

Impact of Cultural Diversity on Overall Organizational Performance: A Moderating Role Education

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Abstract

This study focused on the impact of cultural diversity on organizational performance as moderated by employees' educational attainment. The study measured cultural diversity as language, religious and value system diversity. Organizational performance was measured as team building, communication, and employee productivity. The study collected primary data from 353 employees from ten different manufacturing companies in the Ashanti and Greater Accra Regions of Ghana. The study employed mean and standard deviation for descriptive analysis. The study employed a structural equation model for the estimation. Cultural diversity was found to be prevalence in the sampled companies. However, team building, and communication were effective, and employee productivity was high. The educational attainment of employees significantly reduced the negative impact of language, religious, and value system diversity on each organizational performance indicator. Stakeholders in Ghana's manufacturing industry should encourage continued human resource development through the pursuance of higher education, internal and external training, and seminars.

Keywords: *Cultural Diversity, Educational attainment, Organizational Performance.*

Introduction

Organizations and their workers operate in a distinct culture or socio-cultural context [1]. This is increasing in recent times because of globalization, where people from different socio-cultural backgrounds are hired by the organization [1], increasing cultural diversity in an organization. The term "diversity" refers to a group's variety and distinctions [2]. Individual distinctions such as ethnicity, age, religion, handicap status, geographic location, personality, sexual preferences, and a slew of other personal, demographic, and organizational traits can all be included in the definition of diversity. As a result, diversity may be a broad phrase that encompasses people from a variety of backgrounds [3].

Although mutual respect is the foundation of workplace diversity, accommodating each

different worker's attitudes and opinions can be a huge task for companies, making diversity management challenging [4]. Employee work restrictions such as race, religion, and culture can be burdensome at times, especially if the organization's diversity is so great that the firm needs to hire a full-time staff to keep track of the employees' requirements [5]. Some Muslim employees, for example, may choose not to work on Fridays because it is a holy day for them. In such cases, employers must make arrangements for someone to fill in for them when the need arises.

Several organizations such as Canopy Health [6] have identified team building, employee productivity and communication as key indicators of organizational performance in a culturally diverse work environment. In a culturally diverse workplace, team building is a

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Received: *20.10.2021*

Accepted: *12.11.2021*

Published on: *28.01.2022*

key tool employed by management to enhance productivity [7]. Effective team building can help achieve the vision and mission of an organization and help to foster a healthier workplace [8].

Employee productivity, on the other hand, as defined by Barcenas [89], is the amount of work (or output) produced by an employee in a specific period of time. Employees Productivity increases the overall efficiency of an organization [9, 10].

However, empirical studies on the impact of cultural diversity on organizational performance have produced mixed findings. For example, Mecheo [11] found that religion has a detrimental impact on employee productivity but has a positive impact on job dedication. Similarly, Oduro, Yalley, Sarpong, Kweitsu, and Danso [12] found that cultural diversity and its management has an impact on not just organizational competitiveness but also the organization's capacity to fulfill its objectives. Also, Qiaoxin and Liswandi [13] have shown that religion, language, and age all have a substantial impact on employee happiness, but gender has no impact on employee satisfaction in the firm.

Though the above studies and others have paid much attention to cultural diversity, less attention has been given to how the educational attainment of employees influences the relationship between cultural diversity and organizational performance indicators [14]. Though globalization is increasing, deeping the cultural diversity in organizations, literacy or educational attainment is increasing as well. Thus, the question is, does education effect the impact of cultural diversity on organizational performance indicators? This study sought to address this important vacuum in empirical studies.

This study would help to place cultural diversity in good perceptive in the phase of

increasing the educational attainment of employees.

Methods

Description of the Site

This study was conducted in the Ashanti and Greater Accra Regions of Ghana. The Ashanti Region is located in south Ghana, and it is the third largest of 16 administrative regions, occupying a total land surface of 24,389 km² (9,417 sq mi) or 10.2 percent of the total land area of Ghana. In terms of population, however, it is the most populated region with a population of 4,780,380 according to the 2010 census, accounting for 19.4% of Ghana's total population. Kumasi is the capital town of the Ashanti Region.

The Greater Accra Region is the smallest in terms of land area among the 16 administrative regions in Ghana. The region occupies a total land surface of 3,245 square kilometres. Greater Accra is the second populous region with a population of 4,010,054 in 2010, accounting for 16.3 percent of Ghana's total population [15]. The region is, however, the most urbanized where 87.4% of its population in lives in urban communities. Accra is the capital of the Greater Accra Region and the capital town of Ghana. These two regions host most of the Ghana's industries, manufacturing, services, construction, agro-processing, among others.

Description of Experiment

The study through Yamane [16] sample size determination formulae used 353 employees from ten manufacturing firms, as shown in Table 1. The employees were sampled from each firm using simple random sampling via the lottery method. The number of employees from each company is shown in Table 1.

Table 1. Population of Staff and Locations of the Accessible Companies

No.	Companies	Staff population	Relative freq. (rf)	Sample size (rf*353)
1	Guinness Ghana Breweries	420	0.140	49
2	Dannex Ayrton Starwin Drugs	713	0.237	84
3	Kasapreko	437	0.145	51
4	Camelot Print Ghana	66	0.022	8
5	Karma Pharmaceuticals	235	0.078	28
6	Kinapharma Limited	148	0.049	17
7	Latex foam	66	0.022	8
8	Ashfoam	83	0.028	10
9	Unilever:	713	0.237	84
10	Tobinco Pharmaceuticals	123	0.042	14
Total		3,004	1.000	353

Source: Administrations of the Selected Companies (July 2021)

The study used the questionnaire to collect the data from the staff of the selected companies. The questionnaire had four sections. Part I: Socio-demographic characteristics of respondents comprised of gender, age, educational level, religious affiliation, working experience, and tribe. Section II focused on culture diversity. The section had two sub-sections, including religion and the value system. Religion construct had nine (9) items, and whiles value system construct had nine (9) items. The items under of religious and value system diversities were adapted from Merk et al. (2017). Section III focused on communication, and the items under this were adapted from Mechheo (2014).

Communication competence had two main components, namely interpersonal skills (7 items) and cultural empathy (3 items). Section IV focused on team effectiveness, and it had 11 items. Section V focused on employee's Productivity and had 9 items. All the questions under each part (with the exception of Section I) were in the form of five-point Likert, ranging from strongly disagree to strongly agree.

The questionnaire was reliability with an overall Cronbach's Alpha of 0.887 (i.e., $\alpha=0.887$) and valid with Factor Loading Score for each item more than 0.4 and the Kaiser-Meyer-Olkin (KMO) for each construct was more than 0.8.

Statistical Method

The data were analysed using Statistical Package for Social Sciences (SPSS), version 21.0, and STATA version 13.0. The study edited the data, coded the data, and entered them into the software for analysis. The study used SPSS for all the descriptive analysis, and whiles STATA was used to estimate of the model. The descriptive analysis was done using mean, standard deviations, skewness, and kurtosis. The mean score range of 1.00-3.49 is an indication that cultural diversity or organizational performance indicators are low. On the other hand, the mean score range of 3.50-5.00 suggests that cultural diversity and performance indicators are high.

To determine the effect of education on the impact of cultural diversity indicators (religion, language, and value system) on organization performance indicators (team building, communication, and employee productivity), this study used Structural Equation Model as suggested by Kline [17]. The models are specified below.

$$\begin{aligned}
 PROD V = & \alpha_0 + \alpha_1 REL * EDUC + \alpha_2 LANG \\
 & * EDUC + \alpha_3 VSYSTEM \\
 & * EDUC + \alpha_4 GENDER \\
 & + \alpha_5 AGE \\
 & + \varepsilon \dots \dots \dots \dots \dots Model 1
 \end{aligned}$$

$$TEAMB = \alpha_0 + \alpha_1 REL * EDUC + \alpha_2 LANG * EDUC + \alpha_3 VSYSTEM * EDUC + \alpha_4 GENDER + \alpha_5 AGE + \varepsilon \dots \dots \dots Model 2$$

$$COM = \alpha_0 + \alpha_1 REL * EDUC + \alpha_2 LANG * EDUC + \alpha_3 VSYSTEM * EDUC + \alpha_4 GENDER + \alpha_5 AGE + \varepsilon \dots \dots \dots Model 3$$

Where PRODV is Productivity, TEAMB is team building, and COM is communication, REL*EDUC is the interaction of religious diversity and educational attainment, VSYSTEM*EDUC is the interaction of value system diversity and educational attainment, LANG*EDUC is the interaction of language diversity and educational attainment, GENDER is the gender of respondents and AGE is the age of respondents. Team building, communication, and employee productivity were measured

qualitatively based on a scale by Mechheo [18]. The cultural diversity (language, religious and value system diversity) were measured based on a scale by Merk [19]. Age was a continuous variables, while gender was a nominal variable with a female as the reference category.

Results

Socio-demographic Characteristics of the Respondents

As part of the survey, data were gathered on the demographic characteristics of the various respondents considered in this study. The main aspects of the socio-demographic characteristics of the respondents included sex, educational attainment, level of experience of working in the organization, religious affiliation, and the tribe of these respondents. A summary of the results is displayed in Table 2.

Table 2. Socio-Demographic Characteristics of Respondents

Characteristics	Variable	Frequency (N)	Percentage (%)
Sex	Male	195	55.2
	Female	158	44.8
Educational Attainment	None	16	4.5
	Basic School	35	9.9
	Senior High	85	24.1
	Diploma/HND	68	19.3
	First Degree	92	26.1
	Masters' Degree	43	12.2
	PhD	14	4.0
Level of Experience	Less than 5 years	62	17.6
	5 – 9 years	127	36.0
	10 – 14 years	126	35.0
	At least 15 years	38	10.8
Religious Affiliation	Atheist	5	1.4
	Christian	167	47.3
	Muslim	125	35.4
	Traditionalist	43	12.2
	Buddhist	13	3.7
Tribe	Akan	122	34.6
	Hausa	67	19.0
	Mole-Dagbani	22	6.2
	Ewe	43	12.2

	Nzema	32	9.1
	Krobo/Ga/Adangbe	49	13.9
	Others	18	5.1

Source: Field Data (2021)

From the results, though males dominated over females, the gap is very close. The higher number of employees had at least second cycle education, a cumulative of which is 85.7% of the entire population. Table 2 reports that the majority of the respondents had at most 5 years of working experience. Table 2 reports that 5 (1.4%), 167 (47.3%), 125 (35.4%), 43 (12.2%),

and 13 (3.7%) of the employees considered in this study were Atheists, Christians, Muslims, Traditionalists, and Buddhists respectively.

Descriptions of Study Variables

The key variables used in this study are described in Table 3.

Table 3. Descriptions of Study Variables

Main Variables	Specific variables	Min.	Max.	Mean	Std.	Skewness	Kurtosis
Cultural diversity	Religion	1	5	3.8677	0.1181	-0.003	-0.824
	Value system	1	5	3.6956	1.0061	-0.617	0.330
Performance indicators	Team building	1	5	3.3732	0.9345	0.325	0.276
	Communication	1	5	3.7377	1.0113	-0.216	-0.583
	Employee productivity	1	5	4.0019	0.1817	0.316	0.438

Source: Filed Data (2021)

The results in Table 3 show that cultural diversity in the areas of religion and value system were eminent in the sampled organization. The sampled companies had high team building, organizational communication, and employee productivity.

Estimation of the Models

The study first estimated the impact of cultural diversity on performance indicators without the moderating role of education, as shown in Table 4.

Table 4. Impact of Cultural Diversity on Organizational Performance

Variables	Model 1	Model 2	Model 3
	(Team Building)	(Communication)	(Employee Productivity)
Language diversity	-0.0047 (0.0269)	-.0260 (0.0516)	-0.4316 (0.0519)**
Religious diversity	-0.0314 (0.0203)	-.0726 (0.0389)	-0.0289 (0.0392)
Value system diversity	-0.1853 (0.0649)*	.2069 (0.1244)	-0.5416 (0.1253)**
Gender	-0.0498 (0.0377)	-.0311 (0.0723)	-.0690 (0.0729)
Educational attainment	0.0844 (0.0138)**	.0577 (0.0265)*	.1521 (0.0268)**
Years of working experience	-0.0926 (0.0228)**	0.0146 (0.0438)	-.0205 (.0441)

Constant	4.3798	2.6678	4.4913
	(0.2773**)	(0.5319)**	(0.5357)
Chi-sq.	74.912	13.270	123.807
p-value	0.000	0.039	0.000

Source: Field Data (2021)

From Table 4, language diversity significantly reduces employee productivity ($\beta = -0.4316$) but had no significant impact on team building and communication. Religious diversity had no significant impact on team building, communication, and employee productivity. Value system diversity had a significant negative impact on team building (β

$= -0.1853$) and employee productivity ($\beta = -0.5416$).

The study further estimates the moderation role of education in the impact of cultural diversity indicators on organizational performance indicators to determine the impact would be in the presence of education, and the results are summarized in Table 5.

Table 5. Role of Education on the Impact of Cultural Diversity on Organizational Performance Indicators

Model									
Variables	Communication Effectiveness			Team Effectiveness			Productivity		
	Coef.	Std. Err	p> z	Coef.	Std. Err	p> z	Coef.	Std. Err	p> z
Lang*Edu	.0001823	.0124737	0.988	-.009374	.0066587	0.159	.0881448	.0131782	0.000
Relig*Edu	-.0268523	.0091781	0.003	.0142465	.0048994	0.004	.0035617	.0096964	0.713
Value*Edu	.0324529	.0117846	0.006	.0135124	.0375523	0.032	-.0139407	.0124502	0.263
Gender	-.0411628	.070347	0.558	-.0203443	.035523	0.588	-.004836	.0743198	0.948
YExp	.0178142	.0421847	0.673	-.0914127	.0225189	0.000	-.0431194	.0445671	0.333
_cons	3.225698	.1950056	0.000	3.77766	.104097	0.000	3.252543	.2060185	0.000
Chi2_bs (6)	17.306			62.247			94.097		Baseline vs saturated
p> chi2	0.004			0.000			0.000		

Source: Field Data (2021); Lang*Edu=Language Diversity moderated by educational attainment; Reli*Edu=Religious diversity moderated by educational attainment; Value*Edu= Value Diversity moderated by educational attainment; YExp=Years of working in the Organization

Table 5 reports that, amongst highly educated employees, language diversity does not have significant influence on communication effectiveness ($\beta = .0001823$; p-value= 0.988) and team effectiveness ($\beta = -.009374$; p-value= 0.159). These statistics, however, suggests that, among the educated workforce, language diversity significantly improves Productivity ($\beta = 0.881448$; p-value=0.000) in the workplace. Table 5 reports that education moderates the influence of religious beliefs in the workplace. These statistics indicates that, interaction of education and religious diversity significantly reduces communication effectiveness ($\beta = -.0268523$; p-value= 0.003) but significantly

improves team effectiveness ($\beta = .0142465$; p-value= 0.004).

However, interaction of education and religious diversity did not significantly influence productivity ($\beta = .0035617$; p-value= 0.713) in the workplace. Table 5 reports that, amongst educated employee's employee value system significantly improves communication effectiveness ($\beta = .0324529$; p-value= 0.006) and team effectiveness ($\beta = .0135124$; p-value= 0.032). However, the interaction of education and value system did not significantly influence employee productivity ($\beta = -.0139407$; p-value= 0.263) in the workplace.

Discussions

Thus, inferring from the results, as the level of education of employees increases, the detrimental effects of language diversity on communication and team building is minimized, which leads to improving Productivity. Comparing the effects of employee language diversity on Productivity prior to the inclusion of the moderator variable in the model and after estimating the model, it can be seen that there is a higher change in productivity coefficient. Hence, education influences the role of language diversity on Productivity through enhanced skills set and communication competence of employees [14]. Chenov and Chernova [19] are also of the view that educational competence is unquestionably a competitive advantage for individuals working in culturally diverse business settings as it enhances employee productivity. Neo [20] posits that it is critical for employees to understand how people from various cross-cultural backgrounds interpret, communicate, and make decisions. Education now becomes a key variable in this endeavour which may have impacts on the degree of communication and enhance the Productivity in the workplace. Although it may be difficult to comprehend some comments and behaviours, education leads to a shared notion of acceptance and open-mindedness. These may have significant impacts on Productivity in the workplace.

Also, education leads to a sense of tolerance which makes the effects of employee religion on team building seemingly negligent. Peltonen's [21] indicated that religion, like ethnocentrism and stereotyping, hinders communication by creating a distinct picture of individuals who follow various religions irrespective of the level of education of these individual. Persons find it challenging to communicate with people of various religious beliefs. People's attitudes toward others are influenced by their religious beliefs. As a result, even very education which has been tried and proved may not be sufficient to completely eliminate the impact of religion in

the workplace, which may have negative consequences for overall company efficiency. Piga [22] provides contradiction to these findings when he found that good education may remedy the negative impacts of religiosity in the workplace. Hence, when employees are highly educated, the negative impact of cultural diversity is minimized.

Similarly, education reduces the negative impact of value system diversity on communication, team building, and Productivity. The results in this study are in line with Mecheo's [11] results, which indicated that cultural values had a favorable impact on organizational performance. According to Barrett [23], an employee can react with every circumstance in one of three ways. They can respond using their beliefs, ideals, or intuition. Barrett goes on to say that if workers make judgments based on their views, such conclusions would reflect their previous experience dealing with comparable situations, making the decision a gamble. Past history is constantly lived and contextualized, and beliefs are unprepared to deal with complicated new situations that have never been encountered before. As a result, in the absence of education and training programmes, in the workplace, workers may make judgments based on their own values and beliefs, which may not be the best option for the company and may have an influence on how they operate and their overall performance.

The result in this study further provides support for Ringov [24] in their work which indicated that education and training enable employees to discover genuine and meaningful alignment between their personal values and that of the organization, a strong relationship is formed in such instances. This link opens up a slew of opportunities for personal development and business productivity, manifesting itself in a variety of ways, including reducing the impacts of employee value diversity in favour of a single common company value system. As a result, when a company and its employees join together

around a same set of values, they become more flexible, less hierarchical, and less bureaucratic, and they build a stronger capacity for collective action. When employees share not only identical values, but also a same vision, a company's performance improves.

Conclusion

The study aimed at assessing the effects education in the impact of cultural diversity on organizational performance, using various manufacturing companies in Ghana. It was observed that cultural diversity is high as well as team building, communication, and Productivity. The study concludes that education plays a crucial moderating role by minimizing the negative impact of cultural diversity on team building, communication, and employee productivity.

Based on these findings, employees should be encouraged to undergoing constant training in cultural diversity and further their education to enhance their knowledge, skills, and exposure. This will help the employees to relate well with each other, despite their cultural differences, to help improve organizational performance.

Despite interesting findings in this paper, the researcher believes that the implications of

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cultural diversity can be far stretched than just three variables that were studied. Therefore, further research may focus on exploring the implications of cultural diversity on other variables like employee retention/commitment, employee job satisfaction, global competitiveness of organizations, among others.

Acknowledgement

My sincerest gratitude to Dr. Freda Ocansey, Mr. Prince Amoako who offered very valuable contributions and were very supportive in the compilation of this article. I take this opportunity to thank Anitha, my research mentor, my office secretary, who did the typesetting of this manuscript. Ms. Mary Yigal, how can I forget you? Your kindness and love were just indescribable.

I will remain grateful. Mrs. Diam Lilian Laar, my wife, you were, and you remain my solid aids and support. I could not have made it without you.

Conflict of Interest

The author declares that there is no conflict of interest with regards to this paper.

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