EFFECT OF WORKPLACE DIVERSITY ON EMPLOYEE PRODUCTIVITY OF MANUFACTURING FIRMS IN ABUJA-FEDERAL CAPITAL TERRORY, NIGERIA

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Abstract

INTRODUCTION

Despite the recognized importance of diversity in enhancing employee productivity, many manufacturing firms in Abuja-FCT, struggle to effectively leverage the potential benefits of a diverse workforce and this propelled the need for this study. The study main objective was to examined the effect of ethnic diversity and gender diversity on employee productivity of manufacturing firms. Survey designed was adopted wherein, a sample of 421 employee was drawn by using Cochran (1970) for infinite population. The sample was selected using purposive sampling technique. Data was collected using a five-point Likert scale questionnaire and analyzed using the Partial Least Squares Structural Equation Modelling (PLS-SEM). The findings revealed that ethnic diversity have negative and significant effect on employee productivity while gender diversity had significant positive effect on employee productivity. Based on the foregoing, the study recommends among others that managers should adopt flexible work policies that accommodate various cultural practices and observances which will enhancing employee satisfaction and also develop comprehensive diversity and inclusion programs, such initiatives celebrate cultural differences and promote a sense of belonging among all employees, creating a more harmonious work environment.

Keywords: Ethnic Diversity, Employee Productivity, Gender Diversity, Workplace Diversity

Employee productivity stands as a cornerstone of organizational success, serving as a critical metric for assessing workforce efficiency and overall company performance. In an increasingly globalized and competitive business landscape, organizations are continually seeking ways to enhance employee productivity to maintain a competitive edge (Syed & Ozbilgin, 2019). Productivity, often defined as the ratio of output to input, encompasses not only quantitative measures but also qualitative aspects such as creativity, innovation, and problem-solving capabilities (Sherf & Morrison, 2020). These qualitative elements have gained prominence in the knowledge-based economy, where intellectual capital often determines organizational success.

In Africa, the manufacturing sector plays a vital role in driving economic development and reducing reliance on commodity exports (Onyije, 2021). However, African manufacturing firms often face unique challenges, including infrastructure deficits, limited access to finance, skills gaps, and policy inconsistencies (Guillaume et al., 2017).

Nigeria known to be the giant of Africa with a population of over 180 million is characterized by people of diverse languages, ethnic groups and religious affiliation. More than half the population consists of people of working age (Okechukwu & Agbaji, 2022). Hence, there is a large pool of talent of which organizations generally and manufacturing industries in particular draw from to achieve its goals. To manage the workforce, managers have created diversity policies that are in line with the Labour Act and other laws that have been put in place to protect employees from discrimination because of his/her social categorization (Idris et al, 2020). However, Oyewunmi, (2022) opined that some organizations in a bit escape lawsuit or other legal actions and to also put on a public show that makes them gain good corporate image, pretend to embrace diversity rather than show a genuine desire for it by demonstrating true commitment to the principles of diversity and inclusion.

The contemporary workplace is marked by increasing diversity, reflecting broader societal changes and globalization trends. Workplace diversity refers to the variety of differences between people in an organization, encompassing visible and invisible characteristics (Mor Barak, 2015). The contemporary workplace is characterized by rapid technological advancements, shifting demographic patterns, and

evolving societal norms, all of which contribute to a more diverse workforce. This diversity, manifesting in various forms such as gender, ethnicity, age, and functional background, has become a subject of intense scrutiny in organizational research. The relationship between workplace diversity and employee productivity has emerged as a focal point of investigation, with scholars and practitioners alike seeking to understand the complex interplay between these variables (Guillaume et al., 2017).

The interplay between these diverse elements and employee productivity is complex and multifaceted. While diversity can potentially enhance creativity, innovation, and problem-solving capabilities all of which contribute to productivity it can also present challenges in terms of communication, conflict resolution, and team cohesion (van Knippenberg et al., 2004; Guillaume et al., 2017). The success of diversity initiatives in improving productivity often depends on various contextual factors, including organizational culture, leadership practices, and diversity management strategies (Syed & Ozbilgin, 2019). There are several dimensions used in assessing workplace diversity, thus this study will focus on the dimensions used in the studies of Agbaeze et al. (2023) and also Kundu and Mor, (2020), they measured workplace diversity using gender diversity and ethnic diversity and how it affects employee productivity. Gender diversity refers to the representation and integration of individuals of different genders within an organization. In recent years, gender diversity has received significant attention due to its potential impact on organizational outcomes, including productivity. Research suggests that gender-diverse teams often exhibit enhanced problem-solving capabilities and increased creativity, leading to improved productivity outcomes (Hoobler et al., 2018). For instance, a study by Ellison and Mullin (2014) found that gender diversity was positively associated with increased revenue in professional service firms. However, the relationship is not always straightforward, as some studies have identified potential challenges such as communication barriers and conflicts that may arise in gender-diverse teams, potentially impacting productivity (Metz et al., 2020).

Ethnic diversity pertains to the representation of different racial and ethnic groups within an organization. In an increasingly globalized world, ethnic diversity has become a critical consideration for many organizations. Research indicates that ethnically diverse teams can bring a wealth of perspectives, experiences, and cultural knowledge, potentially enhancing creativity and innovation key components of productivity in knowledge-based economies (Hofhuis et al., 2016). A meta-analysis by Lu et al. (2020) found a positive relationship between ethnic diversity and team creativity, which can translate into improved productivity. However, the authors also noted that the benefits of ethnic diversity were contingent on contextual factors such as organizational climate and leadership styles.

However, it is important to note that much of the existing research on diversity and productivity has been conducted in Western contexts, and the generalizability of these findings to the Nigerian context may be limited. Factors such as cultural norms, socio-economic conditions, and the specific historical context of Nigeria may influence how diversity impacts productivity of Manufacturing firms in Abuja-FCT, Nigeria (George et al., 2016). This underscores the need for context-specific research that considers the unique characteristics of the Nigerian business environment.

Statement of the Problem

The contemporary business landscape is characterized by increasing diversity in the workforce, a trend that presents both opportunities and challenges for organizations. While diversity has the potential to enhance creativity, innovation, and problem-solving capabilities, it also introduces complexities that can impact employee productivity if not properly managed (Guillaume et al., 2017). The relationship between workplace diversity and productivity is multifaceted and often context-dependent, making it a critical area of study for organizational researchers and practitioners alike.

In Abuja-FCT, Nigeria's capital city, the challenges associated with workplace diversity are particularly pronounced. As a rapidly growing metropolis attracting a diverse workforce from various parts of the country and beyond, Organizations face unique challenges in managing diversity and harnessing its potential benefits for productivity (Adeleye et al., 2014). However, there is a dearth of empirical research

examining the specific dynamics of workplace diversity and its impact on employee productivity in this context.

One of the primary challenge's organizations face is the potential for communication barriers and conflicts arising from diverse backgrounds. These issues can lead to misunderstandings, reduced team cohesion, and ultimately, decreased productivity (Metz et al., 2020).

Given these challenges, there is a pressing need for research that examines the specific dynamics of workplace diversity and its impact on employee productivity for firms operating in Abuja-FCT, Nigeria. This research can help to develop effective diversity management strategies that can enhance productivity while addressing the unique challenges posed by the diverse workforce in this rapidly evolving business environment.

Objective of the Study

The general objective of this study is to examine the effect of workplace diversity on employee productivity of manufacturing firms in Abuja-FCT, Nigeria. The specific objectives are:

- i. To examine the impact of gender diversity on employee productivity of manufacturing firms in Abuja-FCT, Nigeria.
- ii. To assess the relationship between ethnic diversity and employee productivity of manufacturing firms in Abuja-FCT, Nigeria.

LITERATURE REVIEW

Workplace Diversity

Workforce diversity is generally viewed as acknowledging, understanding, accepting, valuing and celebrating differences among people with respect to age, class, ethnicity, gender, physical and mental ability, race, sexual orientation, spiritual practice and public assistance status. It refers to a mosaic of people who bring a variety of backgrounds, perspectives, values and benefits as assets to the groups and organizations with which they interact (Cox & Blake, 2020). Workforce Diversity means enabling the employees from diverse background to perform their full potential in an equitable work environment where no group has advantage or disadvantage. Jekelle, (2021) defines workforce diversity as a group of people who bring a variety of backgrounds, styles, perspectives, values and benefits as assets to the organization in which they interact.

Jones and George (2017) defined diversity as variances in time of life, gender, race, creed, sociocultural and economic background, and capacities/incapacities. According to Mande et al. (2020), workplace diversity refers to a collection of individuals that provide different experiences, personalities, opinions, principles, and paybacks to the organization where they are engaged as assets. Scott and Sims (2016) defined workplace diversity as a method for supporting and promoting diversity in the workplace. It refers to the variance in stage of development, sex, beliefs, origin, bodily capability, employee educational status and religious background (Mecheo, 2016). Workforce Diversity is fundamental to the have an immediate noticeable impact; however diverse performance of any organization in this twenty first groups bring a lot of variety through their personality, century; this is because as organizations diversify thought process, processing information, assertiveness, geographically and the free movement of labor across values, energy levels, education levels, experience, goals, national boundaries intensifies, the need to interact political views, lifestyle and social status, among many effectively with broader constituencies becomes critical others traits (Choi et al., 2022). According to Barinua and Poyeri (2022) opined that managing and valuing diversity is a key component of effective people management, which can improve productivity.

Kundu and Mor, (2020) is of the view that unmanaged diversity in the workplace might become an obstacle for achieving organizational goals thus perceiving diversity as a "double-edged sword" meaning that if harnessed correctly, a diverse workforce can transform an organization into a competitive stronghold, however, if mismanaged, dissatisfaction may set in, conflict can become a norm and high

turnover rates may deplete the organization's talent. Workforce variety helps to achieve a higher degree of efficiency, exchange.

Kyalo (2021) according to workforce diversity refers to the similarities and dissimilarities amongst workers within an organization from different socio-cultural backgrounds such as age, gender, ethnicity, disability, origin, religion etc. It can be defined as a strategy which promotes the integration of various human differences, and the use of diversity and inclusion polices as a guide in the workplace (Khan & Jahan, 2021).

This study adopts the definition of Mande et al. (2020) who defines workforce diversity as the mutual and co-existence of employees from different socio-cultural backgrounds within an established organization. The definition of workforce diversity as a group of people who bring a variety of backgrounds, styles, perspectives, values and benefits as assets to the organization in which they interact.

Ethnic Diversity

Ethnicity is considered as shared traits including beliefs, linguistics, faith, and ethnicities that enhance an individual or a group's identity (Ebert & Freibichler, 2023). Ethnic range entails linguistic, religious, racial, and cultural variety. In phrases of enterprise outcomes, including sales, profit, and marketplace percentage, a mild stage of cultural variety has limited influence on the overall performance of a group. Ethnic diversity refers to the presence of individuals from various ethnic backgrounds within a given setting, characterized by differences in cultural practices, languages, and social norms. This diversity can influence interpersonal relationships, workplace dynamics, and ultimately, organizational performance. According to Cox and Blake (2020), ethnic diversity is not merely a demographic characteristic but a complex phenomenon that encompasses various dimensions, including race, culture, and ethnicity. They argue that ethnic diversity can lead to a broader range of perspectives and ideas, facilitating creativity and innovation in the workplace. This perspective aligns with the notion that diverse teams are more likely to generate unique solutions to problems, enhancing overall productivity.

In a similar vein, Zhang et al. (2021) define ethnic diversity as the representation of multiple ethnic groups within an organization, emphasizing the importance of inclusivity in fostering a collaborative environment. Their research highlights that organizations with higher ethnic diversity tend to experience improved employee engagement and satisfaction. This is attributed to the enriched cultural landscape that allows for the sharing of diverse viewpoints and experiences, thereby driving collective problemsolving and decision-making processes. Given the definitions explored, a suitable working definition for this study is that Ethnic diversity is the presence of individuals from various ethnic backgrounds within an organization, each contributing unique cultural perspectives that influence interpersonal interactions, decision-making processes, and overall organizational performance.

Gender Diversity

Gender diversity in the workplace refers to the variety of males and females that are present within an organization. It examines the distribution of men and women across various job roles and leadership levels within a company (Patel, 2023). According to Dreachslin et al. (2022), gender diversity simply describes the degree to which an organization employs a balanced number of men and women. They view it through a numerical lens focused only on headcounts of each gender. A more balanced mix of men and women represents higher levels of gender diversity. However, this definition lacks consideration for how equitably each gender is represented and treated within different roles and positions.

Oyewunmi, (2022) defines gender diversity as the distribution of women and men into both junior and senior job levels. Beyond just the numbers, Herring emphasizes the spectrum of hierarchical levels that each gender occupies. A company demonstrates higher gender diversity if females are well-distributed across entry, mid, and executive level roles rather than concentrated only in junior or support jobs. This perspective incorporates an element of equitable representation and opportunities for career advancement between genders.

A recent contribution by Onyije, (2021) has expanded on previous notions to define gender diversity as the degree to which organizations harness a multiplicity of gender-related behaviors and talents within its workforce reflective of the vast continuum of human personality, behaviors, skills and interests, regardless of biological or self-identified gender. This conceptualization departs from trait-based categorizations of males and females and instead emphasizes maximizing diversity through inclusively fostering a full range of people's innate traits, capabilities and experiences.

This study agrees with Dreachslin et al. (2022) who defines gender diversity in terms of inclusion and belongingness within workplace social systems and networks. They contend that diversity is achieved through establishing an environment where all employees, regardless of gender, feel their individuality is respected and their contributions are valued as important members of cohesive, high-performing teams. A sense of psychological safety and accepted social membership are crucial to realizing the benefits of diverse perspectives and talents.

Employee Productivity

Productivity is a beneficial degree of real output produced compared to the entry of sources and its miles measured throughout the time or in opposition to not unusual place entities (Durga, 2022). Therefore, the productiveness ratio expresses how efficaciously a business enterprise's sources are applied to gain output. Consequently, the income and marketplace percentage of the organization improves. A productivity extent chart may be used to evaluate the overall performance of each worker, team, group, branch, and department within the organization. It may be used as a benchmark within the organization to assess the general productivity of merchandise or services, and is also a useful device aimed at controlling available time and destiny (Sharma & Verma, 2019). Productivity refers to a multitude of manufacturing efficiency measures. A productiveness statistic is an output-to-input ratio utilized in a manufacturing process, also known as output per unit of input. Productivity is a critical aspect of the ability of a company or country to deliver goods. According to Morgeson et al. (2020), employee productivity encompasses the extent to which individuals engage in task-related behaviors that contribute to organizational goals. This definition underscores the role of motivation, engagement, and discretionary effort in shaping productivity. From a resource-based view, employee productivity is conceptualized as the optimal utilization of human capital. Employee productiveness is one of the maximum crucial demanding situations in any organisation's day-by-day management, and without it, the general overall performance of the company might also additionally fail to perform its set goals (Ndichu, 2017). Employee productivity is an evaluation of the efficiency of an employee or a group of workers; such productivity can be measured in relation to the typical worker performing related duties (Rob, 2015). Thus, employee productivity refers to the connection between an organization's yields and the input of nonhuman and human resources used in the manufacturing process. That is, efficiency is the percentage of yield to input. The higher the ratios of statistical value, the better the output (Onyije, 2015).

Empirical Review

Ethnic Diversity and Employee Performance

In South Africa, a study by Saxenaa, (2024) examined how ethnic diversity affects team dynamics and productivity in corporate environments. Using a qualitative approach involving focus group discussions with employees from various companies, the researchers found that while ethnic diversity could enhance creativity and problem-solving abilities, it often led to misunderstandings and conflicts if not properly managed. The authors recommended that organizations invest in conflict resolution training and teambuilding exercises to foster better communication among ethnically diverse teams. However, this study's qualitative nature limits its ability to generalize findings across different sectors.

Moreover, a comparative analysis by Akinbola et al. (2023) explored how ethnic diversity impacts employee performance across different industries in Nigeria and Ghana. Utilizing a cross-sectional survey design with a sample size of 400 respondents from both countries, the study employed structural equation modeling for data analysis. The results indicated that while ethnic diversity positively correlated with employee performance in both contexts, cultural differences influenced how diversity was perceived

and managed within organizations. The authors suggested tailored approaches for managing ethnic diversity based on cultural contexts specific to each country. A critique of this research is its reliance on self-reported measures for performance assessment, which may not accurately reflect actual productivity level.

In another investigation, Okwu et al. (2021) explored the impact of ethnic diversity on employee productivity within the banking sector in Nigeria. Utilizing a survey research design, the authors collected data from 121 employees at First Bank Nigeria through structured questionnaires. The data were analyzed using Pearson Product Moment Correlation Coefficient (PPMC). The results revealed a strong positive correlation between ethnic diversity and employee intention to quit (r = 0.825), suggesting that while diversity can enhance creativity, it may also lead to dissatisfaction if not managed properly. The authors recommended that banks implement training programs focused on diversity management to mitigate potential conflicts arising from ethnic differences. A critique of this study is its reliance on self-reported data, which may introduce bias in assessing employee perceptions.

Gender Diversity and Employee Performance

A study by Ndubuisi-Okolo et al. (2023) examined the impact of gender diversity on employee performance within brewing firms in Anambra State, Nigeria. The researchers employed a descriptive survey design, utilizing a sample of 305 employees selected through Taro Yamane's formula. Data were collected via structured questionnaires and analyzed using Pearson Product Moment Correlation Coefficient. The findings revealed a significant positive relationship between gender diversity and employee performance, suggesting that organizations should prioritize gender-sensitive recruitment practices to enhance job satisfaction and performance among employees. The study recommended that organizations implement policies promoting gender equality and create an inclusive work environment to maximize productivity.

Another study by Idris, et al. (2020) in Nigeria examined the moderating role of work-life balance policies on the relationship between gender diversity and employee performance. The findings indicated that in organizations with well-developed work-life balance policies, gender-diverse teams exhibited higher levels of productivity and job satisfaction. The authors emphasized the importance of creating a supportive work environment that accommodates the diverse needs and responsibilities of employees (Idris et al., 2020).

For instance, a study by Nkomo and Ngambi (2019) in South Africa explored the role of organizational culture in shaping the impact of gender diversity on employee productivity. The researchers found that in organizations with inclusive and supportive cultures, gender diversity was positively associated with higher productivity and innovation. However, in organizations with more hierarchical and rigid cultures, the positive effects of gender diversity were diminished (Nkomo & Ngambi, 2019).

Similarity-Attraction Theory

The Similarity-Attraction Theory, underpinned this study. The theory is developed by Donn Byrne (1970) suggests that individuals are more attracted to others who share similar characteristics, such as attitudes, values, and demographic factors. This theory emphasizes that shared traits create comfort and validation, leading to positive feelings and reducing uncertainty in relationships.

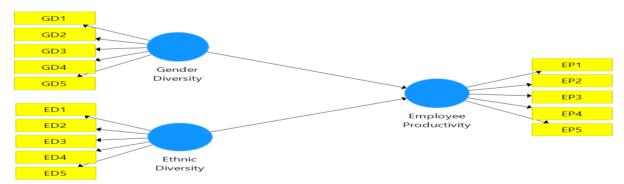
Byrne (1970) particularly using the "bogus stranger" technique, demonstrated that people tend to form friendships and romantic connections with those who have similar attitudes. Subsequent studies, including a meta-analysis by Montoya et al. (2017), confirmed that attraction is significantly influenced by similarity across various relationship types, including friendships and workplace dynamics. In organizational, Kunze et al. (2013) stated that employees collaborate more effectively with colleagues who share similar professional backgrounds, enhancing team cohesion and performance. However, the theory has faced critiques for potentially leading to groupthink and for not accounting for the attraction

to complementary traits. They also opined that individuals may actively avoid those who are significantly different, demonstrating the complexity of attraction dynamics.

The theory provides a framework for understanding how diversity impacts productivity in teams. While cognitive diversity can enhance creativity, interpersonal dynamics may be affected by similarity. Organizations are encouraged to implement strategies that foster inclusivity and collaboration to bridge gaps created by differences, such as training programs and team-building activities.

METHODOLOGY

The study adopted a survey design to examine the nature of relationship between employee productivity (dependent variable) and workplace diversity proxy by gender diversity and ethnic diversity (independent variables). The population for this study includes full-time employees of 129 manufacturing firms in Abuja-FCT. The population of this kind as regards to employees is infinite. Therefore, Cochran (1970) formula was used to obtain a sample size of 385 with 10% attrition was gotten after applying the formula. However, 392 questionnaires were duly completed and returned and were used for data analysis. The questionnaire items were adopted from the works of Dreachslin et al. (2022) and Choi et al. (2022), and was designed using 5-point Likert scale structure ranging from "strongly agreed to "strongly disagreed. The study adopts convenience and purposive sampling technique, which is well-justified for the study. The study employed the Partial Least Square Structural Equation Modeling (PLS-SEM) to model the regression analysis. The PLS path modeling method was developed by Wold (1982). The PLS algorithm is a sequence of regressions in terms of weight vectors. The weight vectors obtained at convergence satisfy fixed point equations. PLS-SEM is a non-parametric method that does not require that the data meet certain distributional assumptions. However, the parametric significance tests (e.g., as used in regression analyses) cannot be applied to test whether coefficients such as outer weights, outer loadings and path coefficients are significant. Instead, PLS-SEM relies on a nonparametric bootstrap procedure to test the significance of various results such as path coefficients, Cronbach's alpha, HTMT, and R² values. (Efron & Tibshirani, 1986; Davison & Hinkley, 1997). The model for the path analysis is specified thus:



Source: SMART-PLS Output, 2025

Fig. 1: Model Specification showing the Constructs and the Items

RESULTS AND DISCUSSION

Assessment of Measurement Model

In assessing the measurement model, we begin by assessing the item outer loadings. As a rule, loadings above 0.708 are recommended, as they indicate that the construct explains more than 50 percent of the indicator's variance, thus providing acceptable item reliability (Hair, et al., 2019). However, Hair, et al., (2019) posited that low but significant indicator loading of 0.50 can be included hence justifying why indicators with loadings less than 0.708 and above 0.50 were not deleted from the model as seen in figure 2 below:

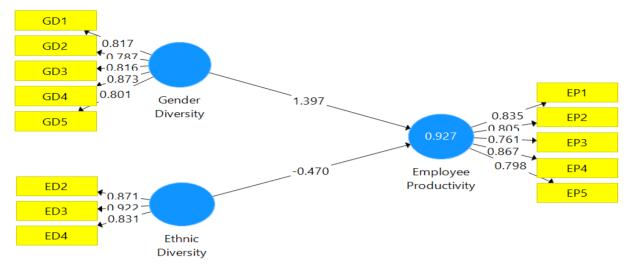


Fig 2: Indicator Loadings

Table 4.2: Reliability of study scale

| S/N | Variables | Items | Factor Loadings | Cronbach Alpha | Composite Reliability | Average Variance Extracted (AVE) | No of Items |
|-----|--------------|-------|--------------------|-------------------|--------------------------|---|----------------|
| 1 | Ethnic | ED1 | 0.871 | 0.891 | 0.921 | 0.700 | 3 |
| | Diversity | ED2 | 0.922 | | | | |
| | (ED) | ED3 | 0.831 | | | | |
| 2 | Gender | GD1 | 0.817 | 0.851 | 0.845 | 0.721 | 5 |
| | Diversity | GD2 | 0.787 | | | | |
| | (GD) | GD3 | 0.816 | | | | |
| | | GD4 | 0.873 | | | | |
| | | GD5 | 0.801 | | | | |
| 3 | Employee | EP1 | 0.833 | 0.912 | 0.928 | 0.619 | 5 |
| | Productivity | EP2 | 0.695 | | | | |
| | (EP) | EP3 | 0.833 | | | | |
| | | EP4 | 0.812 | | | | |
| | | EP5 | 0.793 | | | | |

Source: SmartPLS Output, 2025

Composite reliability of Jöreskog's (1971) was applied to test for internal consistency of the study. All the values fall within the Hair, et al., (2019) rating of good consistency. The Cronbach alpha value were above 0.60 which is the minimum threshold as recommended by Sekaran (2010). To test for the convergent validity, the average variance extracted (AVE) was used. All the latent variables showed values greater than 0.50 which indicates that the constructs explain at least 50 percent of the variance of its items. According to Henseler et al., (2015) the Fornell-Larcker criterion does not perform well when explaining discriminant validity, particularly when the indicator loadings on a construct differ only slightly. As a replacement, they proposed the Heterotrait-Monotrait (HTMT) ratio of the correlations which is the mean value of the item correlations across constructs relative to the (geometric) mean of the average correlations for the items measuring the same construct (Voorhees et al., 2016). Discriminant validity problems are present when HTMT values are high than 0.90 for structural models (Henseler, et al., 2015).

Heterotrait-Monotrait Ratio (HTMT)

| | EP | ED | GD | |
|---------------|-------|-------|-------|--|
| EP | 1.000 | | | |
| \mathbf{ED} | 0.420 | 1.000 | | |
| GD | 0.492 | 0.462 | 1.000 | |

Source: SmartPLS Output, 2025

The variance inflation factor (VIF) was used to evaluate collinearity of the formative indicators. All the VIF values were less than 5 indicate the absence of critical collinearity issues among the indicators of formatively measured constructs (Hair, et al., 2019).

Model Goodness of Fit (GoF)

Sequel to the need to validate the PLS model, there is a need to assess the goodness of fit of the model as Hair, et al. (2017) suggested. This study used the standardised root mean square residuals (SRMR). The choice of this index was based on the fact that the SRMR provides the absolute fit measure where a value of zero indicates a perfect fit. The study adopted Hu & Bentler (1998) suggestion that a value of less than 0.08 represents a good fit while applying SRMR for model goodness of fit. The study result indicates an SRMR value of 0.030. This indicates the model is fit.

Assessing the Structural Model

Having satisfied the measurement model assessment, the next step in evaluating PLS-SEM results is to assess the structural model. Standard assessment criteria, which was considered include the path coefficient, t-values, p-values and coefficient of determination (R²). The bootstrapping procedure was conducted using a resample of 5000.

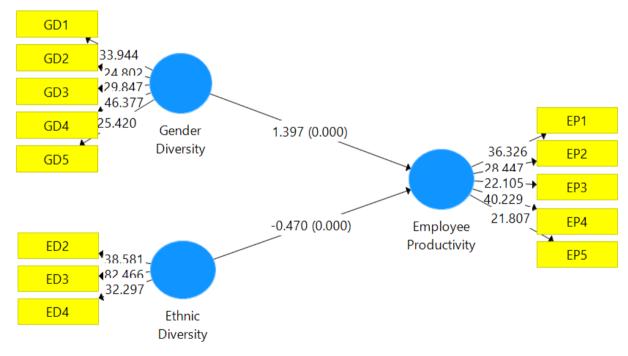


Fig. 3: Path Coefficients of the Regression Model.

The R-square value stood at 92% indicating that ethnic diversity and gender diversity are responsible for 92% variation in employee productivity. The remaining 08% variation could be explained by other factors not included in the study. Based on Hair, et al., (2019), the r-square is considered moderate and negate the findings of the study. Also, the Q² value of the result of the path analysis is presented in the table below:

Table 5: Coefficient of Determination (R²) and Predictive relevance (Q²)

| | R Square | R ² Adjusted | Q Square |
|------------------------------|----------|-------------------------|----------|
| Employee Productivity | 0.927 | 0.927 | 0.916 |

Source: SMART-PLS Output, 2025

Test of Hypotheses

Table 6 shows the path coefficients, t-values and p-values used to test the hypotheses of the study:

Table 4.4: Path Coefficients

| Hypothesis | Variable | Path Coefficient ***(Beta) | t-value | p-value | Findings |
|-----------------|------------------|----------------------------------|---------|---------|----------|
| Ho ₁ | Ethnic Diversity | -0.470 | 6.760 | 0.000 | Accepted |
| Ho_2 | Gender Diversity | 1.397 | 22.085 | 0.000 | Rejected |

Source: SMART-PLS Output, 2025

Test of Hypotheses

Ho: Ethnic diversity have no significant effect on employees' productivity of manufacturing firms in Abuja-FCT, Nigeria.

The result from the analysis indicates that ethnic diversity has negative and significant effect on employee productivity of manufacturing firms in Abuja-FCT. The decision was reached based on the t-value of 6.760 which is greater than 1.964 and a beta value of -0.470 with a p-value of 0.000. Thus, implying that the null hypothesis lacks sufficient ground to be accepted and as such the alternative hypothesis which states that ethnic diversity has significant effect on employee productivity is accepted. This implies that employees with diverse ethnic backgrounds struggle to build cohesion and trust, leading to conflicts or a lack of collaboration in the manufacturing firms which ultimately affecting their performance. Also, the findings by (D'Aveni & Kesner., 2024) indicates that manufacturing firms owners/managers need to carefully consider how to structure teams to balance diversity with the need for effective collaboration and communication, While diversity can enhance creativity and innovation in the long run, manufacturing firms managers should be aware of and address short-term challenges to ensure sustainable productivity.

H₀₂: Gender diversity has no significant effect on employee productivity of manufacturing firms in Abuja-FCT, Nigeria.

The result from the analysis indicates that gender diversity has positive and significant effect on employee productivity of manufacturing firms in Abuja-FCT. The decision was reached based on the t-value of 22.085 which is greater than 1.964 and a beta value of 1.379 with a p-value of 0.000. Thus, implying that the null hypothesis lacks sufficient ground to be accepted and as such the alternative hypothesis which states that gender diversity has significant effect on employee productivity of manufacturing firms in Abuja-FCT is accepted.

This implies that gender-diverse teams often bring different perspectives and skills, which can lead to more innovative solutions and improved problem-solving capabilities. These findings is consistent with Huang and Siengthai, (2024), who found that providing training programs focused on gender awareness and inclusivity. These initiatives can help all employees understand the value of diverse perspectives and foster a respectful workplace culture

CONCLUSION AND RECOMMENDATIONS

This study examined workplace diversity on employee productivity of manufacturing firms in Abuja-FCT, Nigeria. Based on the research findings, the study concluded that ethnic diversity and gender diversity are significant factors, which affect and determines employee productivity of manufacturing firms in Abuja-FCT, Nigeria. The study also concluded that ethnic diversity can bring valuable perspectives to a workplace, its negative impact on productivity in manufacturing firms requires careful

management and strategic planning. Also, gender diversity has been a significant influence on employee productivity by embracing gender diversity, firms can enhance collaboration, innovation, and overall performance

Based on the findings and conclusions above, the study recommends thus:

- Manufacturing firms' managers should adopt flexible work policies that accommodate various cultural practices and observances which will enhancing employee satisfaction and also develop comprehensive diversity and inclusion programs, such initiatives celebrate cultural differences and promote a sense of belonging among all employees, creating a more harmonious work environment.
- ii. Manufacturing firms' managers should provide training programs focused on gender awareness and inclusivity. These initiatives can help all employees understand the value of diverse perspectives and foster a respectful workplace culture.

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Research Questionnaire: Instruction: Please tick as appropriate

Please rate your level of agreement with the following statements 5 = Strongly Agree, 4 = Agree, 3 = Undecided, 2 = Disagree, 1 = Strongly Disagree.

| S/N | Statements | | Agreement scale | | | | |
|-----|---|---------|-----------------|---------|--------|---------|--|
| | Ethnic Diversity (ED) | 5 SA | 4 A | 3 UD | 2 D | 1 SD | |
| 1 | My organization values employees from different ethnic backgrounds. | | | | | | |
| 2 | People of different ethnic backgrounds interact well in my workplace | | | | | | |
| 3 | My organization's management team includes people from different ethnic backgrounds | | | | | | |
| 4 | Employees from all ethnic backgrounds have equal access to career advancement | | | | | | |
| 5 | My organization promotes an inclusive environment for all ethnic groups | | | | | | |
| | Gender Diversity (GD) | 5 | 4 | 3 | 2 | 1 | |
| 1 | Gender-diverse teams communicate more effectively | | | | | | |
| 2 | My organization values contributions from both male and female employees equally | | | | | | |
| 3 | My organization's policies support work-life balance for both men and women | | | | | | |
| 4 | Men and women have equal opportunities for advancement in my organization. | | | | | | |
| 5 | My organization actively promotes gender-inclusive policies | | | | | | |
| | Employee Productivity (EP) | 5 | 4 | 3 | 2 | 1 | |
| 1 | I am satisfied with my overall productivity at work. | | | | | | |
| 2 | I feel that my work performance has improved over the past year. | | | | | | |
| 3 | I believe that I can meet my job performance targets | | | | | | |
| 4 | I feel motivated to achieve high levels of productivity | | | | | | |
| 5 | I think that my productivity positively impacts my career growth | | | | | | |