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LEADERSHIP STYLES OF SELECTED CONSTRUCTION MANAGERS IN NIGERIA

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ABSTRACT: *This study was designed to determine the personal characteristics and leadership styles of construction managers in selected construction firms in Lagos, Nigeria and effect of leadership styles on morale of workers. The study was conducted with data from questionnaire retrieved from forty four construction firms. The construction managers in these firms were required to identify their personal characteristics and leadership styles and the effect of their leadership styles on workers' morale. Rankings of the Relative Importance Index used for personal characteristics evaluation revealed that construction managers are self-confident, self-assured, determined and can communicate effectively with others. Factor analysis was used to extract democratic and autocratic leadership styles as the major styles of leadership among the construction managers. Increment in the productivity and satisfaction and dangerous decisions were rated high as effects of democratic and autocratic leadership style on workers respectively. The established effects of democratic leadership style on workers' morale justify its wide adoption.*

KEYWORDS: Leadership Styles, Leadership Approach, Factor Analysis, Effect Of Leadership Style.

INTRODUCTION

Leadership function emerges wherever people work in groups. It is the process of shaping and defining the goals and culture of a group or an organization. Primarily, leadership is a process of influence and a leader is required to give direction, align people, motivate and inspire.

The appearance of the hierarchical structures of organisations ostensibly suggest that leadership is contained in the flow of the structures, but that is not always the case; as Belbin (1997) later suggested that leadership is a different value that can be brought to the job irrespective of the structure. For several years, the mainstream paradigm of leaders in the Construction Industry has been technology and project oriented (Pries et al., 2004). However, construction managers deal with a wide range of tasks and processes for each construction project, both technical and managerial, and also function as a key decision maker in a construction project owing to their influence on project's resources and the project as a whole. Construction managers are required on projects to provide purpose, direction and motivation to subordinates and subcontractors and have varying roles necessary to perform their functions. These plethora of functions are optimised when leadership performs properly.

According to Messick and Kramer (2004), the extent to which a person shows leadership ability derives from their personal features and expertise, and the features of their circumstances and the prevailing milieu. In the Construction Industry, leadership style is a key component that enables workers' concentration at work and dedication to increase or decrease (Odusami,

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Iyagba and Omirin,. 2003) and it can be described as a relatively enduring set of behaviour which is a characteristic of the leader.

Many studies have provided correlation between the styles of leadership to project performance; but few studies have investigated the effect of leadership styles on workers' morale. Muller and Turner (2007) matched the project managers' leadership abilities of sentimental toughness, effective information flow, stimulus, compassion and ethics as correlates with faster project accomplishment. Rowlinson et al. (1993) evaluated the leadership approaches of construction managers and observed that project leaders showed supportive style at the initial stages of projects and later directive style at the main construction stages. Odusami *et al*. (2003) evaluated the correlation among project leadership, group collaboration and project accomplishment and found that leadership is a factor to be considered for successful execution of projects.

In Nigeria, the requirement for leadership improvement in the construction industry arose because of the myriad of problems facing the industry; many of which will be assuaged when the leadership styles in the industry positively impact the morale of the workers. For example, the productivity of the industry is lower than that of its counterpart in other nations. Specifically, productivity of the Nigerian worker has been adjudged lower than that of counterparts in the western world for decades. (Yesufu, 2000) Part of the efforts of the Nigerian government to improve productivity led to formation of a national productivity centre in 1987. The World Bank Report (2009) reported that labour efficiency in Nigeria is continuously small, its figure is averagely 1.2% increase rate between 2000 and 2008. Whereas, other sub Saharan African countries recorded 1.9% growth rates at the same period.

The Nigerian construction industry is not only an integral part of the economy, but also an influential part because of its contribution to the economy. Because the industry has remained largely non mechanized, but rely on large number of manual workers, it is also bogged down with the low productivity picture painted above (Akindele, 2003). Other problems of the Nigerian construction industry include foreign domination (Engineering Network, 2015); Inadequate human, material and equipment resources and non availability of regulations, guidelines and standards for the building process (Mbamali and Okotie, 2015). Other challenges are unethical behaviours such as bribery, environmental destruction, capital flight, dangerous practices and whistle blowing (Oyewobi, Ganiyu, oke, Wola and Shittu., 2011)

To this end, this study was designed to determine the personal characteristics and leadership styles of construction managers in selected construction firms in Nigeria and the effect of leadership styles on morale of workers. This could unmask the contributions of the leadership of the industry to its growth or decline and thence indicate the required directions for the future.

Leadership approaches and styles

Some approaches to leadership are trait, behavioural and contingency. The trait approach arose from the 'Great Man' theory as a way of recognizing the key features of accomplished leaders. It was supposed that by this approach, essential leadership traits could be identified and that persons with such traits could be used for leadership positions. The behavioural approach focuses on human affairs along efficiency and work outcomes and looks at leaders in terms of their actions and individual subordinate outcome. Fiedler's contingency approach (1967) indicates that managers do not have an ideal way in exercising leadership and that the style to

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be used is dependent upon features such as conditions, persons, assignments, organization and other situational variables.

Leadership styles can be classified as autocratic, democratic and laissez-faire (Koontz and Weihrich, 1988). Koontz and Weihrich (1988) also explained the features of these styles of leadership. An autocratic leader is dependent on the authority conferred upon him by his position, knowledge, strength or power; and therefore keeps the administrative influence and control in his own hand. A democratic leader engages group members in planning and decision-making, often through an official knowledge assembly or ballot procedure. A laissez-faire leader encourages a keen sense of proficiency and knowledge in group associates and permits them to their highest prospects.

RESEARCH METHODOLOGY

The data required for this study were obtained through a survey conducted with a structured questionnaire. The population for the study were construction managers in the construction firms registered with the Federation of Construction Industry (FOCI) comprising medium and large construction firms registered in the categories C and D with the Federal Ministry of Works. Out of the 95 construction firms on the FOCI register, 44 firms located in Lagos State were selected as the sample size.

The questionnaire was structured according to the objectives of the study. The first section was designed to identify the personal characteristics of construction managers in the selected firms. The construction managers were asked to indicate the degree to which they agree or disagree with the listed traits on a Likert scale of 1-5. The scale was defined as follows; 1-strongly disagree, 2-disagree, 3-neutral, 4-agree, and 5-strongly agree. Relative Importance Index (RII) was used to rank the personal characteristics of construction managers in order to show which of the traits is most dominant in the construction managers. The second section contained statements about leadership styles of construction managers. Twenty nine statements on leadership styles extracted from literature were presented in this section for evaluation, using a Likert scale of 1-5 for determining the perceptions of the construction managers. On the Likert scale, 1, 2, 3, 4 and 5 represented almost never true, seldom true, occasionally true, frequently true and almost always true respectively. From the twenty nine statements on leadership styles, nine factors of statements were extracted as impacts of factors that determine various leadership styles among construction managers.

The third objective of the study was to examine the effect of leadership styles on morale of workers. The effects of basic leadership styles (autocratic, democratic and laissez-faire styles) on morale of workers were identified from literature and presented in the questionnaire for evaluation. Likert scale of 1-5 was used to rate the degree of the effect of leadership styles, where rating of 1, 2, 3, 4 and 5 represented not high, slightly high, high, fairly high, and very high. RII was adopted to analyse the degree of the effect of leadership styles on workers' morale as perceived by the construction managers.

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Data analysis and discussion of findings

Table 1.0. Relativity index for ranking the personal characteristics of construction managers

s/n	Personal characteristics	Sum weighted value (SWV) ($\sum Xiyi$)	RII ($\frac{SWV}{44}$)	Mean Deviation ($X-X_m$)	Rank
1	Articulate	189	4.30	0.422	1
2	Perceptive	166	3.77	-0.108	7
3	Self-confident	177	4.02	0.142	2
4	Self-assured	176	4.00	0.122	3
5	Persistent	171	3.89	0.012	5
6	Determined	174	3.95	0.072	4
7	Trustworthy	177	4.02	0.142	2
8	Dependable	170	3.86	-0.018	6
9	Friendly	163	3.70	-0.178	9
10	Outgoing	159	3.61	-0.268	10
11	Conscientious	163	3.70	-0.178	9
12	Diligent	177	4.02	0.142	2
13	Sensitive	165	3.75	-0.128	8
14	Empathic	163	3.70	-0.178	9

Table 2.0. Variance of significant statements about leadership styles beliefs among construction managers

Statement number	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% variance	Cumm. %	Total	% variance	Cumm. %	Total	% variance	Cumm. %
1	6.837	23.575	23.575	6.837	23.575	23.575	3.938	13.581	13.581
2	3.338	11.509	35.083	3.338	11.509	35.083	3.108	10.719	24.299
3	2.178	7.511	42.594	2.178	7.511	42.594	2.548	8.787	33.086
4	1.824	6.290	48.884	1.824	6.290	48.884	2.203	7.598	40.683
5	1.672	5.767	54.650	1.672	5.767	54.650	2.103	7.252	47.936
6	1.532	5.283	59.933	1.532	5.283	59.933	2.090	7.207	55.142
7	1.396	4.815	64.748	1.396	4.815	64.748	1.812	6.248	61.391
8	1.345	4.637	69.385	1.345	4.637	69.385	1.769	6.100	67.491
9	1.051	3.624	73.009	1.051	3.624	73.009	1.600	5.518	73.009
10	0.947	3.266	76.275						
11	0.818	2.822	79.097						
12	0.800	2.759	81.856						
13	0.719	2.479	84.336						
14	0.707	2.437	86.773						
15	0.587	2.026	88.799						
16	0.494	1.704	90.502						
17	0.429	1.481	91.983						
18	0.400	1.378	93.361						

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19	0.361	1.244	94.606
20	0.300	1.035	95.641
21	0.296	1.020	96.661
22	0.241	0.832	97.493
23	0.195	0.671	98.164
24	0.160	0.553	98.717
25	0.128	0.440	99.157
26	0.104	0.357	99.515
27	0.056	0.193	99.708
28	0.053	0.184	99.892
29	0.031	0.108	100.000

Table 3.0. Rotated component matrix and indces of factors determining leadership styles among construction managers

Component factors with the statements describing leadership styles	Loading points	Relative mean deviation	RII
Factor 1: democratic			
2	0.741	0.627	3.909
5	0.847	0.309	3,591
11	0.650	0.036	3.318
24	0.757	0.104	3.386
26	0.638	0.400	3.682
Factor 2: autocratic and laissez-faire			
4	0.722	-1.123	2.159
15	0.688	-0.918	2.364
25	0.624	-0.532	2.750
27	0.754	-0.850	2.432
Factor 3: laissez-faire			
12	0.654	-0.396	2.886
14	0.589	0.036	3.318
16	0.776	0.013	3.295
Factor 4: democratic			
6	0.731	0.468	3.750
10	0.620	0.241	3.523
17	0.454	-0.191	3.091
23	0.629	0.491	3.773
Factor 5: democratic			
3	0.594	-0.168	3.114
8	0.842	0.377	3.659
9	0.442	-0.009	3.273
Factor 6: autocratic			
18	0.727	0.400	3.682
28	0.832	-0.668	2.614
Factor 7: autocratic			
1	0.738	0.059	3.341

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20	0.779	0.468	3.750
Factor 8: democratic			
7	0.679	0.627	3.909
19	0.558	0.513	3.795
29	0.665	0.013	3.295
Factor 9: autocratic and laissez-faire			
13	0.561	0.218	3.500
21	0.575	-0.305	2.977
22	0.787	-0.237	3.945

Table 4.0. Relative indices of effect of leadership styles on workers' morale

s/n	Effect of leadership style	Sum weighted value (SWV) ($\sum Xiyi$)	RII ($\frac{SWV}{44}$)	Mean Deviation (X-X_m)	Rank
Autocratic leadership style (X_m= $22.05/3.675 = 3.675$)					
1	Poor productivity	145	3.30	-0.375	6
2	Increases efficiency of workers	156	3.55	-0.125	5
3	Gives quicker results	168	3.82	0.145	2
4	One-way communication which leads to misunderstanding and communication breakdown	158	3.59	-0.145	4
5	Inhibits workers' freedom	162	3.68	0.005	3
6	Decision made by autocrats can be dangerous in this age of technological and social complexity	181	4.11	0.435	1
Democratic leadership style (X_m= $19.43/5 = 3.886$)					
1	Increase in productivity and satisfaction	192	4.36	0.474	1
2	Induces confidence, cooperation and loyalty among workers	186	4.23	0.344	2
3	Requires literacy, informed and organized labour	158	3.59	-0.296	4
4	It is time consuming	154	3.50	-0.386	5
5	Workers feel alienated if their ideas are not accepted for action	165	3.75	-0.136	3
Laissez-faire leadership style (X_m= $17.77/5 = 3.554$)					
1	Creates a free environment	172	3.91	0.356	1
2	Builds team spirit	155	3.52	-0.034	3
3	Highly creative with a free and formal work environment	151	3.43	-0.124	4
4	Leads to inefficiencies and chaos due to disorganized activities	143	3.25	-0.304	5
5	Team spirit may suffer due to some uncooperative members	161	3.66	0.106	2

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Personal characteristics of construction managers in the Construction Industry

Table 1.0 shows the rankings of the personal characteristics of construction managers in an ascending order using scale 1-10. In the rankings, the ability of construction managers to communicate effectively with others ranked the highest with RII of 4.30. Self-confident ranked next in importance to this with RII of 4.02 Other dominant personal characteristics of construction managers are self-assurance, determination, persistence and dependability. They have RII of 4.00, 3.95, 3.89 and 3.86 respectively.

Leadership styles of construction managers in the Construction Industry

Twenty nine statements about leadership styles of construction managers as shown in **appendix A** were presented to the respondents to rate on a Likert scale of 1-5, representing never true to almost always true respectively. The data obtained was subjected to factor analysis. The appropriateness of the factor analysis for the factor extraction was determined by calculating the Kaiser-Meyer Oikin (KMO) that measures the sampling accuracy and anti-image correlation that determines the strength of relationship among the variables based on partial correlation coefficients. Bartlett's test of sphericity was also calculated. The value of the Bartlett's test of sphericity was 369.198, while the value of KMO was 0.537. Both results imply that factor analysis was suitable for the factor extraction.

Also, having established the appropriateness of factor analysis for the data obtained, principal factors were extracted using principal component analysis and varimax orthogonal rotation. The results revealed that 9 of the 29 factors produced a factor solution with eigenvalue greater than 1. As shown in Table 2, the first dominant factors account for 23.575% of the observed variance, while all the 9 principal factors together accounted for 73.0% of the observed variance shared by the 29 variables. This implies that the 9 principal factors are the significant statements about leadership styles of construction managers as each of the factors on its own explains more variance than a single variable, up to 6.837 times of the first effect. The 9 principal factors of leadership styles of construction managers after extraction were interpreted as follows:

- Factor 1: democratic leadership style
- Factor 2: autocratic and laissez-faire leadership style
- Factor 3: laissez-faire leadership style
- Factor 4: democratic leadership style
- Factor 5: democratic leadership style
- Factor 6: autocratic leadership style
- Factor 7: autocratic leadership style
- Factor 8: democratic leadership style
- Factor 9: autocratic and laissez-faire leadership style

Table 3.0 shows that the first factor is a democratic leadership style and has the highest factor analysis index. The factor comprises of statements 2, 5, 11, 24 and 25 which are democratic

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statements. Amongst the statements, statement 5 has the highest loading point of 0.847 and RII of 3.591. Ranked next to democratic leadership style is another democratic leadership style as given by factor 5. Dominant among the statements in factor 5 is statement 8 which is also a democratic statement. It has a loading point of 0.842 and RII of 3.659. The next factor with high loading point is factor 6 comprising of autocratic statements. Statement 28 gives the highest loading point of 0.832 and RII of 2.614 amongst the statements. Other factors as characterized by their respective dominant statements are factor 9, factor 7, factor 3, factor 2, factor 4 and factor 8. They have loading point of 0.787, 0.779, 0.776, 0.754, 0.731 and 0.679 respectively determined by dominant statements 22, 6, 29, 27, 20 and 7 having RII of 3.045, 3.750, 3.295, 2.432, 3.750 and 3.909 respectively.

Based on the relative mean deviation of statements about various leadership styles in a descending order as shown in table 3.0. Factor 8 interpreted as democratic leadership style is mostly common to construction managers, it has the highest mean deviation of 0.627 from statement 7. This is followed by factor 1, also interpreted as democratic leadership style with statement 2 as the dominant statement and having mean deviation of 0.627. Ranked next to factor 1 is factor 4 interpreted as democratic leadership style with statement 6 as the dominant statement and having mean deviation of 0.468. Other prominent leadership styles are factor 6 (autocratic) and factor 5 (democratic). They have mean deviation of 0.468 and 0.377 and statements 20 and 5 as the dominant statements respectively. The least common leadership style among construction managers was the laissez-faire style of leadership (factor 3) which has the lowest mean deviation of -0.009, -0.168, -0.191, -0.237, and -0.305 from statements 9, 3, 17, 22 and 21 respectively.

The effect of leadership styles on workers' morale

Table 4.0 contains the effect of leadership styles on workers' morale. In the overall rankings, decisions made by autocrats can be very dangerous in this age of technological and social complexity ranked the highest with RII of 4.11 as the effect of autocratic leadership style on morale of workers. Ranked next to this is 'gives quicker results' with RII of 3.82. Other ffects of autocratic leadership style on morale of workers are that, 'it inhibits workers' freedom' and 'causes a one way communication which leads to misleading and communication breakdown. They have RII of 3.68 and 3.59 respectively. In the category of the effect of democratic leadership style on morale of workers, 'increase in productivity and satisfaction' ranked first with RII of 4.36. Closely followed by 'induces confidence, cooperation and loyalty among workers' and 'workers feel alienated if their ideas are not accepted for action' which ranked second and third with RII of 4.23 and 3.75 respectively. In the category of the effect of laissez-faire leadership style on morale of workers, 'creates a free environment', 'team spirit may suffer due to some uncooperative members' and 'builds team spirit' ranked 1st, 2nd and 3rd with RII of 3.91, 3.66 and 3.52 respectively.

CONCLUSION

The findings of this study signified that construction managers in the Nigerian Construction Industry can communicate effectively with others, have self-confidence and are self-assured, determined, dependable and persistent. The various styles of leadership as found among the construction managers are democratic, autocratic and laissez-faire styles of leadership; but the most adopted style of leadership was democratic leadership style. The findings of Fraser (2000)

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support the highest effect of democratic leadership styles on workers' morale which is an increment in the productivity and satisfaction of workers. The adoption of autocratic style of leadership can be very dangerous in this age of technological and social complexity where workers are exposed to all sort of information on internet and social media. Although, it could give quick result but can lead to communication breakdown between managers and workers.

While democratic style of leadership can induce confidence, cooperation and loyalty among workers, it was also found that laissez-faire style of leadership can build team spirit among workers and creates a sense of belonging.

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Appendix A: statement about leadership styles among construction managers

Statement number	Statement describing various leadership styles
1	I always retain the final decision making authority within my department or team
2	I always try to include one or more employees in determining what to do and how to do it. However, I maintain the final decision making authority
3	My employees and I always vote whenever a major decision has to be made
4	I do not consider suggestions made by my employees as I do not have time for them
5	I ask for employees ideas and inputs on upcoming plans and projects
6	For a major decision to pass in my department, it must have the approval of each individual or the majority
7	I tell my employees what has to be done and how to do it
8	When things go wrong and I need to create a strategy to keep a project or process running on schedule, I call a meeting to get my employees' advice
9	To get information out, I send it by mail, memos or voicemail; very rarely is a meeting called. My employees are then expected to act upon the information
10	When someone makes a mistake, I tell them not ever do that again and make a note of it
11	I want to create an environment where the employees take ownership of the project. I allow them to participate in the decision making process
12	I allow my employees to determine what needs to be done and how to do it
13	New hires are not allowed to make any decisions unless it is approved by me first
14	I ask my employees for their vision of where they see their jobs going and then use their vision where appropriate
15	My workers know more about their jobs than me. So I allow them to carry out the decisions to better their jobs
16	When something goes wrong, I tell my employees that a procedure is not working correctly and I establish a new one
17	I allow my employees to set priorities with my guidance
18	I delegate tasks in order to implement a new procedure or process
19	I closely monitor my employees to ensure they are performing correctly
20	When there are differences in role expectations, I work with them to resolve differences
21	Each individual is responsible for defining their roles
22	I like the power that my leadership position holds over subordinates
23	I like to use my leadership power to help subordinates grow
24	I like to share my leadership power with my subordinates
25	My employees must be directed or threatened with punishment in order to get them to achieve the organizational objectives
26	Employees will exercise self-direction if they are committed to the objectives
27	Employees have the right to determine their own organizational objectives
28	Employees seek mainly security
29	Employees know how to use creativity and ingenuity to solve organizational problems

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