

Assessment Of The Influence Of Leadership And Management Practices On The Performance Of Project Stakeholders In South-South Geopolitical Zone Of Nigeria

George D.A.¹, Okolie K.C.², Ezeokoli F.O.² and Okongwu M.I.²

¹Bureau for Special Projects, Rivers State, Nigeria.

²Department of Building, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria

DOI: 10.29322/IJSRP.11.09.2021.p11733

<http://dx.doi.org/10.29322/IJSRP.11.09.2021.p11733>

Abstract: The study assessed the influence of leadership and management practice on the performance of project stakeholders in south-south geopolitical zone of Nigeria. To achieve this, the study established and ranked the influence of leadership and management practice on the performance of project stakeholders in the study area. The study adopted the triangulation method otherwise or mixed method approach for the methodology. The population of this study is 380 consisting of the three major construction stakeholders, namely; the client, consultants and contractors from which 327 questionnaires were sampled using stratified random sampling. Data for this study were gathered for both qualitative and quantitative purposes using questionnaires, focus group meetings and interviews. The results were analyzed using descriptive and inferential, statistics (Mean, Percentage, t-test which was used to test the hypotheses guiding this study) and the findings were presented using tables. The findings revealed that patronage of quacks (3.95) and poor project planning (3.89) which ranked 3rd and 3rd respectively are among the top leading management and leadership problems that consequently affects the sub optimal performance of these project stakeholders. Similarly, adequate project monitoring and supervision (3.86), ensuring transparency in the selection of contractors and consultants (3.84), non-compromised standards (3.78), selection practices devoid of sentimentalism and favoritism (3.77), and no conflict of interest (3.74), among others were ranked among the top 10 leadership and management practices leading to a poor performance by project stakeholders. However, the study revealed that though it is important that the micromanaging leaders are avoided, this practice has little or no effect to achieving optimum Stakeholder's practice in a team environment. The study concludes by recommending that leadership and management should frequent check-ins (i.e. leaders must always meet with team members to check their pulse and performance, know their challenges, know what's going on with members' roles, review recent works done, provide feedback and update employees or team members of tasks ahead), celebrate success and reward hard work and meeting of target, tackle poor performance with constructive feedback, encourage underperforming members and help them grow.

Keywords: Leadership Style, Management Practices, Sub-Optimal Performance, Construction Project Stakeholders, Construction Project Managers (CPM).

1.0 INTRODUCTION

Leadership and management authors are predicting a future change in the methods, tools and skills required to manage construction projects in the 21st century (Egan, 1998; Dainty, Cheng and Moore, 2003; Ballard and Howell, 2004a; Froese, 2010; Lee and Yu, 2012). Many changes in management attitude, skills, styles, judgment and ability will be required to deal with the inevitable complexity in the future environment (Egan, 1998; Edum-Fotwe and McCaffer, 2000; Dainty, Cheng and Moore, 2003; Ballard and Howell, 2004a).

The 21st century brings with it many challenges for Construction Project Managers (CPM) in the construction industry (Bhargav Dave and Koskela, 2009), and these challenges are highlighted by the perception that construction industry stakeholders' performance is sub-optimal, both nationally and internationally (Egan, 1998; Carr and Tah, 2001; Aibinu and Jagboro, 2002; Takim, Akintoye and Kelly, 2003; Ballard and Howell, 2004b; Leung, Ng and Cheung, 2004a; Assaf and Al-Hejji, 2006; Xue, Wang, Shen and Yu, 2007; Emuze,

2011; Xianhai Meng, 2012; X Meng, 2012). Egan emphasizes that: “the industry will need to make radical changes to the processes through which it delivers its projects” (Egan, 1998). This poor performance has had a negative toll on the performance of projects.

Sub-optimal performance typically has an effect on the general outcomes of construction projects. The sub-optimal performance of the role-player’s in the construction industry is well documented and often expressed in articles and academic writings. The problem in this study is that construction role players’ performance is sub-optimal. The theoretical relevance of this study relates to the interaction of the role-players and how each individual role-player’s performance in turn affects the teams’ performance. The performance of each role-player is affected by the person’s ability, experience, motivation and operating environment (Scholl, 2003; Werner *et al.*, 2011; Mcshane and von Glinow, 2013).

Leadership is a relationship through which one person influences the behavior of other people (Mullins, 1996); Kangis and Kelly, 2000). Business dictionary defines management as the organization and coordination of the activities of business in order to achieve defined objectives. A manager should have the skill to understand people and to be able to lead and manage successfully (Shernat and Farrdl, 2015). Leadership is not the same as management (Sherrat and Farrell, 2015). Whereas management focuses on work and meeting objectives, leadership focuses on vision, inspiration and motivation. Selection and implementation of actions to bring about goal attainment represents a form of problem solving which makes the generation, evaluation and implementation of proactive and reactive solution key to leader effectiveness (Mumford, Stephen, Francis, Owen and Edwin, 2000).

A literature scan on current debate and discussions relating to research in the construction industry reveals that the construction role-players’ performance in South-South Nigeria is sub-optimal. Now the question is, how can role-players be motivated and the operating environment improved to optimize performance in a construction project? This study therefore seeks to provide a better understanding of the current sub-optimal performance of construction role players in the project environment existing from leadership style and management practices.

A study of the above constructs would lead to a better understanding of issues or facts that motivate project teams towards optimum performance; not just to achieve, but to exceed construction client goals in the 21st Century.

2.0 LITERATURE REVIEW

2.1 Conceptual framework

According to Diskul (2000), several researches sought to identify a set of common personality traits but could not come up with a universal list of traits which all successful leaders possess. The traits and behavioral approaches did not sufficiently explain leadership behaviour (Ethem and Nurcan, 2009). This led to a change in direction towards the contingency theory (Kangis and Kelly, 2000). However, researchers have after a rigorous study developed a model that seeks to address the need for effective performance amongst stakeholders (See Fig 1)

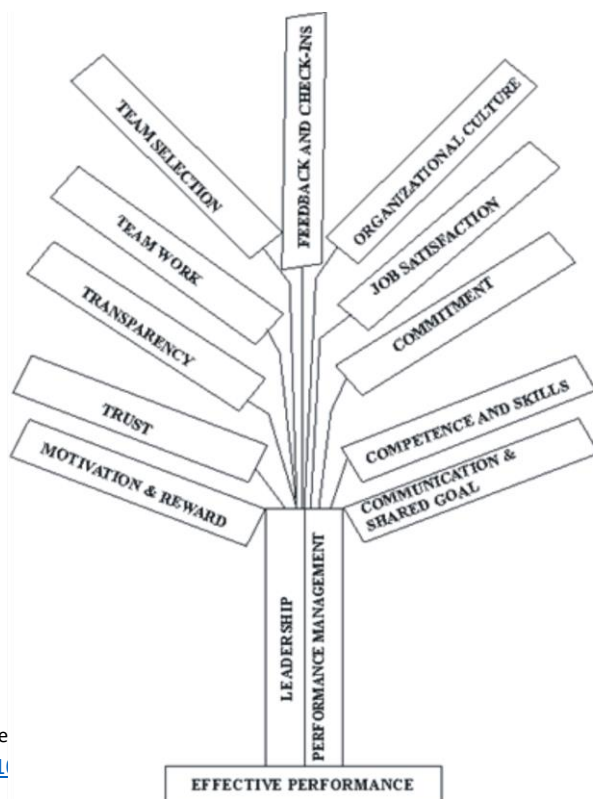


Figure 1: Conceptual (palm tree) model for effective performance

Source: Dennison *et al* (1995)

Behavioral complexity leadership (BCL) theory, according to Dennison *et al* (1995) explains that effective leaders will perform leadership roles and exhibit opposite behaviors when confronted by complex environments. Based on these reasons derived from previous literature, this study will rely on a combination or hybridization of both the BCL theory and the contingency (situational approach) theories which in the researcher’s opinion are both flexible and at the same time stiff enough to suit a complex environment like the construction industry. The researcher has therefore developed the leadership hybrid model which is recommended for use of CPM’s and organizational leaders to optimize performance (See Fig 2).

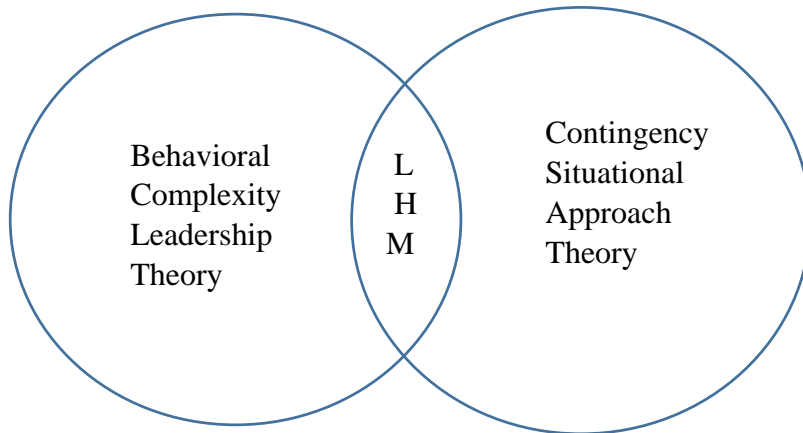


Figure 2: Leadership hybrid model

Source: Quin (1988) and the Blanchard and Hersey (1988)

Constructs

B.C.L: Behavioral complexity leadership theory

L.H.M: Leadership hybrid model which is a combination of both contingency theory and B.C. L

The models developed by Quin (1988) and the Blanchard and Hersey (1988) models for leadership behavior are also considered suitable. Lencioni (2005) theorized on effective teams. Patel *et al.* (2012) developed the team collaboration model. Cohen and Bailey (1997) came up with a team effectiveness framework and Schermahorn *et al.* (2008) developed a model for team building process.

Mohammed *et al* (2013) developed a theoretical framework for the relationship between motivational factors and job performance which is in agreement with the theories of Herzberg (1965;1968; 1974), all on motivators of employees’ performance. The conceptual model of this study also encapsulates these theories including the theory of Siew (2014) on training and development of employees. Bratton and Gold (2003) emphasized the need for proper recruitment/selection of employees and managers by key stakeholders and organizational management as this would result in excellent performance.

2.2 Leadership theories, leadership style and trends in the 21st century

The study of leadership which has to do with the nature of relationship between subordinates and superiors encompasses various approaches, such as trait theory, behavioral theory, and contingency theory (Robbin, 1998). The traditional leadership studies adopted three approaches, such as trait theory, behavioral theory and contingency theory (Robbins 1998). The traditional leadership studies adopted two approaches: traits and behavioral approaches (Ethem and Nurcan, 2009).

These studies of leadership assumed that a leader possesses characteristics or traits which distinguishes him or her from his followers and this assumption serves as a basis for the trait theory of leadership (Ethem and Nurcan, 2009). Several researches in that period concentrated on a set of personality traits, such as appearance, intelligence, persuasiveness and self-reliance. But could not come up with a universal list of traits which all successful leaders possess (Diskul, 2000). In essence, this approach has not sufficiently explained leadership behavior (Ethem and Nurcan, 2009). By the late 1940s, most of the studies on leadership had moved from what leaders were to what they did –the behavioral approach (Ethem and Nurcan, 2000).

The behavioral approach on the other hand, suggests that effective leaders influence their subordinates through behavior; these behaviors can be acquired and improved through training (Ethem and Nurcan, 2009). Many studies attempted to spot out the behavioral differences of effective leaders vis-à-vis ineffective leaders. Both theories, traits and behavioral, attempted to identify leadership uniqueness for all situations (Diskul, 2001). Research works on traits and behavioral approach failed to achieve significantly consistent results and this gave rise to a change in direction towards situational factors –the contingency theory. By the 1960s it became obvious that no specific leadership style existed that is applicable to all situations; therefore, the contingency theory which posits that leadership styles vary from situation to situation was developed as a theory to explain leadership. The effectiveness of a team is determined by a proper match between the leader's pattern of interaction with his team members and the measure to which the situation gives influence and control to the leader (Fielder, 1967). The situational approach looks at leadership effectiveness as arising from a dynamic interplay of three factors which are, the leader, the follower and the situation which they are handling or partaking (Kangis and Kelly, 2000).

2.3 Performance of Leadership

Yukl (2002) defined leadership as a process of facilitating others to acknowledge what need to be accomplished and how it can be done so as to meet set out objectives. Webber (2002) identified the challenges faced by a cross-section of teams as; low team trust, low cohesion, team disintegration and negative team performance. Mullins (1996) looked at leadership from the perspective of influence and described it as a relationship through which one person influences the behavior of other people. Kangis and Kelly (2000) also supported this view.

Sherrat and Farrel (2015) were able to establish that leadership is not the same as management. They said a leader should have the skill of understanding people and to lead and manage projects successfully. Okolie, Okorie and Ikepeazu(2016) said, leadership has been determined to be relevant in the 21st Century building process and it has been proved that exceptional organizational performance could be achieved through leadership traits /behaviour.

The study of leadership encompasses various approaches such as trait theory, behavioral theory and contingency (situational) theory. Several researches sought to identify a set of common personality traits but could not come up with a universal list of traits which all successful leaders possess (Diskul, 2000). In essence these approaches did not sufficiently explain leadership behaviour (Ethem and Nurcan, 2009). The traits and behavioral approaches failed to yield significant results and this gave rise to a change in direction towards the contingency theory which recommends that leadership should be tailored to fit different situations, different employees and different environments. Rangis and Kelly (2000) while trying to explain leadership, said styles should be patterned according to the situation and environment leaders meet on ground; they said the contingency approach looks at leadership as arising from an interplay of three factors, the leader, the followers and the situation being handled.

2.4 Influence of management practices

Management practice here refers to construction management practices in Nigeria, particularly the South-South geopolitical zone. The Nigerian construction industry is said to have contributed about half the total stock of fixed capital investment in the economy (Olaloku, 1987). Construction projects in Nigeria are worth several billions of naira; it is therefore imperative that the challenges facing construction management best practices be given urgent attention (Ugwu and Attah, 2016).

The practice of construction management goes beyond competence and professional expertise, it encompasses good and sound judgment skills to manage resources within the budget, monitor the progress of work, prepare job schedule and unpredicted outcomes, while at the same time dealing with people and organizational issues (Abbasi and Al-Mharmah, 2000). The need for professionalism and best practices by CPMs will ensure that the huge resources invested in the industry are deployed efficiently for the benefit of Nigerians (Gahlot, 2002).

Studies have shown that social, economic, political and human factors and leadership factors are barriers to successful project planning and execution in Nigeria (Idoro and Patunola-Ajayi, 2009).

In a study carried out by Ugwu and Attah (2016) the following factors ranked the highest as the problems facing construction management practice in all six geopolitical zones of Nigeria: lack of construction management knowledge, poor communication between role players, ineffective coordination, poor resource management, lack of organizational structure, poor information/knowledge sharing, freedom of expression, mutual respect, poor motivation, job insecurity, lack of training, non-application of relevant PM software tools and techniques and corruption. With respect to lack of training, Siew (2014) listed some steps that should be followed in training of workers (see fig 3)

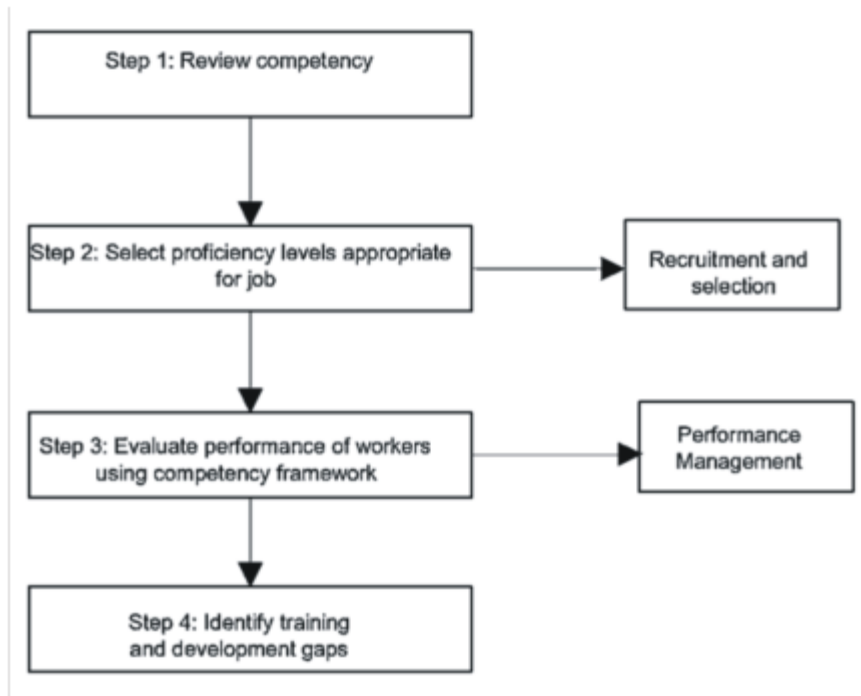


Figure 3: Steps involved in identifying training gaps for employees
 Source: Siew, RYJ (2014) Human resources management in the construction industry

3.0 METHODOLOGY

This research was carried out in south-south geopolitical zone of Nigeria particularly Akwa-Ibom, Bayelsa, Cross-Rivers, Delta, Edo and Rivers States using a triangulation method otherwise known as ‘mixed methods’ as the research design. The population of the study consists of the principal stakeholders (clients, consultants and contractors) involved in construction project in the south-south geopolitical zone of Nigeria.

The population of the contractors and consultants were gotten from list of registered contractors and consultants with Bureau of Public Procurement and ministry of works in the respective states (see Table 1). The population of clients was obtained from the active construction sites in the study area during the period of this study.

Table 1: Population of the study

S/N	POPULATION	NUMBER
1	Clients	752
2	Consultants	1505
3	Contractors	5268
Total		7525

Source: Research’s field survey (2021)

The sample size for the study was determined using Taro Yemeni’s formula $n = \frac{N}{1+N(e)^2}$

Where N = sample size

e^2 = margin of error (assumed 5%)

1 = Unity or constant

$$\text{Therefore} = \frac{7525}{1+7525(0.05)^2}$$

$$= \frac{7525}{1+18.813}$$

$$= \frac{7525}{19.813} = 379.50$$

The sample size of 380 was adopted for this study.

4.0 RESULTS AND DISCUSSION

4.1 Data Presentation and Analysis

Table .2: Distribution of Questionnaire and Percentage Response

S/N	Number of questionnaires distributed	Number of questionnaires received	Percentage (%)
Total	380	327	86.1

Source: Research’s field survey (2021)

Table 2 shows the profile of Questionnaire distribution and percentage response. From Table 2, a total of three hundred and eighty (380) copies of questionnaire distributed across the locations in the study area, about three hundred and twenty-seven (327) copies were correctly filled and returned for analysis. The 327 copies represent about 86.1% of the total questionnaire distributed across the study area.

Table 3 Respondents’ opinion on the management and leadership practices that are needed to enable optimum stakeholder’s performance.

Leadership and management practices for optimum Stakeholder’s practice	Responses and Level of Importance					$W_i X_i$	Mean	Rank
	5	4	3	2	1			
No vision, focus and shared goals	77 (23.5%)	98 (30.0%)	66 (20.2%)	50 (15.3%)	36 (11.0%)	1111	3.40	31
Poor team leadership	78 (23.9%)	95 (29.1%)	80 (24.5%)	44 (13.5%)	30 (9.2%)	1128	3.45	27
Corruption	127 (38.8%)	75 (22.9%)	60 (18.3%)	38 (11.6%)	27 (8.3%)	1218	3.72	10
Poor communication of task and goals	58 (17.7%)	100 (30.6%)	112 (34.3%)	34 (10.4%)	23 (7.0%)	1117	3.42	30
Poor coordination and project governance	63 (19.3%)	127 (38.8%)	74 (22.6%)	38 (11.6%)	25 (7.6%)	1146	3.50	24
Poor performance measurement and management using KPI’s	64 (19.6%)	114 (34.9%)	83 (25.4%)	39 (11.9%)	27 (8.3%)	1130	3.46	26
Bad leadership style	85 (26.0%)	113 (34.6%)	75 (22.9%)	29 (8.9%)	25 (7.6%)	1185	3.62	15
Compromising standards	127 (38.8%)	81 (24.8%)	64 (19.6%)	30 (9.2%)	25 (7.6%)	1236	3.78	6
Selectivism, sentimentalism and favoritism	120 (36.7%)	87 (26.6%)	66 (20.2%)	32 (9.8%)	22 (6.7%)	1232	3.77	7
Poor recruitment and human resource management	100 (30.6%)	94 (28.7%)	81 (24.8%)	32 (9.8%)	20 (6.1%)	1203	3.68	12
Inexperienced team leader/manager	105 (32.1%)	83 (25.4%)	78 (23.9%)	34 (10.4%)	27 (8.3%)	1186	3.63	14
Unqualified team leader/manager	94 (28.7%)	91 (27.8%)	68 (20.8%)	40 (12.2%)	34 (10.4%)	1152	3.52	21

Micromanaging leader	39 (11.9%)	98 (30.0%)	126 (38.5%)	37 (11.3%)	27 (8.3%)	1066	3.26	32
Poor management of materials and financial resources	90 (27.5%)	102 (31.2%)	73 (22.3%)	38 (11.6%)	24 (7.3%)	1177	3.60	16
Lack of supervision	80 (24.5%)	110 (33.6%)	78 (23.9%)	34 (10.4%)	25 (7.6%)	1167	3.57	18
Poor succession management practices	61 (18.7%)	112 (34.3%)	97 (29.7%)	36 (11.0%)	21 (6.4%)	1137	3.48	25
Poor HSE practice	83 (25.4%)	77 (23.5%)	101 (30.9%)	37 (11.3%)	29 (8.9%)	1129	3.45	27
Poor risk management practices	68 (20.8%)	88 (26.9%)	109 (33.3%)	45 (13.8%)	17 (5.2%)	1126	3.44	29
Poor quality management	76 (23.2%)	108 (33.0%)	87 (26.6%)	40 (12.2%)	16 (4.9%)	1169	3.57	18
Poor quality assurance/management practices	66 (20.2%)	111 (33.9%)	95 (29.1%)	39 (11.9%)	16 (4.9%)	1153	3.53	20
Poor cost control/budget management	97 (29.7%)	96 (29.4%)	80 (24.5%)	37 (11.3%)	17 (5.2%)	1200	3.67	13
Poor schedule/time management	85 (26.0%)	99 (30.3%)	87 (26.6%)	35 (10.7%)	21 (6.4%)	1173	3.59	17
Non-compliance with procurement guidelines	79 (24.2%)	90 (27.5%)	99 (30.3%)	38 (11.6%)	21 (6.4%)	1149	3.51	22
Non-compliance with professional best practices, procedures and ethics	121 (37.0%)	85 (26.0%)	60 (18.3%)	32 (9.8%)	29 (8.9%)	1218	3.72	10
Delayed payment to contractors by clients	108 (33.0%)	99 (30.3%)	61 (18.7%)	40 (12.2%)	19 (5.8%)	1218	3.72	10
Non-payment of mobilization fees to contractors	78 (23.9%)	105 (32.1%)	76 (23.2%)	41 (12.5%)	27 (8.3%)	1147	3.51	22
No transparency in the selection of contractors and consultants	126 (38.5%)	91 (27.8%)	64 (19.6%)	24 (7.3%)	22 (6.7%)	1256	3.84	5
Hijacking of contracts by politicians	165 (50.5%)	64 (19.6%)	55 (16.8%)	16 (4.9%)	27 (8.3%)	1305	3.99	1
Poor project planning	135 (41.3%)	99 (30.3%)	38 (11.6%)	32 (9.8%)	23 (7.0%)	1272	3.89	3
Poor project monitoring and supervision	128 (39.1%)	100 (30.6%)	51 (15.6%)	20 (6.1%)	28 (8.6%)	1261	3.86	4
Patronage of quacks	164 (50.2%)	76 (23.2%)	29 (8.9%)	24 (7.3%)	34 (10.4%)	1293	3.95	2
Conflict of interest	114 (34.9%)	87 (26.6%)	72 (22.0%)	34 (10.4%)	20 (6.1%)	1222	3.74	8
Cluster mean							3.62	

1- Least responsible cause, 2- Slightly responsible cause, 3- Moderately responsible cause, 4- Responsible cause, 5- Most responsible cause.

Source: Research's field survey (2021)

The result in Table 4.15, shows that the respondents affirmed that the outlisted are essential management and leadership practices that are needed to enable optimum Stakeholder's practice in a team environment. As shown in the result, the respondents identified that the major practices include minimized hijacking of contracts by politicians (mean=3.99), non- patronage of quacks (mean=3.95), good project planning (mean=3.89), adequate project monitoring and supervision (mean=3.86), ensuring transparency in the selection of contractors and consultants (mean=3.84), non-compromised standards (mean=3.78), selection practices devoid of sentimentalism and favoritism (mean=3.77), and no conflict of interest (3.74), among others. However, they opined that though it is important that the micromanaging leaders are avoided, this practice has little or no effect to achieving optimum Stakeholder's practice in a team environment.

4.2 Test of Hypothesis

This publication is licensed under Creative Commons Attribution CC BY.

<http://dx.doi.org/10.29322/IJSRP.11.09.2021.p11733>

www.ijsrp.org

H₀: Leadership and management practices do not significantly influence the performance of construction project stakeholders.

H₁: Leadership and management practices have significant influence on the performance of construction project stakeholders.

Table 4: Test of significance

One-Sample t-Test: Test Value = 3.00						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Mean responses	20.143	31	.000	.62000	.5572	.6828

From the result in Table 4,

$$\text{Test statistic: } t = \frac{\bar{x} - \mu_0}{\frac{s}{\sqrt{n}}} = 20.143$$

P-value = 0.000

Decision Rule: Reject H₀ of p-value < 0.05 otherwise do not reject

The t-calculated value (t-stat.) of 20.143 and associated probability value of 0.000 < 0.05 indicates that leadership and management practices have significant positive influence on the performance of construction project stakeholders.

5.0 CONCLUSION AND RECOMMENDATIONS

CPMs in the Nigerian construction industry are tasked with the management of projects within the Built Environment from conception to completion, including the management of related professional services. The project teams who are made up of individuals from a range of organizations which provide multidisciplinary inputs must therefore work in a harmonious manner to see that the ultimate goal of the project is achieved successfully (Shelbourn *et al.*, 2006). Project teams are in most cases diverse in nationality, culture, social background, ethics religions and seniority in business (Horwitz and Horwitz, 2007).

The leadership and management of most contracting and consulting firms in the study area were found wanting in their various practices and these ill practices of them were linked to sub-optimal performance of the project stakeholders in the general outcomes of construction projects. some of these practices as found in the study includes bad leadership style, patronage of quacks, poor project planning, no transparency in the selection of contractors and consultants, compromising standards, selectivism, sentimentalism and favoritism, poor communication of task and goals, poor recruitment and human resource management, unqualified team leader/manager, poor quality management etc. Lack of good leadership by the management and as well a management with no goal or vision in sight is another key things that affects the performance of team members.

The study recommends that leadership and management should frequent check-ins (leaders must always meet with team members to check their pulse and performance, know their challenges, know what’s going on with members’ roles, review recent works done, provide feedback and update employees or team members of tasks ahead), celebrate success and reward hard work and meeting of target, tackle poor performance with constructive feedback, encourage underperforming members and help them grow.

REFERENCES

- Abbasi, Y. G., and Al-Mhammah, H. (2000). Project Management practice by the public sector in a developing country. *International Journal of Project Management*, 18(3), 105-109.
- Aibinu, A. A. and Jagboro, G.O. (2002). The effects of construction delays on project delivery in Nigerian construction industry. *International Journal of Project Management*. 20, 593- 599. doi:10.1016/S0263-7863(02)00028-5.
- Assaf, S. A. and Al-Hejji, S. (2006). Causes of delay in large construction projects. *International Journal of Project Management*, 24,349-357. doi:10.1016/j.ijproman. 15.05.2019
- Ballard, G. and Howell, G. A. (2004b). Competing construction management.

- Carr, V. and Tah, J. H. (2001). A fuzzy approach to construction project risk assessment and analysis: Construction project risk management system. *Advances in Engineering Software*, 847-857. doi: 10.1016/S0965-9978(01)00036-9.
- Dainty, A. R. J., Cheng, M. I. and Moore, D. R. (2003). Redefining performance measures for construction project managers: an empirical evaluation. *Construction Management and Economics*, 209-218 doi: 10.1080/0144619032000049737
- Diskul, P. (2001). Towards effective smwts. Dissertation. Virginia Commonwealth University of Richmond Virginia, 266. doi:10.1061/(ASCE)/9742-597X(1994) 10: 6(36).
- Egan, J. (1998). Rethinking construction, 38. Retrieved from: <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:rethink+construction#0>.
- Emuze, F. A. (2011). Performance improvement in South African construction. Nelson Mandela Metropolitan University.
- Ethem. D. and Nurcan, C. (2009). Effects of leadership roles in team effectiveness, *Ege Academic Review*, 9(2), 390-392. Retrieved from: <https://www.researchgate.net/profile/Ethemduygulu/publication>.
- Gahlot, P. S. (2002). Construction planning and management. New Age International Limited, Ansari Road, Daryaganj, New Delhi.
- Herzberg, F. (1965). The new industrial psychology. *Industrial and Labour Relations Review*, 18(3), 364.
- Herzberg, F. (1968) one more time: How do you motivate employees? *Harvard Business Review*, 46(1). 53-62.
- Herzberg, F. (1974). Pinpointing what ails the organizational dynamics, 3(2), 18-29.
- Horwitz, S. K. and Horwitz, I. B. (2007). The effects of team diversity on team outcomes: A meta-analytic review of team demography. *Journal of Management*, 33(6). 987-1015. doi:10.1177/0149206307308587. http://www.ucipfg.com/repositorio/gspm/cursos/spoa_gspm_02/1.pdf#
- Kangis, P. and Kelly, L. (2000). Project leadership in clinical research organizational. *International Journal of Project Management*, 18, 393-401.
- Idoro, G.I. and Patumola-Ajayi, J.B (2009). Evaluating the strategies for marketing project management system in the Nigerian construction industry. *Nordic Journal of Surveying and Real Estate Research*, 6(2), 25-36.
- Leung, M. Ng, S. T. and Chueng, S. (2004a). Measuring construction project participant satisfaction. *Construction Management and Economics*, 319-331. doi:10.1080/0144619032000000000.
- McShane, S. and von Glinow, M.A. (2013). Organizational behaviour: Emerging knowledge. global reality. Sixth. mcgraw-hill/irwin. Retrieved from www.mhhe.com. 29.06.2019.
- Mohammad, S. A., Indra, D. S. and Abu, B. A. (2013). Relationship between motivational factors and job performance of employees in Malaysian service industry. *Asian Social Science*, 9(9), 301-310. Retrieved from: <https://www.researchgate.net/profile/IDsubramaniam/publication/250306563>. 26.06.2019.
- Mullins, L. J. (1996). Management and organizational behaviour. Pitman Publishing, Great Britain.
- Mumford, M. D., Stephen, J. E., Francis, D. H., Owen, J. T. and Edwin, A. F. (2000). Leadership skills for a changing world: Solving complex social problems. *Leadership Quarterly*, 11(1), 11-35.
- Okolie, K. C., Okorie, V. N. and Ikpeazu, F. O. (2016). Development of a leadership model for effective reduction of building collapse in Nigeria. *PM World Journal*, v(iv), 2. Retrieved from: <https://pmworldlibrary.net/wp-content/uploads/2016/04/pmwj45>. 08.07.2019.
- Olaloku, F. A. (1987). The QS, the Second tier foreign exchange market and the construction industry in Nigeria: Options and challenges. *Journal of the Federation of Building and Civil Engineering Contractors in Nigeria*, 4(1), 4-8.
- Rubbins, S. (1998). Organizational behavior: Concepts, controversies, applications. Prentice Hall, USA.

- Schermerhorn, J. R., Hunk, J. G. and Osborn, R. N. (2008). *Organizational behaviour*. John Wiley and Sons, Inc., 195-196.
- Scholl, R.W. (2003.) *Individual performance*. <http://uri.edu/research/Irc/scholl/webnotes/performance.htm>. 26.06.2019
- Shelbourn, M. A. Bouchlaghem, D. M., Anumba, C. J., Carillo, P. M. Khalfan, M. M. (2006). Managing knowledge in the context of sustainable construction, *ITCON*, 11, 57-71.
- Sherrat, F. and Farrell, P. (2015). *Introduction to construction management*. Padstrow: Routledge.
- Siew, R. Y. J. (2014). Human resource management in the construction industry-sustainability competencies, *Australian Journal of Construction Economics and Building*, 14(2), 87-103. Retrieved from: <https://epress.lib-uts.edu.au/journals/index.php/AJC.EB/article/download/3957/4058>. 05-07-2019.
- Takim, R., Akintoye, A. and Kelly, J. (2003). Performance measurement systems in construction. 19th Annual Arcom Conference. 423-32. Retrieved from: http://www.arcom.ac.uk/publications/procs/ar2003-423-432_Takim_Akintoye_and_Kelly. Pdf. 16.07.2019
- Ugwu, O. O. and Attah, I. C. An appraisal of construction management practice in Nigeria. *Nigerian Journal of Technology (NIJOTECH)*, 35(4), 754-760. Retrieved from: <http://dx.noi.org/10.4314/njt.v35i4.9>. 07.07.2019.
- Werner, A., Bagraim, J., Cunningham, P., Pieterse-Landaman, E., Potgieter, T. (2011). *Organizational behaviour: A contemporary South-African perspective*. Third. Ed. A. Werner. Pretoria: Van Schaik Publishers.
- Xue, X., Wang, Y., Shen, Q., Yu, X. (2007). Coordination mechanisms for construction supply chain management in the internet environment. *International Journal of Project Management*, 25. 150-157. doi: 10.1016/j.ijproman.09.06.2019.