Assessing the factors of transactional leadership style for construction projects: a case of Nigerian construction industry

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Abstract

Purpose - The role of construction industry in harnessing human and material resources of a nation cannot be overemphasised, hence, the emergence of the requirement of leadership. This study aims to assess the usage of factors of transactional leadership style by the project managers (PMs) in the Nigeria construction industry.
Design/methodology/approach –Exploratory and descriptive survey approach with questionnaire as an instrument of gathering data was adopted. While data from 975 questionnaires received with acceptable feedback were analysed using both descriptive and inferential statistics.
Findings - Findings reveal active management by exception component of transactional leadership style as factors often used by PMs in Nigeria construction industry. These factors are the three most frequently used, they are: "Always give clear and final instructions to be implemented in the project"; "Always observed the progress of the project, assessed risk and took precaution to avoid mistakes in the project"; "Always closely monitor performance for errors needing correction". The study concludes that it is imperative for PMs in the study area to adopt and incorporates these factors in order to ensure continuous successful delivery of construction projects.
Practical implications - Therefore, it is hoped that the findings of this research will help the construction industry managers in Nigeria to address the age-long but unrecognised leadership problem confronting the sector thereby boosting project delivery.
Originality/value – The study establishes the aspect of transactional leadership style in usage by project managers in the Nigeria construction industry. The findings enable to draw the conclusion on the appropriateness or otherwise of adoption of factors of transactional leadership; either in part or a whole.
Keywords factors of transactional, leadership style, construction industry, Nigeria, projects delivery.
Paper type Research paper.

1. Introduction

Construction industry is one of the sectors responsible for driving the economic development of developing nations as a whole and Nigeria in particular. The industry comprises many players from casual labourers to skilled artisans; technical professionals to management consultants; government agencies or representatives to academia, the list is endless. It was adjudged by Inuwa ***et al.*** (2015) as being responsible for absorbing over 8million people as employee (almost 25% of the nation's workforce). This make it stands out as the leading employer of construction labour in Africa. There are different phases of work and various processes leading to actualisation of

construction projects which require different contributions of all stakeholders with a whole lot of inputs (Abdul-Aziz and Mohmad, 2010). Therefore, the actual phase of construction activities is segmented into various portions with many participants working as a team. However, to achieve greater efficiency and teamwork performance, each segment needs to be manned by a leader and hence, emergence of leadership function. Adu and Opawole (2019) submitted that, among others, poor leadership is the bane of teamwork performance in project delivery. Leadership, in the opinion of Kouzes and Posner (2002), is a process used by so many people to bring forth the best from themselves and others to act, model the way and recognise their employees' contribution. Havenga (2002) on the other hand, argued that leaders empower others to make decisions. According to Swensen *et al.* (2016), leadership is observed to be a social process that brings subordinates to work in synergy so as to achieve the mission towards targeted goal. So many definitions of leadership exist in literature with different perspectives but they still have some elements in common. These elements emphasise the ability of the leader to influence subordinates which is termed leadership behaviour/style and accomplishment of organisational goals/objectives. Summarily, leadership is viewed as the ability to exact influence on the behaviour of subordinates in such a way that leads to the accomplishment of organisational goals.

The subject of leadership and leadership style is like a Siamese twin that cannot be easily separated from each other. Leadership style is crucial in influencing subordinates' behaviour as it could yield desired result or contrariwise. Thus, Pfafflin and Adshead (2004) defined style as the way in which something is said or expressed, how an event is done and the way an act is performed. A transactional leader believes strictly in the use of an exchange process based on the application of social exchange theory. By this, the leader set goals, embark on proper monitoring to control outcome so as to fulfil the contractual agreement between the leader and the employer. This could be achieved by the leader through contingency reward system or active management by exception. Contingency reward system secures the consent of the subordinate on the task to be performed in exchange for a benefit on successful delivery at a particular time (Bass and Riggo, 2006). While active management by exception deploys all means of ensuring project delivery through proper monitoring, supervision, identification of errors and corrections. The priority of transactional leader is providing all such requirements of the employer that will enable the accomplishment of the task as required (Bygballe and Ingemansson,2014).

Construction industry in Nigeria had operated under various forms of leadership/leadership style with no clear-cut definition and attributes. They include but not limited to shareholder, autocratic, bureaucratic, charismatic, democratic /participative, laisses-faire leadership styles. The available literature had shown that many authors have worked and concluded on one form of leadership/leadership style or the other. Ayangade *et al.* (2017) considered the effect of democratic leadership style while working on the morale of workers in Lagos state. Oke (2010) on the other hand concluded that autocratic leadership style is commonly exhibited by Nigerian construction leaders. The conclusion of a recent study by Oyetunji *et al.* (2019) shows that transactional leadership behaviour had a positive linear correlation with workers' performance. However, there is need to identify which factor(s) of this leadership style will be beneficial to project delivery as it does to workers' performance. Also, an earlier study by Fasola *et al.* (2013), though on banking industry, gave some positive revelations about transactional leadership. It exacts more positive impacts than transformational which is found to be insignificant. Therefore, extending the findings to construction industry will enable to draw the conclusion on the appropriateness or otherwise of adoption of factors of transactional leadership; either in part or a whole. The divergence of opinion on the appropriate and exact leadership style in use in Nigeria construction industry has necessitated this research work. Hence, the need for the study of leadership in order to arrive at

determining effective leadership style as the behaviour of a leader is a reflection of the leadership style in use.

Given this background, the aim of the study is to examine the transactional leadership behaviour of project managers with a view towards extracting the beneficial factors while the main objective is to assess the factors of transactional leadership styles for construction projects in Nigeria. The findings of this study will lay to rest the uncertainty surrounding the appropriate leadership style prevailing in the industry in Nigeria. Additionally, the project managers shall filter through the various factors and adopt those appropriate to their working environment. The null hypothesis to justify the opinion of respondents on the study state thus:

Ho1: There is no significant variations in the responses to factors of transformational leadership styles among the respondents (construction team) in the study area.

2. Literature review

Transactional leadership style is an exchange process that is typically represented as setting objectives, monitoring and controlling outcomes. It is purely based on the fulfilment of contractual obligations between the leader and the subordinate. The following are the three first order factors of transactional leadership: contingent reward system, active management by exception and passive management by exception (Bass, 1985). In the opinion of Bass and Riggo (2006), a transactional leader that uses contingent reward system would secure the agreement of followers on a task to be done in exchange for an adequate reward for delivery or performance within a stipulated time frame. Also, followers are supervised, errors and mistakes are identified and then corrective action taken by a leader that favours an active management by exception. Bygballe and Ingemansson (2014) argued that transactional leadership is concerned with meeting or satisfying the extrinsic need of the followers, such as ensuring the subordinates performs the task to the requirement of the leader.

Generally therefore, in contingent reward system, the leader focuses on clarifying role and task requirements by providing followers with material or psychological rewards in exchange for the fulfilment of contractual obligations; active management by exception or (active corrective transactions) emphasises the active vigilance of a leader whose goal is to ensure that standards are met; and passive management by exception or (passive corrective transactions) is a situation in which leaders take action only after a behaviour has created serious problems (Antonakis *et al.*, 2003; Judge and Piccolo, 2004). Tyssen *et al.* (2014), pointed out two arguments against these three-factor measure of transactional leadership. First, there is an overlapping measure between passive management by exception in the transactional and laissez-faire styles. Second is the negative correlation between active management by exception and passive management by exception whereas they are supposed to measure related concepts.

Agaa (2016) in the work, transactional leadership and project success; the moderating role of goal clarity, examined how transactional leadership behaviour with the moderating role of project goal clarity influenced project success. Although, mainly development projects of the Non Governmental Organisation (NGO) sector in Ethiopia were considered, the findings were significant and substantial as it was a divergent from the usual consideration of transformational style. Little attention has been paid to the role of transactional leadership in project success even when it was considered as an important precondition for the effectiveness of transformational leadership. The study asserted a positive relationship between the contingency reward of transactional leadership and project success. Furthermore, with project clarity as moderator, Agaa (2016) argued that contingency reward is a stronger predictor for projects with high goal clarity than those with low goal clarity. The findings of the study were based on the feedback from the

opinions of project managers in NGOs directly involved in development projects in Ethiopia. Another area of concern for the study is the success parameters used. The study considered four items comprising two items of efficiency requirements (cost and schedule performance), one item of project effectiveness and one item of end-user satisfaction. Although, the approach used was in line with previous empirical works (Hoegl and Gemuenden,2001; Beringer, Jonas and Kock, 2013; Suprapto, Bakker and Mooi, 2015). Contingent reward of transactional leadership according to Agaa (2016), may result in high project success only for projects having a clear goal, this is the major practical implication of the findings, because as the project goal clarity drops, project success declines. Among other limitations of the study is the subjective ratings as perceived by the project managers upon which results are based instead of objective data regarding project success. Also, inferences about causal relation were limited by the cross-sectional research design used for the study. However, the study confirmed the importance and roles of project managers in project success and recommended that longitudinal studies be conducted on the effects of project\managers' transactional leadership and goal clarity on project success over the project lifecycle.

Oke (2013) had examined the leadership styles prevalent among the professionals in Nigeria construction industry by using various criteria. Among the findings of the study was that professionals in Nigeria construction industry were more transactional than transformational in their leadership approach. Though the study recommended the importance of building up transformational traits as it engenders more inclusiveness of followers in construction process and participation. This research intends to justify this assertion by studying the frequency of usage of transactional leadership among construction professionals in Nigeria construction industry.

A recent study by Idiata, Oriakhi and Bamidele (2020) investigated the challenge of leadership style of project managers from the angle of internal stakeholders in the Nigeria construction industry. The study used questionnaire adapted from Paul Hersey and Kenneth H Barnard's Leadership Effectiveness and Adaptability Description (LEAD) to achieve the study objective. The survey had only internal construction professional stakeholder (civil engineers, builders, architects, estate surveyors, Urban planners and surveyors) as respondent within a city in Nigeria. The forms of leadership style examined were directing, coaching, delegating and sharing style. The finding revealed a mixed result among various professionals considered as respondents, while civil engineers favoured the use of coaching leadership style with 72%, it is favoured among urban planners with a score of 10%. Directing leadership style was preferred by architects with 51% but Urban planners preferred it with 47% and surveyors with 31% whereas not common among the civil engineers where it has a score of 10%. The adoption of delegating and sharing form of leadership style among these professionals was generally low and unpopular. The study based the conclusion on assessment of only internal construction stakeholders especially the professionals without considering other relevant followers. Limiting the scope to just a location does not justify the acceptability of the findings, hence a gap for the current study to explore.

There are some traits and characteristics peculiar to a transactional leader, they are summarised in Table I.

Position of table 1

3. Research methods

3.1 Data collection

The research method adopted by the study were exploratory and descriptive survey approach with questionnaire used as an instrument of gathering data. The population of the study consist of

employees of construction firms (both indigenous and foreign) operating in the study area (FCT (Abuja), Lagos and Rivers). The population from Lagos, Abuja and Port-Harcourt are considered based on the volume of construction activities in those places. According to Ikediashi and Ogwueleka (2014), these are strategic cities in Nigeria. Additionally, they are macro-capital cities with high concentration of construction firms. The sampling method adopted was both purposive and stratified random, stratified random sampling to determine the construction firms in the study area and purposive to select the respondents in the chosen firm. Respondents were divided based on location (cities or states) using stratified random sampling. This allows for proportional representation of each location. It was also used to stratify respondents based on firm ownership type/mode of employment. Purposive sampling was used to select the respondents within construction firms based on the recommendation of project manager(s). All such projects like buildings, roads, hospitals, hotels and any such construction projects worthy of evaluation were considered by the study.

The targeted respondents comprised project managers (PMs), construction professionals (referred to as project team members (PTM) who are architects, builders, quantity surveyors and engineers) and firm's project supervisors (SUP). Federal Inland Revenue Service (FIRS) of Nigeria was the source of the population frame as against Federation of Construction Industry (FOCI) with lesser registered construction firms. The choice of FIRS is informed by the high response rate desired; FOCI was used by Omopariola *et al*. (2019) in South Africa, though targeted at the same respondents but yielded lesser response rate. This is also different from the platform used by Ibrahim *et al*. (2009) to select the construction firms considered for the study in UK. Construction firms with evidence of tax payment through tax identification number (TIN) over the last five years were considered to still be operational, hence, evaluated for this study. By using Taro Yamane equation, a total of 411 firms was gotten from the sample frame of 627 firms to form the sample size. Each firm has 3 respondents; therefore, the study has a total number of 1233 respondents from 411 firms. The order of allocation in the study area is as shown in Table 2.

Position of table 2

Position of figure 1

FCT (Abuja) has 158 firms, Lagos with 148 firms and Rivers with 105 firms. Well structured, cross-sectional questionnaires numbering 1233 were distributed for data gathering while 975 were received with valid response and used for data analysis. Some questionnaires were distributed directly to respondents through the PMs of chosen firms. Others were done through research assistants who also contacted PMs directly. The questionnaires were divided into two sections. Section one captured the respondent's characteristics such as sex, educational qualification, stake in the projects, professional affiliations, membership status of professional body (if any), years of experience, state where project is domiciled, project owner type, type of construction, contract type and others. While the second parts sought the opinion of the respondent on the frequency of usage of factors of transactional leadership style by the project managers.

3.2 Measures

Scales of measurement used for the study were nominal, interval and ordinal scales. The respondents' characteristics in the first section were accessed using both nominal and interval scales while ordinal scale of measurement was used for the second section. The ordinal scale was on a five point-Likert scales of 5-strongly agree; 4-agree; 3-moderate (slightly agree); 2-disagree; 1-strongly disagree. The respondents were asked to rate the frequency of usage of transactional leadership style by the project manager. Note, seven or five point-Likert scales is mostly used for ordinal scale measurement but five point is preferred for the study.

3.3 Variables

In order to achieve the objective of the study and provide answer to the research question, the extant variables were extracted from the literature as developed by previous researchers. Transactional leadership measurement indices were developed based on Friedler (1967) submission, modified by Agaa (2016) to about fifteen items. These were further reframed as shown in Table 3. and adopted for this study after pilot-testing.

Position of table 3

3.4 Data analysis

Statistical Package for Social Science (SPSS) version 17 was used for preliminary data analysis (basic descriptive and inferential statistics). Respondents' characteristics were analysed descriptively, ranking of perceptions and opinions done with relative importance index (RII). Relative importance index of factors' rating for each group of respondents (PM, PTM and SUP) was computed and ranked. Based on the approach used by other researchers (Aibinu and Jagboro, 2002; Cheung *et al*., 2004; Ugwu and Haupt, 2007) for similar studies, computation and ranking of weighted average of each factor for all groups was carried out, this represents perception of the group. RII for the study was calculated from the mean scores gotten from each group of respondents using the equation (I)

$$RII = \sum w \div AN \quad (I)$$

Where w = weighted average given to each factor by the respondents; it ranges from 1 to 5

A = the highest weight (which is 5 for this study)

N = the total number of respondents (975 for this study)

RII = relative importance index.

Kruskal Wallis (H) test was conducted for both hypothesis testing and to determine the significant variations and differences in the perception and frequencies of usage of factors of transactional leadership styles, while Bonferroni with Dunn's corrected test was assigned to ascertain the source of variation (if any) in the perceptions (post-Hoc test).

3.5 Research hypothesis

The research hypothesis postulated based on the research question and objective states thus: there is no significant variations in the responses to factors of transactional leadership styles among the respondents (construction team) in the study area. This hypothesis testing was done using Kruskal Wallis (H) test.

3.6 Sample characteristics

Construction firms were identified as the custodian of construction project team through a pilot study. Hence, the structured questionnaire as instrument of data collection was administered on construction team members within the firms operating in the chosen locations. Table 4 shows the firm locations covered by the study, the total number of questionnaires distributed, the quantity returned, used for the study, number discarded as well as the corresponding percentage returned from each location.

Position of table 4

The questionnaire achieved a distribution return rate of 79.8% (N=1233), essentially due to the incentives given to the research assistants and professional colleagues in these locations. As shown in Table 3, of the total distributed, Lagos has a share of 36%, Rivers and FCT (Abuja) has 25.5% and 38.4% respectively. Few of the returned questionnaires were discarded due to some anomalies noticed. They were either not completely filled or cases of multiple answers to same question and many others. Out of the total number returned ((N=984), only 9 that represent < 1% were discarded. Therefore, a total of 975 questionnaires representing 79.1% of the total distributed and 99.5% of the quantity returned were used for the study.

The characteristics of the respondents whose perception were investigated such as sex, educational qualification, stake in the projects, professional affiliation, membership status and experience are presented in Table 5. It is noteworthy that, the presence of women or female gender in the Nigeria construction industry is similar to other African nation as rightly pointed out by Verwey (2008), Haupt and Fester (2012). As shown in Table V, while female participants are 12.5%, male counterparts are 87.5%.

Position of table 5

4. Results and Discussion

4.1 Usage of Factors of Transactional Leadership Style (TSLS)

The construction team (who are the respondents) were asked to indicate their level of agreement to the usage of factors of transactional leadership style so as to achieve the study objective. A set of selected factors of transactional leadership style (as identified and extracted from the literature) were presented to the respondents. In order to reveal the level of agreement of usage of these factors, the construction project team (project managers, project team members (comprising project architects, builders, engineers and quantity surveyors) and supervisors), using a Likert scale, ranked the 15 elements as contained in the questionnaire.

A comparative analysis of the RII and ranking of the perception of the entire construction team in all locations on the frequencies of usage of factors of transactional leadership style by the project manager PM is presented by Placing the RIIs side-by-side and extracted for easy glance in Table 6, there are three factors that emerge frequently as the most frequently used by project managers. These are; “always observed the progress of the project, assessed risk and took precaution to avoid mistakes in the project” (RII=0.8894), “always closely monitor performance for errors needing correction” (RII=0.8638), “always give clear and final instructions to be implemented in the project” (RII=0.8533). The ranking might not be the same but fall within the first three as seen in the topmost five ranked elements in Table VII. This implies that the progress and smooth delivery of construction project is the ultimate concern of project managers in transactional leadership style concept.

The middle-ranked elements; “often concentrate full attention on dealing with mistakes and failures”, eighth (RII=0.4851); “during project execution, always waiting for things to go wrong before taking action”, ninth (RII=0.4416); “always call attention to what team members can get for what they accomplish”, tenth (RII=0.4293); “give project team members milestone to achieve with attendant reward”, eleventh (RII=0.4189). These have RIIs a little below average of 0.5 but not below 0.4, it portends that they are sometimes displayed by PMs. The nature and type of project/client, contract condition with personality of the PM sometimes decide the attitude to be displayed in the course of project execution.

On the other hand, “always absent when attention is required” ranked twelfth (RII=0.3963), “fond of punishing subordinates for errors/mistakes on work performed through various sanctions” ranked thirteenth (RII=0.3875), “often do avoid involvement in work progress” ranked fourteenth (RII=0.3253), “always absent when attention is required” ranked fifteenth (RII=0.3163), the RIIs of these elements portray them as not being used by project managers to drive construction project delivery. The PMs are on ground and get fully involved during construction work, pay attention (either prompt or not) to situations on site and take responsibility for outcome of the process.

Position of table 6

Position of table 7

4.2 *Hypothesis testing on the level of agreement on the usage of factors of TSLS*

Table 6 shows discrepancies in the perception of different group of construction team on the frequency of usage of transactional leadership by PMs. Even the three common factors to all got different ranking and RIIs. Same goes to the remaining elements, they received different rankings from all the respondents across board. It therefore became imperative, given this trend, to test the hypothesis postulated earlier using Kruskal Wallis (H) Test. This is to verify and ascertain the source of this variation. The hypothesis stated that:

Ho: There is no significant variations in the responses to factors of transactional leadership styles among the construction team in the study area.

The decision rule for testing the hypothesis goes thus, if the P-value is less than (or equal to) $\propto$ at 5% significance level, then the null hypothesis is rejected in favour of alternative (if $P \leq 0.05$, reject Ho otherwise, if $P > 0.05$ then accept Ho).

The result of the test is presented in Table 8. As shown in the table, four (4) variables have p-values greater than 0.05 and are not significant. For these variables (with p-value > 0.05), the null hypothesis is accepted and according to construction team (the respondents), there is no significant difference on the level of agreement of frequency of their usage as factor of transactional leadership style. However, eleven (11) variables have p-values less than 0.05 and are therefore significant with null hypothesis rejected and alternative accepted. This portends, for these variables, variation in the perception of construction team on the level of agreement on their frequency of usage as factors of transactional leadership style.

Position of table 8

It becomes difficult to reject or accept the result of the hypothesis testing since the test was carried out on each individual factor. Therefore, attempt was made to carry out another hypothesis

testing by comparing the mean score of all elements as ranked by the respondents (construction team). The result presented in Table 9. shows p-value of 0.573 thereby implying the acceptance of null hypothesis by the entire construction team. There is therefore no significant variation in the response of construction team on the usage of factors of transactional leadership style by the project manager.

Position of table 9

4.3 Discussion of results

The specific objective of the study was to assess the factors of transactional leadership behaviour of project manager in the study area. The hypothesis postulated to validate this objective stated that there is no significant variation in the responses to factors of transactional leadership styles among the respondents (construction team) in the study area. The outcome of the study upholds the hypothesis as the opinion of the respondents are the same, hence, no significant difference exists in their perception on the frequency of usage of factors of transactional leadership style. The three top rated factors are responsibility-based factors, these are factors that are part of the core obligation of any PM (for instance "Always give clear and final instructions to be implemented in the project" (RII=0.8894); "Always observed the progress of the project, assessed risk and took precaution to avoid mistakes in the project"; "Always closely monitor performance for errors needing correction" (RII=0.8533)). Observably from the study, it is evident that some factors of transactional leadership style are required for the successful delivery of construction projects across the globe and in Nigeria in particular. This finding is in line with one of the conclusions of Agaa (2016) that transactional leadership style with moderating roles of certain elements do greatly influence project success. Also, as rightly pointed out by Denehy (2008), leadership is the one who knows the way, shows the way and goes the way, this places enormous responsibility on the project manager to ensure construction project success. Where contingency reward is used by the PM to fast-track delivery, the PM must be on his toe to ensure compliance with instructions and strict adherence to construction process or procedure. Adopting these factors enhance efficiency (cost and schedule performance), improve project effectiveness and increase end-user satisfaction as it was observed in the works of Hoegl and Gemuenden (2001); Beringer, Jonas and Kock (2013) and Suprapto, Bakker and Mooi (2015). Agaa (2016) also submitted the tendency of contingency reward of transactional leadership resulting in high project success for projects with moderating roles of goal clarity.

The finding of the study recognised the importance of two main aspects of transactional leadership which are contingency reward and active management by exception. The PM offers the subordinates relevant assistance by way of instruction, clearly states the construction process and procedures, specifies standard for compliance and adequately reward subordinate on meeting target or punishment for failure in accomplishing task.

It is noteworthy that two least ranked elements by the overall perception, "Often do avoid involvement in work progress" (RII=0.3253) and "Always absent when attention is required" (RII=0.3163) enjoys similar ranking of fourteenth and fifteenth by each group of respondents when the ranking was individually done on group basis. This by implication means the PM would have been considered to abandon responsibility if these elements had received better ranking and as such their services would not be necessary in the construction industry. This congruence of opinions validates the opinion of Denehy (2008) earlier mentioned. Therefore, the place and roles

of PM in construction project as a team leader who knows the way, goes the way, and shows the way, cannot be taken for granted.

The construction team share the same view on the frequency of display of factors of transactional leadership style as shown by the outcome of Kruskal Wallis analysis. By this, the null hypothesis was unanimously accepted, hence, general agreement to the exhibition of certain factors of transactional leadership by the PM in Nigeria.

5. Summary and Conclusion

The study assessed the factors of transactional leadership style of project managers for construction projects in Nigeria. Considering the fact that the nature and location of construction project with the type of contract determines the choice of leadership style, efforts were made to elicit responses from respondents (from the firms) on the frequency of usage of factors of transactional leadership style by PM for their construction projects. It was discovered that most frequently used factors of TSLS are responsibility-based factors that are component of active management by exception ("Always give clear and final instructions to be implemented in the project"; "Always observed the progress of the project, assessed risk and took precaution to avoid mistakes in the project"; "Always closely monitor performance for errors needing correction"; "Always keep track of all mistakes made by the team members"). The acceptance of null hypothesis based on the result of Kruskal Wallis (H) test conducted indicated the agreement of the entire construction team to the use of factors of transactional leadership style by the PM especially the responsibility-based factors that are purely active management by exception of transactional leadership.

Also, the outcome of the study had shown that the entire construction team share similar opinion on the frequency of usage of factors of transactional leadership style by the project manager. This level of agreement, especially on the factors that constitute the most frequently used ("Always give clear and final instructions to be implemented in the project"; "Always observed the progress of the project, assessed risk and took precaution to avoid mistakes in the project"; "Always closely monitor performance for errors needing correction"; "Always keep track of all mistakes made by the team members") attest to the position of responsibility and responsiveness of PM. The study therefore concludes that it is imperative for PMs in the study area to adopt and incorporates these factors especially active management by exception in order to ensure continuous successful delivery of construction projects.

Adoption of the findings of this study in construction industry in Nigeria will lay to rest the notion of inappropriateness of transactional leadership. The beneficial factors could be incorporated with other styles to achieve better project performance and boost delivery.

The obvious limitation of this study was the locations chosen for consideration that represents three regions out of six that makes up the entity called Nigeria. Extending the scope to other locations and cities would have enabled comparative analysis of results and findings. Therefore, further research could be explored by incorporating the remaining three regions.

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Table 1: Transactional Leadership Styles and Behaviour

S/N	Transactional Style	Leadership Behaviour
1.	Contingent reward	This leader provides others with assistance in exchange for their effort and they clarify expectations and offer recognition when goals are achieved.
2.	Management by Exception (Actives)	These leaders specify the standard for compliance and may punish staff for not being compliant with standard.
3.	Management by Exception (Passive)	These leaders avoid specifying agreement and fail to provide goal and standard to be achieved by staff. Sometimes, a leader waits for things to go wrong before taking action.

Source: Bass and Avolio (2004).

Table 2: Sample frame and size of construction firms in the study area

State	Number of firms	Sample
Lagos	235	148
Rivers	142	105
FCT (Abuja)	260	158
Total	627	411

Table 3: Transactional Leadership Measurement Indices

1	Always emphasise the reward each project member will receive once project goal is achieved.
2	Give project team members milestone to achieve with attendant reward.
3	Always call attention to what team members can get for what they accomplish.
4	Often tell team members what to do if they want to be rewarded for their work.
5	Always give clear and final instructions to be implemented in the project.
6	During project execution, always waiting for things to go wrong before taking action.
7	Fond of punishing subordinates for errors/mistakes on work performed through various sanctions
8	Always absent when attention is required
9	Often do avoid involvement in work progress
10	Sometimes delay in response to issues on site.
11	Often concentrate full attention on dealing with mistakes and failures.
12	Always focus attention on irregularities, exceptions and deviations from standards.
13	Always observed the progress of the project, assessed risk and took precaution to avoid mistakes in the project.
14	Always closely monitor performance for errors needing correction.
15	Always keep track of all mistakes made by the team members

Source: Agaa (2016) and modified by the author.

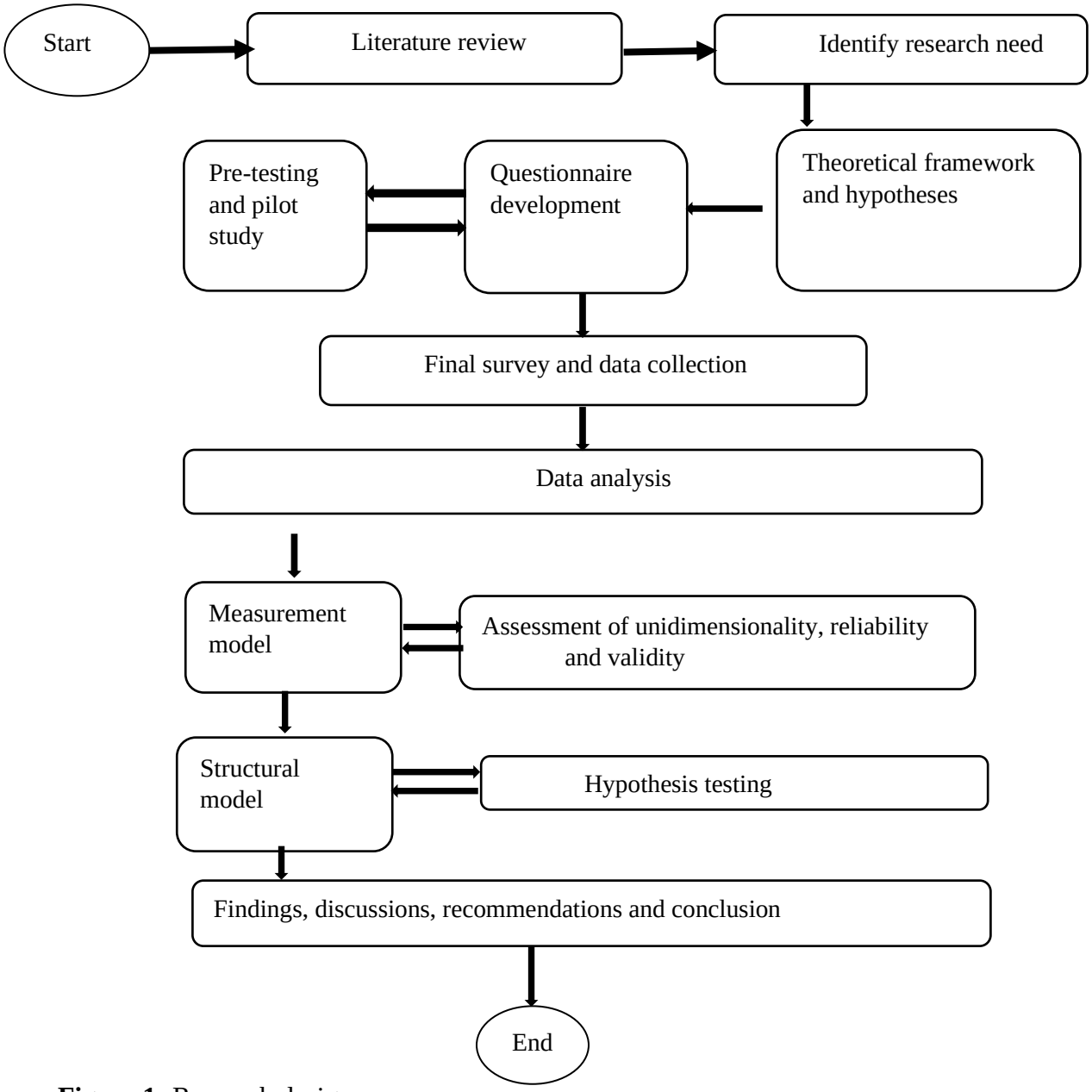

Figure 1: Research design

Table 4: Descriptive result of the return rate of questionnaire administered

Firm	Administered		Returned		Used		%	Discarded	
Location	No	%	No	%	No	%	Per location	No	%
Lagos	444	36.1	355	36.1	353	36.2	79.5	2	22.2
Rivers	315	25.5	275	27.9	271	27.8	86	4	44.4
FCT(Abuja)	474	38.4	354	36.0	351	36.0	74.1	3	33.3
Total	1233	100	984	100	975	100		9	100

Table 5: Descriptive results of Respondents' characteristics

Features	Sub-Features	(%)	N
Sex			
	Male	87.5	836
	Female	12.5	139
	Total	**100**	**975**
Educational qualification			
	OND	7.4	62
	HND	32.2	381
	BSc/BTech	24.2	226
	PGD	6.6	66
	M.SC/M.ENG	21.9	186
	Others	7.7	54
	Total	**100**	**975**
Stake in the project			
	Project Manager	33.0	325
	Project Team Member (PTM)	33.6	326
	Supervisor (SUP)	33.3	324
	Total	**100**	**975**
Professional affiliation			
	NIA	15.4	148
	NIOB	21.1	175
	NSE	36.5	343
	NIQS	15.7	160
	None	11.4	149
	Total	**100**	**975**
Membership status			
	Technician	0.7	7
	Licentiate	0.7	7
	Associate	3.4	33
	Graduate	26.5	259
	Corporate	51.9	506
	Fellow	1.44	14
	None	15.3	149
	Total	**100**	**975**
Work experience			
	1-5 years	1.1	8
	6-10 years	10.3	93
	11-15 years	17.1	224

	16-20 years	37.0	346
	Above 20 years	34.5	304
	Total	**100**	**975**
Nationality			
	Nigerian	89.7	879
	Non-Nigerian	10.3	96
	Total	**100**	**975**
Firm size			
	Small firm (0-49)	37.3	131
	Medium firm (50-100)	26.2	92
	Large (100 and above)	36.5	128
	Total	**100**	**351**
Project size			
	Below 10 million	-	-
	10-20 million	-	-
	21-50 million	1.1	4
	51-100 million	9.1	32
	100-900 million	34.8	122
	Above 1 billion	55.0	193
	Total	**100**	**351**
Construction type			
	Building	45.43.	443
	Road	26.05	254
	Hospitals	6.05	59
	Sports complex	1.85	18
	Others	20.62	201
	Total	**100**	**975**

Table 6: Perception of the entire construction project team on the frequencies of display of elements of TSLS

Elements of Transactional	Overall			PM			PTM			SUP		
	N	RII	Rank	N	RII	Rank	N	RII	Rank	N	RII	Rank
Always observed the progress of the project, assessed risk and took precaution to avoid mistakes in the project.	975	0.8894	1st	325	0.9200	2nd	326	0.8902	1st	324	0.8593	1st
Always closely monitor performance for errors needing correction.	975	0.8638	2nd	325	0.8794	3rd	326	0.8613	2nd	324	0.8506	2nd
Always give clear and final instructions to be implemented in the project.	975	0.8533	3rd	325	0.9243	1st	326	0.8374	3rd	324	0.7981	3rd
Always keep track of all mistakes made by the team members	975	0.6451	4th	325	0.6185	4th	326	0.6546	4th	324	0.6623	5th
Sometimes delay in response to issues on site.	975	0.5534	5th	325	0.3883	10th	326	0.6043	5th	324	0.6673	4th
Often tell team members what to do if they want to be rewarded for their work.	975	0.5270	6th	325	0.5532	5th	326	0.5098	8th	324	0.5179	8th
Always focus attention on irregularities, exceptions and deviations from standards.	975	0.5107	7th	325	0.4154	8th	326	0.5466	6th	324	0.5704	6th
Often concentrate full attention on dealing with mistakes and failures.	975	0.4851	8th	325	0.3698	12th	326	0.5233	7th	324	0.5623	7th
During project execution, always waiting for things to go wrong before taking action.	975	0.4416	9th	325	0.3717	11th	326	0.4558	9th	324	0.4975	9th
Always call attention to what team members can get for what they accomplish.	975	0.4293	10th	325	0.4492	6th	326	0.4110	11th	324	0.4278	11th
Give project team members milestone to achieve with attendant reward.	975	0.4189	11th	325	0.4375	7th	326	0.4166	10th	324	0.4025	12th
Always emphasise the reward each project member will receive once project goal is achieved.	975	0.3963	12th	325	0.4123	9th	326	0.3914	13th	324	0.3852	13th
Fond of punishing subordinates for errors/mistakes on work performed through various sanctions	975	0.3875	13th	325	0.3120	13th	326	0.4092	12th	324	0.4414	10th
Often do avoid involvement in work progress	975	0.3253	14th	325	0.2775	15th	326	0.3344	14th	324	0.3642	14th
Always absent when attention is required	975	0.3163	15th	325	0.2818	14th	326	0.3160	15th	324	0.3432	15th

Table 7: Top Five display of elements of TSLS based on perception of each group of respondents

Rank	Project Manager	Project Team Member	Supervisor
1st	Always give clear and final instructions to be implemented in the project.	Always observed the progress of the project, assessed risk and took precaution to avoid mistakes in the project.	Always observed the progress of the project, assessed risk and took precaution to avoid mistakes in the project.
2nd	Always observed the progress of the project, assessed risk and took precaution to avoid mistakes in the project.	Always closely monitor performance for errors needing correction.	Always closely monitor performance for errors needing correction.
3rd	Always closely monitor performance for errors needing correction.	Always give clear and final instructions to be implemented in the project.	Always give clear and final instructions to be implemented in the project.
4th	Always keep track of all mistakes made by the team members	Always keep track of all mistakes made by the team members	Sometimes delay in response to issues on site.
5th	Often tell team members what to do if they want to be rewarded for their work.	Sometimes delay in response to issues on site.	Always keep track of all mistakes made by the team members

Table 8: Variation in the perception of entire construction project team on the level of agreement in the frequencies of display of elements of TSLS

Elements of TSLS	Respondents' Designation	N	Mean Rank	Chi Square	D/F	Sign	Remark
Always emphasise the reward each project member will receive once project goal is achieved.	Project manager	325	505.67	2.310	2	0.315	NS
	Project team member	326	483.08				
	Supervisor	324	475.23				
Give project team members milestone to achieve with attendant reward.	Project manager	325	506.33	3.267	2	0.195	NS
	Project team member	326	489.17				
	Supervisor	324	468.44				
Always call attention to what team members can get for what they accomplish.	Project manager	325	513.58	5.835	2	0.054	NS
	Project team member	326	463.46				
	Supervisor	324	487.04				
Often tell team members what to do if they want to be rewarded for their work.	Project manager	325	515.53	4.997	2	0.082	NS
	Project team member	326	475.90				
	Supervisor	324	472.56				
Always give clear and final instructions to be implemented in the project.	Project manager	325	611.06	117.408	2	0.000	S
	Project team member	326	452.11				
	Supervisor	324	400.68				
During project execution, always waiting for things to go wrong before taking action.	Project manager	325	367.27	119.904	2	0.000	S
	Project team member	326	517.17				
	Supervisor	324	579.75				

Fond of punishing subordinates for errors/mistakes on work performed through various sanctions	Project manager	325	362.23	120.333	2	0.000	S
	Project team member	326	525.98				
	Supervisor	324	575.94				
Always absent when attention is required	Project manager	325	419.71	43.955	2	0.000	S
	Project team member	326	494.92				
	Supervisor	324	549.54				
Often do avoid involvement in work progress	Project manager	325	399.21	68.094	2	0.000	S
	Project team member	326	503.11				
	Supervisor	324	561.85				
Sometimes delay in response to issues on site.	Project manager	325	280.49	297.995	2	0.000	S
	Project team member	326	552.28				
	Supervisor	324	631.48				
Often concentrate full attention on dealing with mistakes and failures.	Project manager	325	313.61	216.179	2	0.000	S
	Project team member	326	547.66				
	Supervisor	324	602.90				
Always focus attention on irregularities, exceptions and deviations from standards.	Project manager	325	336.85	163.422	2	0.000	S
	Project team member	326	545.69				
	Supervisor	324	581.56				
Always observed the progress of the project, assessed risk and took precaution to avoid mistakes in the project.	Project manager	325	543.32	29.973	2	0.000	S
	Project team member	326	483.81				
	Supervisor	324	436.73				
Always closely monitor performance for errors needing correction.	Project manager	325	515.86	6.453	2	0.040	S
	Project team member	326	481.15				
	Supervisor	324	466.95				
Always keep track of all mistakes made by the team members	Project manager	325	451.00	9.290	2	0.010	S
	Project team member	326	500.92				
	Supervisor	324	512.11				

Table 9: Variation in the response of entire construction team on the level of agreement in the frequencies of display of elements of TSLS

Levels of agreement in the frequencies of display of elements of TSLS	**N**	**Mean Rank**	**Decision @ 0.05 Sig. Level**
Project manager	15	20.13	
Project team member	15	23.93	
Supervisor	15	24.93	
Chi-Square		1.115	
Degree of Freedom		2	
P-value		0.573	Accept