



## The Influence of Workforce Diversity on Team Effectiveness: A Study of Selected Manufacturing Firms in Enugu State, Nigeria

**Dr. Joy, Nonyelum Ugwu**

Department of Business Administration, Enugu State University of Science and Technology (ESUT)  
Nigeria

**Esther, Nneka Mbagwu**

Department of Business Administration, Enugu State University of Science and Technology (ESUT),  
Nigeria

### **ABSTRACT:**

*This study examined the influence of workforce diversity on team effectiveness: a study of selected manufacturing firms in Enugu state, Nigeria. A five point likert scale questionnaire that covered the different areas of workforce diversity and how it affects team effectiveness was used to elicit response from the respondents. The population of the study comprises of 300 members of staff drawn from three manufacturing firms in Enugu state. The researchers however using yaro yamene's formula selected 171 employees out of the population of study. The Non-Parametric Kruskalwallis test (H) using the 20.0 version of the statistical package for social sciences (SPSS) was used to analyze the data gathered. The overall finding in this study shows that workforce diversity has significant impact on team effectiveness in manufacturing firms in Nigeria. The kruskawalis (H) value of the various hypotheses as tested was less than the level of significance (i.e  $0.001 < 0.05$ ). The researchers therefore concluded that team thrust, teaming skills and team task skills are largely influenced by the extent of diversity in the workforce. The researchers recommend that to maximize the benefit of diversity in the workforce, diversity sensitivity training should be included workforce orientation programmes. This will enable the workforce adequately confront the challenges of diversity in the team*

**Key Words:** workforce; team; diversity; psycho-social; team thrust; teaming skills; team tasks

### **1. INTRODUCTION**

Over the years, a shift in organizational structure from the dominant hierarchical structure to a flat structure has become the norm in industries. This may not be unconnected with the need to swiftly respond to complexities and dynamism that characterize business environment. The hierarchical structure tend to be rigid in information processing and decision making, hence, it slows down organizational response to changes in the environment. One of the concepts that have emerged especially after the industrial revolutions of 1700s with wide acceptance among researchers and management

practitioners is the *team* concept. A team basically is a collection of people with diverse skills, with mutual responsibility and one target. They function in an interdependent manner, so much so that the deficiency in one of the team members can easily be made up by the strength of another member.

Diversity is a construct that has emerged in social and management sciences to explain the psycho-social and cultural make up of a group. According to Harrison and Klein (2007), diversity describes the distribution of differences among the members of a unit with respect to a common attribute, such as tenure, ethnicity, conscientiousness, task attitude, or



pay. Thus, diversity is measured on the group or organizational level as a compositional construct, in addition, diversity is attribute specific. However, the diversity in team members is not limited to skill alone, it transcends to issues of culture, gender, cognitive capacity, religious beliefs, social and political orientation. These with organizational factors influence the capacity of the team to deliver on organizational tasks.

That organizations are structured along the team line does not guarantee its performance. It therefore becomes important to assess the functionality or effectiveness of the teams. The measurement of team effectiveness has become of interest to researchers since the corporate performance of organizations that adopts the team structure depends on the performance of different teams within the organization. To understand how effective a team is, one may consider three strands. Denkn (2008), highly effective teams have proven to establish good working relationships and potentially achieve greater outcomes, since conflicts within teams are minimized. The researchers therefore assert that teams are effective when they can guarantee continued members commitment, efficient attainment of team goals while satisfying the needs of individual members. In this paper, we shall attempt to establish the correlation between workforce diversity and team effectiveness in manufacturing firms by focusing on three major dimensions of the T7 Model of team effectiveness namely; team thrust, teaming skills and task skills.

## Objectives

The general objective of this paper is to examine the influence of workforce diversity on team effectiveness. The following specific objectives shall be examined;

- i. The influence of workforce diversity on team thrust
- ii. The influence of workforce diversity on teaming skills

- iii. The influence of workforce diversity on team task skills

## Research Questions

The following questions were raised as a guide to this study;

- i. What are the influences of workforce diversity on team thrust
- ii. What are the influences of workforce diversity on teaming skills
- iii. What are the influences of workforce diversity on team task skills

## Hypotheses

H<sub>01</sub>: Workforce diversity does not have significant influence on team thrust

H<sub>02</sub>: Workforce diversity does not have significant influence on teaming skills

H<sub>03</sub>: workforce diversity does not have significant influence on team task skills

## 2. Literature Review

For easy appreciation of this study, we shall review literatures on the major variables in this topic.

### TEAM

Katzenbach and Smith states that a team is a small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they hold themselves mutually accountable (Brooks 2006). Regardless of what people perceive of teams, it exceeds individuals acting alone or in large organizational groupings, especially when performance requires numerous skills, judgments, and experiences. A more comprehensive clarification has been presented by Bailey and Cohen, where “a team is a collection of individuals who are interdependent in their tasks, who share responsibility for outcomes, who see themselves and are seen by others as an intact social entity, embedded in one or



more larger social systems and who manage their relationships across organizational boundaries” (Halverson & Tirmizi 2008). Both of these definitions underline the interdependence of team members as individuals who bring their unique skills and working approaches to the team, as well as the complex social system that is build by the team members.

Usually under the definition of a team, particular time frames and specific resources are mentioned as parts of teamwork limitations. Those resources include time, money, people, material, information, social capital and energy. All these resources are the factors that have a major impact on the productivity of a team (Adler 2008). The processes that group members are involved in relate to the actual actions taken by individuals or the entire group when solving a task. They include approaches, both on interpersonal and intrapersonal levels in order to transform the resources they have into products or services.

Aside from different definitions of a team, there are also several typologies of team categorization. Some of them are the differentiation between formal and informal teams. *Formal teams* tend to have strong organizational structures where team members have distinct roles and specified workload. Those teams are often set for a particular task to be accomplished within a specific timeframe. On the contrary, *informal teams* are usually created to solve a particular problem, but during their work there is a possibility of membership changes. The level of interdependence in informal teams is lower as compared to formal teams (Halverson & Tirmizi 2008). Other types of teams are task forces, committees, self-managed and virtual teams. *Task forces* are teams designed for a specific project within the organization, where the performance and timetable together with members’ interdependence play the most important role. A *committee* performs likewise to task forces, but the degree of members’

autonomy is higher with different levels of interdependence. *Self-managed teams* have the greatest level of sovereignty from the organization. *Virtual teams* do not have to meet in the physical form of face-to-face in order to work; their formation and participation take place by the means of technology. While the definitions of those team types are clearly expressed, it is possible that the features of one team characteristics overlap with another team type or types. Teams can differ in terms of projects they are involved in; these types of projects can be related to product design, strategy formulation, marketing planning etc. Those projects can last temporarily where teams are formed for short-term periods, whereas some teams function in the organization for years. Teams can be composed of members that have never met before, while other teams consist of members that already have some experiences together prior to the team formation, or they even choose team members themselves.

Teams can also be categorized in terms of diversity. There are several types of such teams: homogenous teams where all members come from the same background, token teams in which only one member comes from other surroundings, bicultural teams where two cultures are represented and multicultural teams. This thesis will investigate the diversity in multicultural teams that contain members of three or more national backgrounds. Emphasizing the importance of team work, Jossey states that “not finance, not strategy, not technology. It is teamwork that remains the ultimate competitive advantage, both because it is so powerful and so rare.” This is the way Patrick Lencioni opened his best-selling book, *The Five Dysfunctions of a Team* (Jossey Bass, 2002).

## Diversity

In understanding the meaning of national diversity, there is a need to look at each component constructing this expression.



Diversity refers to people from various groups such as gender, religious groups, younger and older groups of people, ethnicity and nationality etc. (Guirdham 2005). Nationality is one element of the term diversity. All people in the world can be differentiated by their own nationality. This nationality branch of diversity has elements consisting of clearly observable differences, but also unobservable dissimilarities such as the value systems people hold, skills, experience and cognitive processes. Furthermore, these two types of diversity can be categorized into the surface-level diversity with clearly visible traits and the other diversity being the more deep-leveled diversity, with no clearly identified traits (Staples & Zhao 2006). In a multicultural team setting, these two forms of diversity play an important role in determining the process and outcome of national diverse teams. Govindarajan and Gupta further explore these two forms of dividing diversity, as they state two types of diversity closely related to the previous ones. These are cognitive and behavioral diversity. The cognitive diversity refers to “the differences in the substantive content of how people perceive the team’s challenges and opportunities, options to be evaluated and optimal course of action. This deals with different perceptions people hold, meaning that individuals have different ways to perceive the task and optimal solutions in the group work. The other form is behavioral diversity referring to the various group members where there is a “difference in language as well as culture-driven norms of behavior. This refers to how different cultural norms can create communication difficulties and how they determine the behavior of people (Francesco & Gold 2005)

### **Approaches to Managing Workforce Diversity**

Gong (2008), although challenges exist, some approaches can effectively help contemporary

approaches of managing cultural diversity, which include;

➤ *Overcoming the Stereotypes and Increasing Fairness:* According to Gong (2008), stereotypes can easily result in discrimination against minority employees with cultural differences. And the discrimination may cause minority employees to feel ashamed of their culture and therefore lack the willingness to cooperate with others. Ethnocentrism is the belief that one’s culture is superior over others. Stereotype, ethnocentrism or discrimination can take place in parts of the employees. This negatively affects the whole organization, which might result in further isolation of minorities. Organizations that devote to diversity must first be aware of the stereotypes, ethnocentrism, and prejudice, and then create and adopt effective strategies to overcome biases. Employers should recognize the talents of minority workers, developing management opportunities to the qualified minority candidates. They should first overcome negative stereotypes and need to improve fairness in pre-employment hiring screening. Job description needs to be more rational. New standards like structured interviews or culturally sensitive tests should be added into the screening system (Berta 2006). Human Resource departments must regularly review and reevaluate their current measures and mechanism for hiring and evaluation to ensure that these systems are fair to applicants or employees with different cultural backgrounds. The screening tools must be culturally sensitive and the testing is culturally unbiased. Fair treatment is completely essential, but for an organization who wants to meet the multicultural challenge it is not enough. Completely evaluating diversity means treating people as individuals. Other people should not be seen as cultures or as “pieces in some kind of multi-racial mosaic (Day 2007). In an efficient diversity management system, organizations should pay attention to the contributions that the diverse





workforce and unique individuals can make to the companies. When dealing with cultural differences, a developmental method will help to increase fairness, diminish stereotypes, and make the diversity a reality.

➤ *Blending Cultural Diversity with a Dominant Organizational Culture:* The emphasis of this approach is on trying to integrate by blending the cultural diversity of an organization into this cultural texture. Similarities among the members of organizations help to develop cohesion and unity which, in turn, is related to the success of the organization (Seymen 2006). Organizational culture is a group of ruling ideas that include: ways of reasoning, ways of acting, common shared values, and codes of behavior and ethical standards, which are formed and developed over a long period with the active consensus of their leaders and influenced by the social environment as the background. As a natural consequence of forming a group, members coming from different sub-cultures found a unique belief and value system which is different from other organizations but relative and common to them. As organizational culture acculturates employees around common values, it enables them to move in an acceptable behavior model and constitutes transferable knowledge accumulation.

➤ *Dealing by a Human Resource Program or Strategy:* The most important property of this kind of program is its charging significant responsibilities to human resource departments and its intensely utilizing modern management techniques. With the help of these programs, how people from different cultures view work, how or by what they are motivated, what their attitudes are, what they value, etc. can be learned (Peppas 2001). The success of these programs is possible by performing human resource applications which are appropriate to the perspectives and needs of members belonging to different cultures (Kranias 2000). The increase of cultural

diversity necessitates managers to possess the information and understanding about how to manage people who are very different from each other in order to reach their common goals. According to Wright and Noe (1996), managers working with a workforce that has cultural diversity have to use variable management and organizational behavior techniques which harmonize different workforce needs and values.

➤ *Adopting an Employment Relationship Program:* To successfully manage a multicultural workforce, managers should first realize that majority and minority cultures are not always the same. Emulti (2001) posited that the following strategies can also help managers to break cultural barriers and reap advantages from cultural diversity:

- Creating programs that increase awareness of cultural diversity
- Improving positive attitudes toward differences among diverse groups
- Realizing the same view points and relations among different ethnic groups
- Being flexible in communication, and expressing personal concerns and confusions when facing cultural obstacles. In addition to these strategies, another important and effective approach to manage cultural diversity in the workforce is to adopt an employee relationship management system. To integrate minority workers into the workplaces, managers should accept the cultural differences by all the employees and create good relationship with them. Some programs can help to build up the relationship, which include:
  - Teaching other language to local employees
  - Celebrating different religious or traditional holidays of minority employees in the workplace, involving minority employees' families into some company activities, and emphasizing the importance of minority workers to the companies (Baum, Devine, and Hearn 2007.) In doing this, Managers should make effort to build one-on-one relationship with employees, understanding where they



came from by having conversations with them during the down time or some social events. Most minority employees prefer being listened to and respected. Therefore, increasing communication with these minority employees and providing environment of understanding and appreciating these employees can effectively obtain their trust and loyalty. Once they become self-motivated, their productivity would also be enhanced accordingly (Gong 2008).

➤ *Diversity Management Training Program:* Another factor ensuring effective management of cultural diversity is training programs. Diversity training is defined as “a means of establishing respect and developing sensitivity for all of the differences among employees and customers (Lim and Noriega 2007). Diversity training and education are necessary and essential to help employees:

- To become competitive and successful.
- To work effectively in environments outside their native culture.
- To significantly reduce the potential costly failure caused by cultural difference problems.

Diversity management training and multicultural education teach employees about various cultures. These training programs help to diminish stereotypes and allow trainees to see the cultural differences and the truth about other cultures. By the training, employees will show more respect to other people with different cultural backgrounds, and achieve more understanding of others’ beliefs and their traditions (Gong 2008). The training program emphasizes communication and educational training, which has positive impact on both minority and non – minority employees. Since multicultural workforce includes every job position from the top management down to low-level employees, diversity management training should be conducted in all levels but not only in the entry-level or low-skilled level (Emulti 2001). Specific training programs aiming at managing cultural diversity should be carefully designed, continually enforced, and

gradually improved. Moreover, according to Admed (2006), it cannot be ignored that for any training program that has the chance of long-term success, upper level management must be involved to ensure the implementation of diversity practices.

## Team Effectiveness

The definition of team performance and high performing teams leads to the term team effectiveness, which is “an evaluation of the outcomes of team performance processes relative to some set of criteria” (Salas, Goodwin and Burke 2009). The effectiveness is a combination of the actual performance results and some set standards that are often related to teams’ or organizational goals. An effective team has been described by Brooks as a group of people with the same, clear understanding of team’s objectives. There is a need for definable membership, shared communication network and group consciousness for such team. He also underlines the importance of the variety of skills and knowledge that others bring to the team, and which is needed for the team members to deal with team’s tasks.

Team members should also have respect and trust for each other in two dimensions – as individuals and for the contribution each brings to team’s results (Brooks 2006). Another view on team effectiveness is by Halverson and Tirmizi, where they state that a team’s effectiveness can be determined by its structure, membership and processes that relate to the level of trust, cohesion, efficacy and commitment. There are also several variables that influence teams in terms of organizational and societal contexts. Halverson and Tirmizi show some other criteria that can be used to measure team effectiveness when focusing on multicultural teams, which are productivity and performance, as well as team members’ satisfaction and learning. Integration of these factors leads to understanding of team’s effectiveness. Cultural norms in this case can have influence on team member’s perception



on processes and performance. Team member's individual criteria for the team's effectiveness will relate to their satisfaction of the performed task (Halverson & Tirmizi 2008). A proposal of effective multicultural teams formulated by Earley and Gibson states "effective teams are those with a strong team culture because shared member expectations facilitate individual and team performance and communication. A strong team culture might derive from overlapping and pre-existing characteristics of team members or newly developed patterns of team member interaction (Earley & Gibson 2002). This definition of effective multicultural teams underlines the importance of strong relationship between team members leading to understanding of each member differences and creating a beneficial working environment.

In an attempt to understand how teams work, a number of team effectiveness models have been developed by different authors. Each of these models presents several variables that the author(s) believes influence the effectiveness of teams. While some of the models emphasize group structure and interpersonal dynamics, others tend to focus on the talent. In this paper we have adopted the T7 model.

### The T7 Model of Team Effectiveness

Lombardo and Eichinger in 1995 developed the T7 Model of assessing team effectiveness; the model consists of seven elements all starting with the letter "T" and segments the team into two environments; five internal factors and two external factors. The internal factors include; Thrust or common purpose, Trust among teammates, Talent or collective skills, Teaming skills or efficiency as a team, and Test skills equaling getting the job done. The external factors are; Team leader fit or a leader who satisfies team needs, and Team support from the organization or the organizational culture enables the team (DeMeuse, 2007).

Internally, group fragmentation can easily occur when the thrust and trust components of

the internal factors are compromised. Thrust enables the committee to have a common objective or goal and is an important building block in the first step towards committee organization. The trust among team members is essential, but trust in the group leader is paramount, and of all the factors this is considered the most fragile component. The trust within a group can be circumvented with Dyadic side conversations or actions which create an independent undercurrent, these behaviors can have a negative influence on the committee as a whole and cause factions or cliques. Since the influence of these factions or cliques within the group creates an event that will alter the trust of the group and induce fragmentation, a strong leader is required to eliminate this behavior and keep the group focused and purposeful (Swaab, 2008).

### 3. Methods

Aham (2000) defined data analysis as the conversion of raw data into usable information. This study in its nature is qualitative. The researchers therefore used the descriptive survey approach to gather data for this study. The population of the study comprises of 300 members of staff drawn from three manufacturing firms in Enugu state. The firms include; Dalex paints Trans Ekulu, Emenite Ltd Abakaliki Road Emene, Hardis and Dromedas Airport Road Emene. The researchers however using yaro yamene's formula selected 171 employees out of the population of study. A five point likert scale questionnaire that covered the different areas of workforce diversity and how it affects team effectiveness was used to elicit response from the respondents. The statistical tools used for data analysis was the Non-Parametric Kruskalwallis test (H) using the 20.0 version of the statistical package for social sciences (SPSS). The kruskawalis which is a non-parametric equivalent for one-way ANOVA may be described thus:



$$T = H = \frac{12}{N(N+1)} \sum_{i=1}^k \frac{R_i^2}{n_i} - 3(N+1).$$

The

decision rule is to reject the null hypothesis if  $H \geq \chi_{(k-1)}^2$ , where k is the degree of freedom.

#### 4. Results and Discussions

The researchers in this section presented the results of the three hypotheses earlier stated in this study.

#### NPAR TESTS

```
/K-W=VAR00001 BY VAR00002(1 5)
/STATISTICS DESCRIPTIVES
/MISSING ANALYSIS
```

#### NPar Tests

##### Hypothesis One Output

##### Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
VAR00001	25	34.2000	13.58001	9.00	56.00
VAR00002	25	3.0000	1.44338	1.00	5.00

##### Kruskal-Wallis Test

##### Ranks

	VAR00002	N	Mean Rank
VAR00001	1.00	5	11.20
	2.00	5	21.00
	3.00	5	9.90
	4.00	5	3.30
	5.00	5	19.60
	Total	25	

##### Test Statistics<sup>a,b</sup>

	VAR00001
Chi-Square	19.838
Df	4
Asymp. Sig.	.001

a. Kruskal Wallis Test

b. Grouping Variable: VAR00002

##### Hypothesis Two Output



**Descriptive Statistics**

	N	Mean	Std. Deviation	Minimum	Maximum
VAR00001	25	34.2000	14.69977	7.00	63.00
VAR00002	25	3.0000	1.44338	1.00	5.00

**Kruskal-Wallis Test**

**Ranks**

	VAR00002	N	Mean Rank
VAR00001	1.00	5	10.20
	2.00	5	22.80
	3.00	5	15.50
	4.00	5	3.20
	5.00	5	13.30
	Total	25	

**Test Statistics<sup>a,b</sup>**

	VAR00001
Chi-Square	19.083
Df	4
Asymp. Sig.	.001

a. Kruskal Wallis Test

b. Grouping Variable: VAR00002

**Hypothesis Three Output**

**Descriptive Statistics**

	N	Mean	Std. Deviation	Minimum	Maximum
VAR00001	25	34.2000	13.31978	16.00	69.00
VAR00002	25	3.0000	1.44338	1.00	5.00



## Kruskal-Wallis Test

Ranks

	VAR00002	N	Mean Rank
VAR00001	1.00	5	5.10
	2.00	5	18.50
	3.00	5	10.50
	4.00	5	21.90
	5.00	5	9.00
	Total	25	

Test Statistics<sup>a,b</sup>

	VAR00001
Chi-Square	17.967
df	4
Asymp. Sig.	.001

a. Kruskal Wallis Test

b. Grouping Variable: VAR00002

The overall finding in this study shows that workforce diversity has significant impact on team effectiveness in manufacturing firms in Nigeria. The kruskawalis (H) value of the various hypotheses as tested is less than the level of significance (i.e  $0.001 < 0.05$ ). The researchers concluded that team thrust, teaming skills and team task skills which were used to proxy team effectiveness are largely influenced by the extent of diversity in the workforce.

## 5. Conclusion and Recommendations

Sequel to the findings above, the researchers concludes that workforce diversity impacts on team effectiveness significantly. The researchers recommend that to maximize the benefit of diversity in the workforce, diversity sensitivity training should be included workforce orientation programmes. This will enable the workforce adequately confront the challenges of diversity in the team.

## REFERENCES

[1] Admed, S. (2006), Doing Diversity Work in Higher Education in Australia.

*Educational Philosophy and Theory* 38, Pp. 745-768

[2] Baum, T., Devine, F., & Hearn, N. (2007), The Implications of Contemporary Cultural Diversity for the Hospitality Curriculum. *Education + Training* 49, pp. 350-363.

[3] Berta, D. (2006). *Experts: Fairer Hiring Will Improve Diversity*. 40, pp. 4-49.

[4] Brooks I. (2006), *Organisational Behaviour*, 3rd ed. London: Prentice Hall.



[5] Day, R. (2007), Developing the Multicultural Organization: Managing Diversity or Understanding Differences? *Industrial and Commercial Training* 39, Pp. 214-217.

[6] DeMeuse, K. P. (2007). Driving Team Effectiveness: A Comparative Analysis of the Korn/Ferry Model with other Popular Team Models. *Korn/Ferry Institute*, 1-16.<http://www.kornferryinstitute.com/reports-insights/driving-team-effectiveness>.

[7] Emulti, D. (2001), Preliminary Analysis of the Relationship between Cultural Diversity and Technology in Corporate America. *Equal Opportunities International* 20, Pp. 1-16.

[8] Francesco, A.M & Gold B.A. (2005), *International Organizational Behavior*. New Jersey:Pearson.

Gong, Y. (2008), *Managing Cultural Diversity in Hospitality Industry*. University Of Nevada, Las Vegas. Master's Thesis.

[9] Guirdham, M (2005), *Communicating across Cultures*. London: Palgrave Macmillan

[10] Halverson, B. C & S. A. Tirmizi. (2008). *Effective Multicultural Teams: Theory and Practice*. New York: Springer

[11] Harrison, D., Klein, K., (2007). What's the difference? diversity constructs as separation, variety, or disparity in organizations. *The Academy of Management Review* 32(4), 1199-1228.

[12] Kranias, D. (2000), Cultural Control: The Case of Japanese Multinational Companies and Their Subsidiaries in the US Management Decision 38, Pp. 638-649.

[13] Lim, E. & Noriega, N. (2007), The need for leadership support in cross-cultural diversity management in hospitality curriculums. *Consortium Journal of Hospitality & Tourism*, 12(1), 65-74

[14] Peppas, S. (2001), Sub-Cultural Similarities and Differences: An Examination of US Core Values. *Cross Cultural Management* 8, Pp. 59-70.

[15] Seymen, O. A. (2006), The Cultural Diversity Phenomenon In Organizations and Different Approaches for Effective Cultural Diversity Management: A Literary Review. *Cross Cultural Management: An International Journal* 13, Pp. 296-315

[16] Staples, D.Sandy & Lina Zhao. (2006), The Effects of Cultural Diversity in Virtual Teams Versus Face-to-Face Teams in Group Decision and Negotiation 15: 389-406.

[17] Swaab, R., Phillips, K., Diermeier, D. & Husted, V. (2008). The Pros and Cons of Dyadic Side *Small Group Research*, 39:372, DOI: 10.1177/1046496408317044.

[18] Wright, P., and Noe, R. (1996), *Management of Organizations*. Irwin McGraw-Hill.