes the behaviors, attitudes, and values of individuals within an institution (Akpa, Asikhia&Nneji, 2021). In Nigerian tertiary institutions, where the pursuit of knowledge and

Corresponding author: Saidu Mohammed Yusuf

✉ sayumd@gmail.com

Department of Business Administration, Bauchi State University, Gadau, Bauchi State.

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academic excellence is paramount, the impact of organizational culture on productivity is of particular significance. The culture prevailing within these institutions can either foster an environment of innovation, collaboration, and high performance, or it can hinder progress, leading to inefficiencies and reduced productivity (Kafi& Adnan, 2022).

In the context of Nigerian tertiary institutions, productivity can be measured through various indicators, including research output, student satisfaction, graduation rates, and institutional reputation. By focusing on organizational culture, organizations can create an environment conducive to productivity enhancement, leading to improved educational outcomes, research impact, and overall institutional success.

Organizational productivity is one of the critical issues around the globe. Incidentally, this issue has cut across sectors and endeavors. For instance, research studies in different areas and disciplines have pushed issues around productivity and performance to the front burner (Bilan et al., 2020). It is observed in many countries that, organizational productivity studies have become popular over the years (Dien, 2020). Nigeria as a stakeholder in the global community is not an exception. For example, organizational productivity has been on increase in the Nigerian education sector. In Nigeria, tertiary institutions' managements are always faced with the problem of morale and performance. This has been reiterated by Nigerian educational policy makers and other stakeholders (Lee, 2022; Padave et al., 2021). The highlighted scenario calls for a need to know the factors that affect employee performance. Doing this will enable the institutions' willing leadership to take the necessary policies to improve the performance of employees to match the institutions' expectations, vision and mission (Newman & Ford, 2021; Chanana, 2021).

The Nigerian higher education landscape is diverse, encompassing universities, polytechnics, and colleges of education, each with its unique challenges and opportunities (Ogunode, 2023). The impact of organizational

culture is especially pronounced in this sector due to its role in shaping the experiences of both academic and non-academic staff, as well as students. It influences the quality of teaching, research output, administrative effectiveness, and the overall reputation of these institutions (Shehzadi, Nisar, Hussain, Basheer, Hameed & Chaudhry, 2021).

This study delves into the intricate relationship between organizational culture and productivity within Nigerian tertiary institutions. It seeks to explore how the prevailing culture, whether positive or negative, influences the motivation, engagement, and performance of individuals and teams within these academic settings. By examining the nexus between culture and productivity, this research aims to provide insights and recommendations that can guide institutional leaders, policymakers, and stakeholders in fostering a conducive culture that enhances organizational productivity and contributes to the advancement of higher education in Nigeria.

The study would provide answer to this research question:

- i. What impact does organizational culture have on organizational productivity in Nigerian tertiary institutions?

LITERATURE REVIEW

Theoretical Framework

Concept of Organizational Productivity

Productivity can be referred to as the quantity of work that is attained in a unit of time by means of the factors of production. These factors include technology, capital, entrepreneurship, land and labour. It is the link between inputs and outputs and increases when an increase in output occurs with a lesser than comparative increase in input. It also occurs when equal amount of output is generated using fewer inputs (Boehm, Flaaen&Pandalai-Nayar, 2019).

Tauwab and Issor (2019) were of the perspective that productivity can be seen as a measure of performance that encompasses both efficiency and effectiveness. It can also be

Corresponding author: Saidu Mohammed Yusuf

✉ sayumd@gmail.com

Department of Business Administration, Bauchi State University, Gadau, Bauchi State.

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referred to as the ratio of output or production capacity of the workers in an organization. It is the correlation that exists between the quantity of inputs and outputs from a clearly defined process. The performance of a business which determines its continued existence and development is largely dependent on the degree of productivity of its workers. Cook and Davíðsdóttir, (2021) stated that the prosperity of a nation as well as social and economic welfare of its citizens is determined by the level of effectiveness and efficiency of its various sub components.

Productivity is a total measure of the efficiency or capacity to transform inputs that is raw materials into finished products or services. More precisely, productivity is a measure that indicates how well essential resources are used to accomplish specified objectives in terms of quantity and quality within a given time frame. It is suitable when measuring the actual output produced compared to the input of resources, taking time into consideration. Hence, productivity ratios indicate the extent at which organizational resources are effectively and efficiently used to produce desired outputs. Efficiency takes into account the time and resources required to execute a given task. Therefore, it can be concluded that effectiveness and efficiency are significant predictors of productivity (Bai, Li, Kong, Han, Li & Qin, 2019).

Concept of Organizational Culture

According to Stein (2021), although culture has traditionally been viewed as one facet of anthropology, classifying organizational culture as purely anthropological is somehow a too narrow approach, as it emerged as an interdisciplinary phenomenon with contributions from psychology, sociology, anthropology and social psychology (Jardon&Martinez-Cobas, 2019). Hofstede (2019) defines culture as the collective programming of the mind, distinguishing the members of group or category of people from others. According to him, national and organizational cultures are phenomena of different structures. At the national level, cultural differences reside in values, while, at the

organizational level, they reside in practices (Chanana, 2021),

Moreover, practices are the visible parts of culture, whereas values are the invisible parts. Therefore, practices are subject to planned change, whereas values, although they do change, they cannot be subject to planned change (Chanana, 2021). Spicer (2020), defines organizational culture as everything that people have, think and do as members of their society. Organizational culture is a concept that represents the character of an organization, which directs employees in their daily working relationships and guides them on how to behave and communicate within the organization. As well as manifesting in an organizations' structure Spicer, 2020). Paais and Pattiruhu (2020) define organizational culture as an important factor that influences the performance of an organization.

Effect of Organizational Culture on Organizational Productivity

Mohammadi, (2020) conducted a study on the Organizational culture and its impact on organizational productivity in district 19 of the Municipality of Tehran, Iran, based on Denison model. Using 148 employees as sample size, results of test carried out showed that in terms of employees of the study area, the dimension of adaptability and mission in organizational culture have an unfavorable situation, and the dimension of involvement in and compatibility are also in a moderate position. He therefore recommends further research in other sectors in order to gain an overview of the organizational culture governing all the sectors.

Organizational culture is a derivative of various administrative factors. It is defined as a system consisting of four components, including values, assumptions, beliefs and norms (Burhanuddin, 2019). These components are introduced and embraced by individuals who subsequently unite and connect them as part of the organization in which they live and work. This culture can be manifested on four levels: artifacts, perspectives, values and assumptions (Wagstaff& Burton-Wylie, 2020).

Corresponding author: Saidu Mohammed Yusuf

✉ sayumd@gmail.com

Department of Business Administration, Bauchi State University, Gadau, Bauchi State.

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Culture difference within the workplace has also been found to impact leadership efficacy (Budur, 2020). This phenomenon affects how members and leaders work in accomplishing their organization missions and objectives (Wagstaff & Burton-Wylie, 2020). University leaders must develop effective organizational cultures that address educational needs nationwide, including ecological and social issues (Mzangwa, 2019).

Okwata, Wasike and Andemariam, (2022) assessed the effect of culture change on organizational performance at Kenya Wildlife Service Nairobi National Park. The study was guided by Geert Hofstede's theory as the framework for cross-cultural communication, Edgar Schein's model as the cultural inventions by a specific group, and the Denison dimension model theory. Using descriptive survey research

design, on a target population of 100 employees drawn from various departments at Kenya Wildlife Service (KWS) Nairobi National Park, a structured questionnaire was used for data collection to effectively respond to the research problem. The study revealed that majority (35.9%) of the respondents were convinced that management ensures that old habits that are not effective are dropped and at the same time the management at KWS encourages employees to adapt to changes and be flexible, especially when the work environment is changing. The study concludes that organizational culture aligned with vision, goals, and company strategies guides employees towards a shared purpose and improves an organization's capacity to perform excellently.

This arguments leads to the following hypothesis

HO₁: Organizational culture does not significantly impact organizational productivity

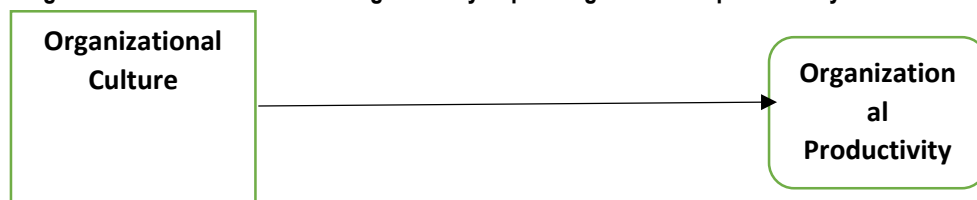


Figure 1: Conceptual Framework Showing the Relationship between Study Variables.

METHODOLOGY

The study's data collection method was a cross-sectional survey. Selected Universities and Polytechnics within North Eastern states provided the population for the study, which included 1,970 academic staff members. 314 people were selected from this population as samples using the Krejcie and Morgan (1970) table. However, McNamara, Zisser, Beevers and Shumake, (2022) argued that to obtain adequate data, researchers should increase the sample

size to compensate for likely non-response. Therefore, based on statistical requirements and consideration of compensating for non-responses, the final sample size was 400. The study used a convenience sampling. This is due to the large sample size needed in light of the limitations in time and level of accessibility to the population. The SPSS Package version 23 was used for data analysis and hypothesis testing. Descriptive statistics and Spearman's rank order correlation were used.

Table 1: Reliability Statistics for the Instruments

S/No	Dimensions/Measures of the study variable	Number of items	Number of cases	Cronbach's Alpha
1	Organizational Culture	7	356	0.789
2	Organizational Productivity	7	356	0.819

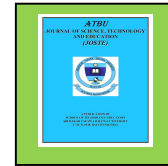
Source: Research Data, 2023

Corresponding author: Saidu Mohammed Yusuf

✉ sayumd@gmail.com

Department of Business Administration, Bauchi State University, Gadau, Bauchi State.

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All of the dimensions and measures in our study had significant reliability estimates greater than 0.7 Cronbach's Alpha.

The null forms of the bivariate hypotheses Ho1 was used in the hypothesis test. We used the linear regression to conduct the analysis. The probability of accepting or rejecting the null hypotheses at ($p > 0.05$) is determined by the significance level of 0.05.

DATA ANALYSIS AND RESULTS
Bivariate Analysis

Table 2: Model Summary of the effect of Organizational Culture on Organizational Productivity

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.643 ^a	.413	.411	.56779

a. Predictors: (Constant), OrganizationalCulture

R square .413 which is approximated to $R^2 = .411$. This means the predictor has 41% variance with the dependent variable.

Table 3: ANOVA for the effect of Organizational Culture on Organizational Productivity

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	80.312	1	80.312	249.118	.000 ^b
	Residual	114.125	354	.322		
	Total	194.437	355			

a. Dependent Variable: OrganizationProductivity

b. Predictors: (Constant), OrganizationalCulture

F (249.118), P value = 0.000 which is < 0.05 hence shows a moderate significant relationship

Table 4: Coefficients for the effect of Organizational Culture on Organizational Productivity

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.008	.133		15.110	.000
	OrganizationalCulture	.521	.033	.643	15.783	.000

a. Dependent Variable: OrganizationProductivity

Source: SPSS Output

Model Summary Table shows R value of 0.643; R square .413 which is approximated to $R^2 = .411$ Anova table (Test using Alpha 0.5) shows F = 249.188, P = 0.000, that is, < 0.05 , mean square of 80.312 and Coefficient Table (Predictor Test at Alpha 0.05); t value of 15.110 and 15.783 with std. error of 0.133 and 0.033.

The result of the model showed R value of .643 which is the coefficient of determination are shown in Table 4.18, 4.19 and 4.20. This simply depict that about 41% of the employee productivity is accounted for by organizational culture. Therefore, based on

observed findings the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, Organizational culture has a significant impact on organizational productivity.

DISCUSSION OF FINDINGS

The study examined the impact of Organizational Culture and Productivity in Nigerian tertiary institutions. The finding revealed that Organizational Culture significantly impacted Productivity. This study agrees with the findings of Mohammadi, (2020) who conducted a study on the Organizational culture and its impact on

Corresponding author: Saidu Mohammed Yusuf

✉ sayumd@gmail.com

Department of Business Administration, Bauchi State University, Gadau, Bauchi State.

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organizational productivity in district 19 of the Municipality of Tehran, Iran, based on Denison model. The dimension of adaptability and mission in organizational culture have an unfavorable situation, and the dimension of involvement in and compatibility are also in a moderate position. He therefore recommends further research in other sectors in order to gain an overview of the organizational culture governing other sectors.

Also, the study agrees with Akpa, Asikhia and Nneji (2021) who investigated the factors influencing employees' belief in the care by their organization in Canada reported that employees' felt that their organization cared about their success and this increases their commitment to the organization, help the organization accomplish its goals and make them to be more loyal to their organizations. Hence, the felt organizational culture is seen in job enrichment, organizational rewards, promotions, appreciation and involvement in policy formulation.

Equally, Blouch and Azeem (2019) investigated the link between workplace justice and organizational performance in Pakistan. Their findings revealed that organizational culture significantly influenced the organizational citizen behaviour and had mediating role between organizational justice and organizational citizenship behaviour.

Furthermore, the study also aligns with the findings of Okwata, Wasike and Andemariam, (2022) assessed the effect of culture change on organizational performance at Kenya Wildlife Service Nairobi National Park. The study was guided by Geert Hofstede's theory as the framework for cross-cultural communication, Edgar Schein's model as the cultural inventions by a specific group, and the Denison dimension model theory. Using descriptive survey research design, on a target population of 100 employees drawn from various departments at Kenya Wildlife Service (KWS) Nairobi National Park, a structured questionnaire was used for data collection to effectively respond to the research problem. The study concludes that organizational culture aligned with vision, goals, and company strategies guides employees towards a shared

purpose and improves an organization's capacity to perform excellently.

CONCLUSION AND RECOMMENDATION

In conclusion, the impact of organizational culture on organizational productivity in Nigerian tertiary institutions is a complex and multifaceted relationship. The research and analysis have revealed that a positive organizational culture characterized by values such as collaboration, innovation, transparency, and a strong commitment to educational excellence can significantly enhance productivity within these institutions. When employees and academic staff feel a sense of belonging, engagement, and alignment with the institution's goals and values, they are more likely to perform at their best, leading to improved outcomes in teaching, research, and administrative functions.

The study recommends that the management of tertiary institution should encourage a positive culture which fosters collaborative and engaged workforce. When employees feel a sense of belonging, trust, and alignment with organization's values, they are more likely to be motivated, innovative, and productive.

REFERENCES

- Akpa, V. O., Asikhia, O. U., &Nneji, N. E. (2021). Organizational culture and organizational performance: A review of literature. *International Journal of Advances in Engineering and Management*, 3(1), 361-372.
- Bai, S., Li, M., Kong, R., Han, S., Li, H., & Qin, L. (2019). Data mining approach to construction productivity prediction for cutter suction dredgers. *Automation in Construction*, 105, 102833.
- Blouch, R., &Azeem, M. F. (2019). Effects of perceived diversity on perceived organizational performance: Mediating role of perceived organizational justice. *Employee Relations: The International Journal*, 41(5), 1079-1097.

Corresponding author: Saidu Mohammed Yusuf

✉ sayumd@gmail.com

Department of Business Administration, Bauchi State University, Gadau, Bauchi State.

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- Boehm, C. E., Flaaen, A., &Pandalai-Nayar, N. (2019). Input linkages and the transmission of shocks: Firm-level evidence from the 2011 Tōhoku earthquake. *Review of Economics and Statistics*, 101(1), 60-75.
- Burhanuddin, B. (2019). The scale of school organizational culture in Indonesia. *International Journal of Educational Management*, ahead-of-print(ahead-of-print), 1-14. doi: 10.1108.
- Chanana, N. (2021). Employee engagement practices during COVID-19 lockdown. *Journal of public affairs*, 21(4), e2508.
- Cook, D., &Davíðsdóttir, B. (2021). An appraisal of interlinkages between macro-economic indicators of economic well-being and the sustainable development goals. *Ecological Economics*, 184, 106996.
- Hofstede, G. (2019). Cultural predictors of national negotiation styles. In *Processes of international negotiations* (pp. 193-201). Routledge.
- Jardon, C. M., &Martinez-Cobas, X. (2019). Leadership and organizational culture in the sustainability of subsistence small businesses: An intellectual capital based view. *Sustainability*, 11(12), 3491.
- Kafi, M. A., & Adnan, T. (2022). Empowering Organizations through IT and IoT in the Pursuit of Business Process Reengineering: The Scenario from the USA and Bangladesh. *Asian Business Review*, 12(3), 67-80.
- Mohammadi, S. (2020). Organizational culture and its impact on organizational productivity. *International Journal of Human Capital in Urban Management (IJHCUM)*, 5(3), 267-276.
- Mzangwa, S. T. (2019). Transformation as part of evolving organisational culture in the South African higher education institutions. *Cogent Social Sciences*, 5(1), 1638635.
- Ogunode, N. J. (2023). Challenges Hindering Academic Staff in Nigerian Tertiary Education from Securing Local and International Grants: A Descriptive Study. *Indonesian Journal of Innovation Studies*, 25.
- Okwata, P. A., Wasike, S., &Andemariam, K. (2022). Effect of Organizational Culture Change on Organizational Performance of Kenya Wildlife Service Nairobi National Park. *Administrative Sciences*, 12(4), 139.
- Paais, M., &Pattiruhu, J. R. (2020). Effect of motivation, leadership, and organizational culture on satisfaction and employee performance. *The Journal of Asian Finance, Economics and Business*, 7(8), 577-588.
- Shehzadi, S., Nisar, Q. A., Hussain, M. S., Basheer, M. F., Hameed, W. U., & Chaudhry, N. I. (2021). The role of digital learning toward students' satisfaction and university brand image at educational institutes of Pakistan: a post-effect of COVID-19. *Asian Education and Development Studies*, 10(2), 276-294.
- Spicer, A. (2020). Organizational culture and COVID-19. *Journal of Management Studies*, 57(8), 1737-1740.
- Stein, H. F. (2021). *Listening deeply: An approach to understanding and consulting in organizational culture*. Routledge.
- Wagstaff, C. R., & Burton-Wylie, S. (2020). Organizational culture in sport. In *The Routledge International Encyclopedia of Sport and Exercise Psychology* (pp. 391-404). Routledge.

Corresponding author: Saidu Mohammed Yusuf

✉ sayumd@gmail.com

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