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Influence of Teamwork Diversity Factors on Organisational Performance of Construction Firms in Nigeria

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Abstract: Teamwork is *sine qua non* to the project success of construction firms in Nigeria, and the entire world. There are many factors external and internal to the construction firms that influence teamwork diversity. This paper assessed the influence of teamwork diversity factors on organisational performance of construction firms in Lagos and Abuja through the self-administration of 254 structured questionnaires using random sampling technique. The data were analysed using multiple regression analysis, correlation analysis, and mean score ranking. The outcome of the research showed that factors that influence teamwork diversity are loyalty, motivation and responsibility (5.8850), that people worked collaboratively (5.8482) and ability to handle people and supervise, monitor and ensure the implementation of the project (5.7257) among other factors. Furthermore the results of the correlation, and multiple regression analysis revealed that teamwork is positively correlated with organisational performance which informed the rejection of the null hypothesis with the effect size (F) greater than one. This established the theory that there is significant relationship between teamwork and organisational performance. The paper concluded that for construction firms to have better organisational performance the teamwork intrinsic should be emphasised and given more attention. It is therefore recommended that efforts be made by the firms to create cultural

teamwork diversity heads that will see to the implementation of adequate incentives and cultural inclusiveness among team members.

Keywords: Organisation, Teamwork, Teamwork diversity, Organisational performance

1.0 Introduction

Construction firms' products undergo interdependent processes which explain why it is teamwork based industry. From inception to completion of projects, teams are formed on an ad-hoc basis and disbanded at some point along the project processes up to the final execution of the product.

Hence teamwork is imperative as far as construction work is concerned. Inefficiency of a particular team may create disruption in the work programme of other teams which eventually may result in poor performance in the organisation.

The feat of every establishment entails the positive dynamism of teamwork for the reason that it aids the employees' empowerment and advancement and their capabilities to function efficiently in the team's given tasks. The realisation of good collaboration among the team members also enables every member to gain thoughtful insight into the importance of teamwork as hominoid society builder and allowing individuals accomplish mutual targets required (Sanyal & Hisam, 2018). The visibility of teamwork importantly manifests in construction practice with the not too obvious culture acting as the underlying factor. Khoshtale & Adeli (2016), asserted that diversity impact cannot be overemphasised as it makes his obvious limelight impact in construction right from the project inception to the closing of the project

with the experiences of improved good human relationship. Congruently, Uher & Loosemore (2004) argued that notwithstanding the positive side of teamwork, due to the diversity within it there are negative negative traits such as contention amid the construction practitioners, dearth of reliance, absence of mutual respect which are grey areas that need greater attention if construction leaders must maintain the teamwork spirit during the course of the project (Uher & Loosemore, 2004; Faizatul, 2013).

Projects are being handled by people of different cultural background who obviously are mix of educated and non educated people with differing construction years of experience. The challenge emerge when the team lack the needed skill and experience to meet the objectives of the teamwork. This may pose a threat to the progress of the construction work and this may not be idea at some situations. Addressing this problem on time is needful in developing a team that not only efficient but also effective.

Teamwork has been looked at from different angles such as productivity, organisational performance etc. However, the underlying factors that make teamwork effective when looked at from the angle of diversity is sparsely focused on in the Nigerian construction industry, hence the need to assess the factors that influence teamwork diversity in construction firms in Nigeria with a view to

improving collaboration and performance. This is done with two objectives and one hypothesis in mind: To establish the relationship between teamwork and organisational performance

To ascertain the factors that induce teamwork diversity of construction companies in Nigeria.

Hypothesis Ho: The relationship between organisational performance and teamwork is not at all up-front and significant.

2.0 Literature Review

2.1 Construction team composition

The related pursuit of team members (Emmit and Gorse, 2007) of cultural variety (Loosemore & Lee 2003; Loosemore, Melissa & Kevin 2012) is significant to every project. This is in line with Emmit and Gorse (2007) who stated that every teamwork within the wall of construction are diverse and in mutual cooperation being well coordinated to deliver a project. Essentially, leadership, individuals, team and task are vital resources that construction industry operates with (Adair, 1983 cited in Khoshtale & Adeli, 2016). Teamwork is much evident and noteworthy in building practise and constructive cultural sway is of essence for a successful project.

2.2 Teamwork

Various authors elucidated teamwork; Katzenbach and Smith (2003) highlighted team component as individuals, matching abilities, mutual initiative, construction objectives, and work approach. Kock (2003); Saxena (2014) further stated that teamwork

symbolises an important tactic by firms to make better their to teamwork. Diversity within the teamwork is of worth to every organisation (Kelli et al., 2015), and the performance outcome of teamwork indicates whether or not the team is effective or not (Katzenbach & Smith, 2003). Succinctly, success in team is by virtue of every member's mutual roles in the teamwork (Azmy, 2012).

Unfortunately, team performance are circumscribed by several effects such as the diversity make up of the team which can be a varied or same make up. At the initial establishment of the crew, similar teamwork achieves cohesiveness faster than varied teamwork (Saxena, 2014). However, varied teamwork are face with solving diversity problem such as class variance, prejudice, tribal sentiment, language and communication barrier (Saxena, 2014) thereby giving room to delay in project processes.

Equally, bad attitude displayed by any member of the team can mess up strategies put in place by the teamwork, carelessly producing negative influence on teamwork (Steven & Zhiang, 2010). Moreover, there may be high worker turn over which may arise from the aftermath of an efficient worker leaving the firm because of prejudice (Sharon, 2018).

2.3 Team effectiveness

Performance, interdependent work, and team satisfaction are the three variables that defined team effectiveness (Mohrman, Cohen & Mohrman (1995). Also, studies such as Katzenbach & Smith (2003);

Khoshtale & Adeli (2016); reiterated that what make an efficient team is not farfetched from collaborations, interdependence, efficient communication, and focus.

Covey (1989) in Uher & Loosemore (2004) revealed a basic edict of happenings required to attain positive teamwork and team concerted effort are: mutual respect, reliance, openness and combined effort. Once team members appreciate each other, there will be rapid growth in morale. The product of trust and will is open interactions, thus creating true teamwork.

2.4 Relationship between teamwork as well as organisational performance

The achievement of the crew rest on on the common efforts of every team member (Azmy, 2012). Management procedure is imperative for developing organisational culture as it encompasses providing workers with the tactical issues and urgencies of the business. Organisation set the framework where all workers can express their abilities to what they are intended to realise. This acknowledged that subsections put together teams and that crews carry their own cultural ideas to a project, triggering variances and coordination hitches. Teamwork is therefore the key to enhancing individual and collective preparation, which influences the company's quality and efficiency by extension. The relation between teamwork and quality was, to be sure, reflected by Stewart and Barrik (2000). In relation to that the following hypothesis was put forward in this paper:

Hypothesis Ho: The relationship between organisational performance and teamwork is not at all up-front and significant

3.0 Research methodology

This paper reported part of a larger study that adopted mixed methods methodology. This aspect described the quantitative strand that was collected using quantitative methodology to elicit data from construction firms' personnel that have the requisite knowledge about the study. Quantitative methodology is regarded as the numerical depiction as well as influence of observations to exemplify in addition elucidate the mirrored phenomena (Babbie & Mouton, 2005). Logical method is most normally connected with quantitative approaches (Ann & Marja, 1997; Yin, 2015). The teamwork and organisational performance variables were tailored after Kreitner and Kinichi (2004) work, David, Bloom & Hillman (2007), Brammer and Millington (2008) and Waiganjo, Mukulu & Kahiri (2012). Two hundred and fifty-four construction workers were administered questionnaires; one hundred and thirteen returned which constituted 76.1 percent indigenous and 23.9 percent foreign construction firms in Lagos and Abuja. The data were collated and analysed using factor analysis for data reduction, correlation analysis and multiple regression analysis (Khoshtale & Adeli, 2016; Oyewobi, 2014)), and mean score ranking (Agboola, 2011; Oyewobi,

2014; Khoshtale and Adeli (2016) to determine the teamwork diversity factors that ranked the highest which is very critical to firms’ performance. The teamwork variables were coded as TWK1 to TWK 15 as seen in the results and discussion section. Teamwork variables were subjected to factor analysis and two component were extracted which the researchers labelled collaboration (teamwork 1) and conflict resolution (teamwork 2). Also the organisational performance

variables underwent factor analysis and three factors were extracted namely workgroup performance, firm’s performance, and overall performance coded as WGP, FOP, and ORP respectively. The results were later discussed and presented in tables.

4.0 Results and Discussion

4.1 Demographic profile of the respondents

Table 1: Demographic profile of the respondents

	Frequency	Valid percent
Kinds of Construction company		
Indigenous	86	76.1
Foreign	27	23.9
Experience in years		
1year	11	9.7
1to less than 2years	18	15.9
3 to less than 5years	34	30.1
6 to less than 10 years	21	18.6
Greater than 10yrs	29	25.7
Respondents’ age		
Not up to 21 years	2	1.8
21 to 34	33	29.2
35 to 44	41	36.3
45 to 54	26	23.0
Greater than 55	11	9.7
Sex		
Male	101	89.4
Female	12	10.6
Respondents’s religio		
Islam	28	25.5
Christianity	82	74.4

Respondents' role in organisation		
Project manager (PM)	19	17.3
Manager (M)	15	13.6
Senior management position (SMP)	32	29.1
Supervisor (S)	34	30.9
Foremen (F)	10	9.1

Table 1.0 denoted the demographic profile of the workforce of the selected construction firms in Nigeria. The indigenous construction organisations are 76.1% in Nigeria whereas their foreign counterpart which are 23.9%. This confirmed Idoro & Akande-Subar (2008) findings that there existed more indigenous construction organisations than foreign construction organisations in Nigeria notwithstanding higher patronage of foreign construction firms

by the government of Nigeria. The year of experiences shows a high skew towards 3-<5yrs (30.1%), 6-<10yrs (18.6%) and >10yrs (25.7%) which shows a well-informed and experienced workforce who might have in one way or the other work through cultural diversity influences. Succinctly the differences in age, gender, religion and role of the respondents disclosed culturally diverse workforce in the Nigerian construction firms.

4.2 Testing of hypothesis Ho

Table 2: Correlation matrix between teamwork and organisational performance

	1	2	3	4	5
Teamwork 1	1	-.117	-.047	-.122	-.098
Teamwork 2	-.117	1	.152	.240*	.241*
Workgroup performance	-.047	.152	1	.496**	.814**
Firm's performance	-.122	.240*	.496**	1	.859**
Organisational performance	-.098	.241*	.814**	.859**	1

*. Relationship is substantial at the 0.05 level (2-tailed).

**.. Relationship is substantial at the 0.01 level (2-tailed).

Using correlation matrix and multiple regression analysis, the hypothesis denoting the relationship between teamwork variables and organisational performance variables was tested to understand their level of association that would provide a guide on whether to accept or reject the null hypothesis. The result in Table 2 indicated that teamwork 1 (collaboration) correlated negatively with the success of the workgroup, the performance of companies and overall performance ($r = -.047$ $p \neq 0.05$), ($r = -.122$ $p \neq 0.05$), ($r = -.098$ $p \neq 0.05$). Teamwork 2 (Conflict resolution)

correlated favorably with the performance of the workforce, the performance of businesses and overall performance ($r = .152$ $p \neq 0.05$), ($r = .240$ $p < 0.05$), ($r = .241$ $p < 0.05$). At a substantial level of 0.05, the majority of coordination and organizational success variables are positively correlated, so the null hypothesis is dismissed. This is in line with the positive relationship between teamwork as well as organizational success observed by Stewart and Barrik (2000) and Ghazi and Muzaffar (2018).

Table 3: Regression between teamwork and organisational performance

Independent variables	Organisational performance		
	Workgroup Overall Performance	Firm's performance	
	Model 1	Model 2	Model 3
Teamwork 1	.030	-.095	-.071
Teamwork 2	.148	.229	.233
R	.155	.258	.251
R2	.024	.067	.063
F	1.348	3.933	3.701
Sig	.264	0.022	.028

In addition, an MLR was carried out in which the teamwork variables were regressed against the organizational performance variables, as seen in Table 3. Teamwork variables were

taken as the predictors, while the dependent variable was the organizational performance variables. The model has been modified as follows:

$$\begin{aligned}
 Y_{WGP} &= \beta_{(TWK2)}^{(WGP)}TWK2 + \beta_{(TWK1)}^{(WGP)}TWK + \beta_{(TWK)}^{(WGP)}TWK + \beta_o^{(WGP)} \\
 Y_{FOP} &= \beta_{(TWK1)}^{(FOP)}TWK1 + \beta_o^{(FOP)} + \beta_{(TWK)}^{(FOP)}TWK + \beta_{(TWK2)}^{(FOP)}TWK2 \\
 Y_{ORP} &= \beta_{(TWK1)}^{(ORP)}TWK1 + \beta_o^{(ORP)} + \beta_{(TWK)}^{(ORP)}TWK + \beta_{(TWK2)}^{(ORP)}TWK 2
 \end{aligned}$$

In Table 3 the outcome of the regression analysis is presented, model 1 with R₂ of 2.4% (R = .155, R₂ = .024, F = 1.348 with [p ≠ 0.05]). Model 2 had R₂ of 6.7% (R = .258, R₂ = .067, F = 3.933 with [p < 0.05]). Model 3 had R₂ of 6.3%

(R = .251, R₂ = .063, F = 3.701 [with p < 0.05]). Model 2 as well as model 3 output a substantial value while model 1 does not. However, based on the effect size F that is greater than 1., the null hypothesis is discarded

Table 4: Factors that influence Teamwork diversity

Code	Variables of Teamwork	Mean	Stand. Deviat.	Rank in order
TWK 1	That people worked collaboratively	5.8482	1.26070	2
TWK 2	To be suspicious of other workers who belong to other trades/companies	3.3186	1.54264	14
TWK 3	to emphasize teamwork and involve all participants in planning	5.3274	1.45432	8
TWK 4	To deal with conflict by compromise	4.2569	1.66335	11
TWK 5	For participants to withhold information from each other	3.2389	1.65979	15
TWK 6	For workers to identify more with their companies than the project	4.3540	3.13084	10
TWK 7	To have open and free communications	5.3964	1.42879	7
TWK 8	To find a participant to blame when things went wrong	3.6964	1.70764	13
TWK 9	Interdependence of each team member	4.9027	1.48182	9
TWK 10	Commitment to the benefits of group problem-solving	5.6460	1.14892	5
TWK 11	Ability to identify and analyse problems and to make the correct group decision	5.5841	1.31425	6
TWK 12	Negative attitudes of the co-workers to the work	3.7768	1.94848	12
TWK 13	Ability to convey and understand ideas and concepts	5.6903	1.11867	4
TWK 14	Loyalty, motivation and responsibility	5.8850	1.14761	1
TWK 15	Ability to handle people and supervise, monitor and ensure the implementation of the project	5.7257	1.33796	3

4.3 Factors influencing teamwork diversity of construction firms in Nigeria

TWK 14, TWK 1, TWK 15, TWK 13, and TWK 10 are the first five variables that influence teamwork diversity (see Table 4). For a team that wants to have high performance results, responsibility, motivation and loyalty are essential (TWK 14). This is in line with Rodrigues (2001), who indicated that the fairness of managers and employers to their subordinates will lead to loyalty and devotion to service being the end result. TWK 1 came second in ranking as can be seen on the table; team collaboration goes a long way in initiating positive processes among the teams that bring good performance. Faizatul (2013) and Ankrah (2007) studies are in line with this, noting that there is a problem of lack of trust and competition among construction participants, affecting collaboration between workers in Nigeria's construction companies.

Azmy (2012) found that the accomplishment of the team is a result of the combined efforts of efficiency and performance as they are efficient in certain

all team members, the ability of the team to achieve goal is quicker and higher compared to individual effort. In addition, the respondents stressed that the willingness of managers to supervise people in order to ensure project implementation (TWK 15) is essential. This means that all factors, including the human element, that could disrupt the job must be properly managed to ensure the positive execution of the job (Loosemore, Melissa & Kevin, 2012).

Being able to properly expantiate concepts and ideologies to team members will be possible through a good and effective communication(TWK 13) the lack of which can affect the work negatively. Real commitment to the benefits of group problem-solving: this is contrary to the principle of looking at men as machines that companies can use and dump. The benefits of the workforce(TWK 10) are to be considered to motivate the workers so that they can put in their best as well as project an excellent opinion of their employer. According to Essens et al. (2005) a productive team would br accessed for circumstances. Henderson and Walkinshaw (2002) as well as

Khoshtale and Adeli (2016) noted that team performance is depended on action or happening within the team. All the variables of teamwork diversity discussed above are crucial to the performance of teams in Nigeria's construction firms.

4.4 Managerial implication of teamwork/organisational performance outcome

In view of the enormous influence of loyalty, motivation and responsibility within the team members and inimitable traits of teamwork, management rather than take these influences with levity, should emboss this aspect as critical success criteria. Provision of incentives such as cultural inclusion as a form of motivation would produce a feedback of earned loyalty among the teams. Promoting cultural inclusion and understanding within the team would foster an atmosphere of 'I belong' to the team which would invariably make every one of them carry out their task to the best of their ability without any ill feeling. With such an atmosphere collaboration cannot be far-fetched among the workers with the resulting outcome of better performance.

5.0 Conclusion and Recommendation

The paper assessed the influence of teamwork diversity factors on organisational performance of construction firms in Lagos and Abuja through the adoption of quantitative methodology. Motivation, loyalty along with responsibility are vital for a team that want high performance outcome. Creating a conflict resolution project within the team is essentially important to boost workforce performance, firms' performance as well as the overall performance of the firms. Encouraging coordination among the members of the team goes a long way to initiating constructive processes that bring successful team results. Inclusion of every member of the team irrespective of their diversity in problem solving allows for free communication among the team members that promote good team performance. Consequently, teamwork processes should be of great focus to the construction firms studied as this determines the eventual outcome of performance due to the positive association between them. The paper concluded that for construction firms to have better organisational performance the

teamwork intrinsic should be emphasised and given more attention. It is therefore recommended that efforts be made by the firms to create cultural teamwork diversity heads that will see to the implementation of adequate incentives and cultural inclusiveness among team members.

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