

# The Effects of Unethical Professional Practice on Construction Projects Performance in Nigeria

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## Abstract

Despite its role in accomplishing social and economic development goals, the construction industry is challenged by the unethical conduct of construction professionals which impacts quality, time, and costs. The major goal of this study was to examine the effects of unethical professional practice on construction projects performance in Niger State, by investigating the root causes and effects of unethical professional practices on construction projects performance in the study area. A literature review on the subject of unethical conduct among construction industry experts carried out. A quantitative research design approach based on the use of structured questionnaires with Likert-type scales was adopted. Data was collected through purposive sampling of 51 construction project professionals within the study area, and Mean Item Score (MIS) were employed in the analysis of the data. The findings of the study included that attempt by Contractors to maximize profits are the only project-related immediate cause of unethical professional practices that was ranked as ‘highly important’. A total of 16 unethical practices were found to have ‘highly significant’ effects on six aspects of construction project performance (quality, time, cost, safety, risk and image). The study has concluded that although a wide diversity of unethical practices is evident in the construction industry, it is however possible to curb the effects of these unethical practices, since the critical practices have been identified in this study. It was recommended that the ways and means by which contractors attempt to achieve profit maximization should be the subject of further research study with the view of designing strategies to discourage and prevent such attempts. Stakeholders in the construction industry need to look beyond the traditional ‘iron triangle’ of performance measures – cost, time and quality – especially when the effects of unethical practices are being considered.

**Keywords: Construction, Ethics, Performance, Professional Practice, Projects.**

## INTRODUCTION

### 1.1 Background to the Study

The term “ethics” is used in evaluating what is right in a given scenario. Scalza (2008) defined ethics as “A system of moral principles, by which human action and proposal may be judged good or bad, right or wrong; The rules of conduct recognised in respect to a particular class of human actions; Moral principle of the individual.” The ethics of both the organisation leaders

and employees make up how the organisation is perceived and whether they are seen as ethical or not (Scalza, 2008). McCarthy (2012) affirmed that ethical conduct is simply doing the right thing when no one is looking.

The consequences of unethical professional practices, which involve professionals not conforming to approved standards of professional behaviour, are very evident in the Nigerian Construction Industry (NCI) (Matthew, 2014; Oyewobi *et al.*, 2011; Ameh & Odusami, 2010). Adnan *et al.* (2011) identified inadequate legislative compliance, severe competition, economic downturn, and inadequate ethical education as reasons professionals are involved in unethical practices. The Nigerian construction industry is not an exception. Ayoola (2008) claimed that some of the common techniques employed by these parties in corrupting the performance process include failure to meet quality standards, colluding to fix bidding prices, claiming urgency as an excuse for selecting a contractor without competition, demanding private benefits, and diverting delivered goods for resale or for private use.

The construction industry is significant to both the developing and developed countries. Matthew (2014) affirmed that between two to ten percent of the total work-force is employed in the construction industry. Jaafar and Radzi (2012) averred that public projects have dominated the construction industry. success in The construction industry involves construction professionals such as architects, construction and project managers, land surveyors, quantity surveyors, structural and service engineers, town planners (Dada, 2012; Idoro, 2011), and depends heavily on the quality of the managerial, financial, technical and organisational performance of the respective construction professionals. One of the most important issues that currently arise within the construction industry environment of the study area is unethical practices. The aim of this study is therefore to examine the effects of unethical professional practice on construction projects performance in Niger State, Nigeria. This will be achieved through the investigation of the root causes of unethical professional practices on construction projects performance as well as the identification of the effect of unethical professional practices on construction projects performance in the study area.

## **LITERATURE REVIEW**

### **Ethics in the construction industry**

Ethics is generally defined as a system of moral principles, by which human actions and proposals may be judged good or bad, right or wrong; and the rules of conduct recognized in respect of a particular class of human actions (Oxford Dictionary, 1999). Ethics defined as the

discipline dealing with what are good and bad about moral duty and obligation (FMI/CMMA, 2004).

The construction industry is classified as the most fraudulent industry worldwide, providing the perfect environment for ethical dilemmas, with its low-price mentality, fierce competition and paper-thin margins (Adnan *et al.*, 2012). According to Ameh and Odusami (2010) there is scarce empirical academic research on professional ethics in the NCI. Oyewobi *et al.* (2011) discovered that the construction industry is more susceptible to ethical problems because of several features and corruption, and concluded that these affect all stages of construction from planning to completion stage.

Ameh and Odusami (2010a) studied Nigerian building professionals' ethical ideology and perceived ethical judgment. Their finding reveals that the dominant ethical ideology of building industry professionals is situationism. This orientation suggests that given the current sociopolitical and economic situation of Nigeria the attitude of building industry professionals in practice would possibly be unethical due to the extreme influence that situational factors have on their behaviour. Momoh and Alutu (2017) reported that contractors fraudulently obtain vital information on a contract by paying money to officials of the awarding organization, a contractor must include a kickback in his tender to win, contract officers (engineers; quantity surveyors; etc.) have vested interest on the jobs they are advising on and, winning a contract depends on how well in advance a bidder negotiate for kickbacks as the most severe unethical practices in the NCI.

### **Causes and effects of unethical professional practices on construction projects**

A review of extant literatures reveals that the absence of punishment for corruption, loss of money due to change in government, lack of continuity in government programmes, availability of loop holes in project monitoring, among others are some of the factors that influence the perpetuation of unethical professional practices in construction project management in Nigeria (Ayodele *et al.*, 2011; Oyewobi *et al.*, 2011; Ameh and Odusami, 2010a).

The resultant effects of unethical professional practices on the management of construction projects in Nigeria include: abandonment; building/users dissatisfaction; collapse of buildings; conflicts/ disputes /litigation; cost overrun; delays; deterioration of the environment; deterioration in professionalism; high maintenance cost; high rate of accidents; poor aesthetic value; poor basis for project monitoring and control; poor clients confidence on professional

competence; poor value for money; poor workmanship; portrays bad image of the construction industry; rework; time overrun; underutilisation of resources; and vulnerability to frequent maintenance work (Adebanjo, 2012; Ameh and Osegbo, 2011; Ayodele *et al.*, 2011; Oyewobi *et al.*, 2011; Ameh *et al.*, 2010).

One of the aftermaths of corruption is the raising of the cost of construction to an embarrassing level. The prevalence of poor pre-contract planning, inept/ incompetent contractors, incompetent consultants/professional advisers, fraud, poor project funding/delayed payments, late appointment of relevant professionals, non-application of due process in contract awards, hasty preparation/award/execution of projects, adverse market forces/inconsistent government policies, design inadequacies, choice of contractual arrangement/form of contract, and inflation have been identified as the causal factors responsible for the very high cost of construction in Nigeria (Alutu and Udhawuve, 2009).

Unethical or corrupt practices tend to distort construction process and thereby hamper economic fortune. Unethical performance delays the free play of market forces, discourage economic aid from the foreign donors and it makes almost impossible to attract and international investors shun the corrupt environments to the detriment of the economies and communities of the respective countries (Oyewobi *et al.*, 2011). Patrick (2016) revealed that corruption can be occurred in several forms and different ways and at any stage during the life cycle of the construction project. A survey identified several types of unethical conducts and ethical dilemmas in the Australia construction industry such as corruption, negligence, bribery, conflict of interest, bid cutting, under bidding, collusive tendering, cover pricing, frontloading, bid shopping, withdrawal of tender, and payment game (Bengu, 2015).

## **METHODOLOGY**

This study focused on the perceptions of the key construction professionals that work on public building construction projects. The study evaluated the root causes and effects of unethical practices on public construction projects. This research work adopted the survey approach because a large number of these professionals can be reached within a relatively short period of time. A quantitative research design approach based on the use of structured questionnaires was adopted. A 5-item Likert scale was employed for root causes of unethical practices, while a 3-item Likert scale was used for effects of unethical practices. Data was collected through purposive sampling of 51 construction project professionals within the study area.

Mean Item Score (MIS) were employed in the analysis of the data. The use of MIS was justified because the paper was interested in respondents' perceptions of unethical practices on public construction projects. The relevant mathematical formula employed is  $MIS = \Sigma W / (N)$ , where W is the weighting given to each factor by the respondents (ranging from 1 to 5), and N is the total number of respondents. Higher values of MIS indicate greater importance of root causes and effects of unethical practices. The results obtained were presented in tables.

## RESULTS AND DISCUSSION

### Demographics of survey respondents

In a reflection of the male-dominated nature of the Nigeria construction industry, almost three-quarters of the respondents (70.6%) were male, while females made up the balance of 29.4%, as reported in Table 1.

**Table 1: Demographics of respondents**

Parameter	Frequency (n)	Percentage (%)	Parameter	Frequency (n)	Percentage (%)
<b>Gender</b>			<b>Profession</b>		
Female	15	29.4	Architect	10	19.6
Male	36	70.6	Builder	19	37.3
<b>Educational attainments</b>			Civil Engineer	10	19.6
HND/B.Sc	36	70.6	Quantity Surveyor	12	23.5
M.Sc	9	17.6	<b>Work experience</b>		
Ph.D	6	11.8	Less than 5 yrs	7	13.7
<b>Employer</b>			5 yrs – 15 yrs	11	21.6
Client	12	23.5	16 yrs – 25 yrs	17	33.3
Consultant	23	45.1	More than 25 yrs	16	31.4
Contractor	16	31.4			

Source: Author's fieldwork (2023)

Respondents who worked for consultants were most numerous (45.1%); those employed by contractors made up 31.4%. Nineteen out of the sample of 51 were Builders (37.3%); Quantity Surveyors made up 23.5%, while the rest of the sample was divided equally between Architects (19.6%) and Civil Engineers (19.6%). Respondents who possessed Bachelor's degrees or its equivalent were most numerous within the sample (70.6%). In terms of work experience, respondents who had worked for between 16 and 25 years made up a third of the sample (33.3%). Respondents who had worked for more than 25 years comprised 31.4%.

### Root Causes of Unethical Professional Practices on Construction Projects

Mean score analysis was employed to rank the various causes of unethical practices, divided into three main categories - (i) root causes attributable to the individual, (ii) root causes attributable to the project environment, and (iii) immediate causes that are derived from the project environment as well. The result of this descriptive analysis was presented in Table 2. Only one ('Profit maximization by Contractors') out of the 38 causes was regarded as 'highly important' by respondents; all of the rest 37 causes were considered to be only 'fairly important'. However, out of the top ten highest ranked causes, seven causes belonged to the Immediate-Project category, two were from the Root-Project category while the Root-Individual category had one. This implied that unethical practices in the construction industry are fuelled most immediately by the nature of the project environment itself.

These immediate drivers of unethical practices include poor professional ethics standards, the desire to maximize financial gain, and lack of rigorous supervision. The low entry barriers in the construction industry, which mean that almost anybody can participate in construction without rigorous special training, as well as the bureaucratic nature of procurement, were the two highest ranked Root-Project causes. 'Peer pressure' was the only Root-Individual cause within the top ten causes; stakeholders in the construction process may sometimes succumb to pressure from their peers to engage in unethical practices. The gender and age of construction professionals were relatively not as important as other drivers, being ranked 37th and 38th respectively.

**Table 2: Root causes of unethical practices on construction projects**

Root Causes of unethical professional practices	Category of Causes	Mean Score	SD	Rank	Level of importance
Profit maximization by Contractors	Immediate-Project	3.55	0.99	1st	Highly important
Low entry barriers (open to all-comers)	Root-Project	3.43	1.10	2nd	Fairly important
Poor standards of professional ethics	Immediate-Project	3.35	1.09	3rd	Fairly important
Under-payment of Professional Consultancy Fees	Immediate-Project	3.31	0.95	4th	Fairly important
Lack of rigorous supervision	Immediate-Project	3.29	1.22	5th	Fairly important
Peer pressure	Root-Individual	3.29	1.15	6th	Fairly important
Inadequate punitive sanctions	Immediate-Project	3.29	1.14	7th	Fairly important
Bureaucratic nature of procurement	Root-Project	3.27	1.08	8th	Fairly important
High levels of Poverty	Immediate-Project	3.25	1.16	9th	Fairly important
Excessive love for money (Greed)	Immediate-Project	3.22	1.17	10th	Fairly important
Low work experience	Root-Individual	3.22	1.12	11th	Fairly important
Demographics	Root-Individual	3.20	1.34	12th	Fairly important
Quackery (as a result of Low entry barriers)	Immediate-Project	3.18	1.07	13th	Fairly important
Abuse of Interpersonal connections	Immediate-Project	3.16	1.25	14th	Fairly important
Lack of transparency in procurement system	Immediate-Project	3.16	1.14	15th	Fairly important
Weak Ego (easily convinced to become corrupt)	Root-Individual	3.16	0.88	16th	Fairly important
Fall-out of endemic societal corruption	Immediate-Project	3.14	1.31	17th	Fairly important
Nomadic nature of labour force hinders enforcement	Root-Project	3.12	1.05	18th	Fairly important
Fragmented industry (centralized control absent)	Root-Project	3.10	1.04	19th	Fairly important
Legal loopholes in procurement procedures	Root-Project	3.10	0.94	20th	Fairly important

<b>Root Causes of unethical professional practices</b>	<b>Category of Causes</b>	<b>Mean Score</b>	<b>SD</b>	<b>Rank</b>	<b>Level of importance</b>
Unfair/opaque selection processes (Favouritism)	Immediate-Project	3.08	1.28	21st	Fairly important
Weak accountability	Immediate-Project	3.08	1.07	22nd	Fairly important
High cost of obtaining redress in court of law	Immediate-Project	3.06	1.19	23rd	Fairly important
Competition to get projects is high	Root-Project	3.04	1.30	24th	Fairly important
Lack of integrity by public procurement officials	Immediate-Project	3.04	1.30	25th	Fairly important
Family influence - weak emphasis on ethical values	Root-Individual	3.04	1.28	26th	Fairly important
Effects of Socialisation - school, work, society	Root-Individual	3.04	1.09	27th	Fairly important
Fear of punishment	Root-Individual	3.02	1.07	28th	Fairly important
Effect of politics on public works	Root-Project	3.00	1.36	29th	Fairly important
Individual's perception of his/her own Status	Root-Individual	2.98	1.26	30th	Fairly important
The industry is project based	Root-Project	2.96	1.40	31st	Fairly important
Undue politicisation of contracts (Godfatherism)	Immediate-Project	2.96	1.33	32nd	Fairly important
Weak or warped understanding of religion	Root-Individual	2.94	1.12	33rd	Fairly important
Work environment (goals, policies & culture)	Root-Individual	2.92	1.25	34th	Fairly important
Low wages expose workers to corrupt practices	Immediate-Project	2.84	0.95	35th	Fairly important
Contracts are usually huge and lucrative	Root-Project	2.82	1.28	36th	Fairly important
Gender	Root-Individual	2.80	1.36	37th	Fairly important
Age (life experiences) - Youthful exuberance	Root-Individual	2.76	1.18	38th	Fairly important

Source: Author's fieldwork (2023)

### **Effect of Unethical Professional Practices on Construction Projects Performance**

Mean score analysis was employed to rank the various effects of unethical practices, which were divided into fifteen types of effects. Six aspects of construction project performance were also examined; these were quality, time, cost, safety, risk and image. All of the results of the analysis for these six aspects of construction project performance are presented in Table 3.

In all, 16 practices had 'highly significant' effects on the six aspects of project performance. Two practices had 'highly significant' effects on quality ('Work is not executed as per original design', and 'Disclosing confidential bidding information'). For schedule performance, three practices were ranked as 'highly significant' ('Politicians influence choice of contractors', 'Bribing to influence bid evaluation process' and 'Changes in high value items not verified'). three practices were also considered as having 'highly significant' effects on cost performance of construction projects ('Politicians influence choice of contractors', 'Changes in high value items not verified' and 'Bribing to influence bid evaluation process').

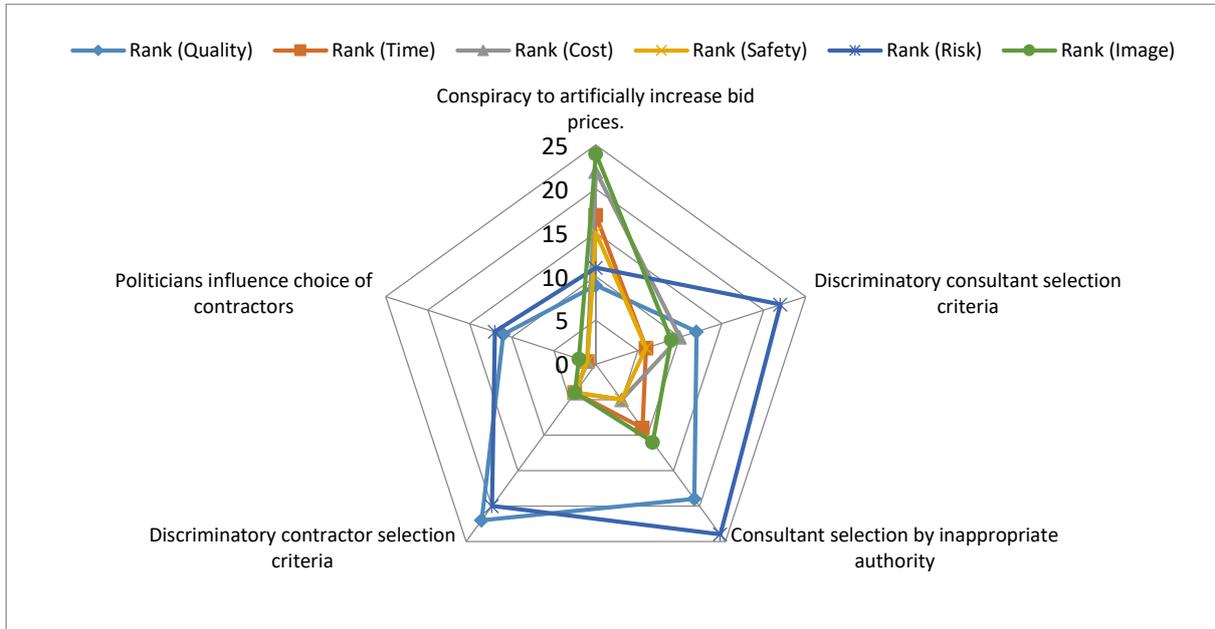
**Table 3: Effects of unethical practices on six aspects of project performance**

Description of Unethical Professional Practices	Category of Unethical Practices	QUALITY		TIME		COST		SAFETY		RISK		IMAGE	
		MS	Rank	MS	Rank	MS	Rank	MS	Rank	MS	Rank	MS	Rank
		Conspiracy to artificially increase bid prices.	1	2.31	9th	2.18	17th	2.06	22nd	2.24	15th	2.22	11th
Discriminatory consultant selection criteria	1	2.25	12th	2.39	6th	2.32	10th	2.35	6th	2.12	22nd	2.40	9th
Consultant selection by inappropriate authority	1	2.16	19th	2.37	9th	2.39	5th	2.37	5th	2.10	24th	2.39	11th
Discriminatory contractor selection criteria	1	2.13	22nd	2.41	4th	2.49	4th	2.39	4th	2.12	20th	2.57	4th
Politicians influence choice of contractors	1	2.26	11th	2.55	1st	2.63	1st	2.59	1st	2.20	12th	2.63	2nd
Site supervisors bribed to neglect duties	2	2.10	24th	2.35	10th	2.37	7th	2.31	11th	2.10	23rd	2.37	13th
Bribing to access confidential information	2	2.14	21st	2.39	5th	2.29	13th	2.33	9th	2.14	19th	2.29	17th
Bribing to be included in the pre-qualified list	2	2.10	26th	1.80	27th	1.55	28th	1.75	27th	2.10	26th	1.78	28th
Bribing to cut competitor from pre-qualified list	2	2.18	17th	2.00	26th	2.04	24th	2.04	26th	2.18	16th	2.26	19th
Bribing to influence bid evaluation process	2	1.65	28th	2.53	2nd	2.50	3rd	2.46	3rd	1.65	28th	2.58	3rd
Payment of contingency without tangible basis	3	2.12	23rd	2.37	8th	2.31	12th	2.31	10th	2.12	21st	2.43	7th
Payment of claims cannot be accounted for	4	2.18	14th	2.27	13th	2.21	19th	2.29	12th	2.18	13th	2.25	21st
In-house officials take over subcontracting	5	2.31	10th	2.26	14th	2.22	17th	2.21	18th	2.31	9th	2.31	16th
A large project split to avoid bidding	6	2.18	16th	2.10	24th	1.98	26th	2.18	21st	2.18	15th	2.06	26th
When a bidder wants to be seen to participate but does not want to win the job.	7	2.16	18th	2.14	22nd	2.22	18th	2.10	23rd	2.16	17th	2.25	20th
Pinching of corporate or public funds.	8	2.39	6th	2.10	25th	2.08	21st	2.06	25th	2.38	6th	2.16	22nd
Contractors provide false certificates in bidding	9	2.37	7th	2.18	19th	2.24	15th	2.20	20th	2.37	7th	2.33	15th
Kickbacks for construction and supply contracts	10	2.41	3rd	1.65	28th	1.65	27th	1.69	28th	2.41	3rd	1.82	27th
Concealing substandard works by contractors	11	2.22	13th	2.12	23rd	2.23	16th	2.06	24th	2.22	10th	2.33	14th
Over-designing/pricing works for personal gain	11	2.16	20th	2.18	16th	2.13	20th	2.14	22nd	2.16	18th	2.27	18th
Substitution of unqualified materials	11	2.18	15th	2.31	12th	2.33	9th	2.33	8th	2.18	14th	2.41	8th
Lowering specifications for substandard works	11	2.10	25th	2.18	18th	2.06	23rd	2.24	16th	2.10	25th	2.14	25th
Work/supply order not priced justifiably	12	2.39	4th	2.16	20th	2.02	25th	2.22	17th	2.39	4th	2.14	23rd
Disclosing confidential bidding information	13	2.55	2nd	2.39	7th	2.32	11th	2.35	7th	2.55	2nd	2.40	10th
Work is not executed as per original design	13	2.55	1st	2.31	11th	2.33	8th	2.27	13th	2.55	1st	2.49	6th
Changes in high value items not verified	13	2.35	8th	2.51	3rd	2.54	2nd	2.47	2nd	2.35	8th	2.64	1st
Proper record of hindrances/claims not kept	14	2.39	5th	2.25	15th	2.37	6th	2.25	14th	2.39	5th	2.51	5th
Non-compliance with technical staff regulations	15	1.80	27th	2.16	21st	2.27	14th	2.20	19th	1.80	27th	2.37	12th

**Notes:** 1=Bid Rigging; 2=Bribery; 3=Change Order Fraud; 4=Claims Fraud; 5=Conflict of interest; 6=Contract splitting; 7=Cover pricing; 8=Embezzlement; 9=Forgery; 10=Kickbacks/Extortion; 11=Outright Fraud; 12=Overbilling; 13=Professional misconduct fraud; 14=Professional negligence; 15=Using unqualified workers.

On the safety performance of construction projects, only one practice had a ‘highly significant’ effect (‘Politicians influence choice of contractors’). Two practices had ‘highly significant’ effects on risk performance of construction projects; (‘Work is not executed as per original design’ and ‘Disclosing confidential bidding information’). Five practices were found to have ‘highly significant’ effects on the image of construction project contractors; ‘Changes in high value items not verified’, ‘Politicians influence choice of contractors’, ‘Bribing to influence bid evaluation process’, ‘Discriminatory contractor selection criteria’ and ‘Proper record of hindrances/claims not kept’.

In order to show visually how the unethical practices were ranked, a radar chart of the five unethical practices under the ‘bid rigging’ category was created as displayed in Figure 1. It was observed that only the practices that affected time, cost and safety were ranked within the top 10, out of 28. This is a further indication of the significance of unethical bid rigging practices on the time, cost and safety of public building construction projects. Where proper care is not taken, and such practices are allowed to happen during the bidding stage, the effects will be felt far beyond the pre-contract stage.



**Figure 1: Radar chart of unethical practices associated with ‘bid rigging’**

## CONCLUSION AND RECOMMENDATION

This study was initiated with the aim of examining the effects of unethical professional practice on construction projects performance in Niger State, by investigating the root causes and effects of unethical professional practices on construction projects performance in the study area. Attempts by Contractors to maximize profits were the only project-related immediate cause of unethical professional practices that was ranked as ‘highly important’. This study has found that in relative terms, the age and gender of construction professionals are not as important as other drivers. A total of 16 unethical practices were found to have ‘highly significant’ effects on six aspects of construction project performance (quality, time, cost, safety, risk and image). The study has concluded that a wide diversity of unethical practices is evident in the construction industry. Such practices have significant effects on different aspects of the

construction process, such as quality, time, cost, safety, risk and image. It is however possible to curb the effects of these unethical practices, since the critical practices have been identified in this study.

Based on the finding of this study it was recommended that the ways and means by which contractors attempt to achieve profit maximization should be the subject of further research study with the view of designing strategies to discourage and prevent such attempts. Unethical practices have significant effects on all of the six aspects of construction project performance (quality, time, cost, safety, risk and image) that were investigated in this study. For this reason, it was recommended that stakeholders in the construction industry need to look beyond the traditional 'iron triangle' of performance measures – cost, time and quality – especially when the effects of unethical practices are being considered. The damage done by unethical practices to the safety, risk and image perception of construction will only continue to increase if no conscious efforts are directed towards understanding and curbing the effects of unethical practices on more novel measures of performance in the construction industry.

## REFERENCES

- Adebanjo, A. (2012). Institutional Framework for Achieving Value for Money in Construction Projects in Nigeria. 1st National Project Cost Reduction Summit. *Abuja: Quantity Surveyors Registration Board of Nigeria (QSRBN)*.
- Adnan, H., Hashim, N., Mohd, N., & Ahmad, N. (2012). Ethical issues in the construction industry: Contractor's perspective. *Procedia-social and behavioral sciences*, 35, 719-727.
- Alutu, O. E., & Udhawuve, M. L. (2009). Unethical practices in Nigerian engineering industries: Complications for project management. *Journal of management in engineering*, 25(1), 40-43.
- Ameh, J. O., & Odusami, K. T. (2010a). Nigerian Building Professionals' Ethical Ideology and Perceived Ethical Judgement. *Australasian Journal of Construction Economics and Building, The*, 10(3), 1-13.
- Ameh, O. J., & Odusami, K. T. (2010). Professionals' ambivalence toward ethics in the Nigerian construction industry. *Journal of professional issues in engineering education and practice*, 136(1), 9-16.
- Ameh, O. J., & Osegbo, E. E. (2011). Study of relationship between time overrun and productivity on construction sites. *International Journal of Construction Supply Chain Management*, 1(1), 56-67.
- Ameh, S., Dania, A., Zubairu, I., & Bustani, S. (2010, July). Sustainable construction education: Assessing the adequacy of built environment professional's training. In *Procs West Africa Built Environment Research (WABER) Conference* (pp. 27-28).

- Ayodele, E. O., Ogunbode, A. B., Ariyo, I. E., & Alabi, O. M. (2011). Corruption in the construction industry of Nigeria: Causes and solutions. *Journal of emerging trends in economics and management sciences*, 2(3), 156-159.
- Ayoola, A. O. (2008). Ayoola identifies causes of corruption. *ThisDay* newspaper.
- Bengu, P. S. (2015). *The impact of change management in the public service: case study of the South African social security agency* (Doctoral dissertation).
- Dada, M. O. (2012). Predictors of procurement selection: an investigation of traditional and integrated methods in Nigeria. *Journal of Construction in Developing Countries*, 17(1), 69-83.
- Dictionary, O. E. (1999). New York: Oxford University.
- FMI/CMAA (FMI/Construction Management Association of America). (2004). Survey of construction industry ethical practices.
- Idoro, G. I. (2011). Influence of in-sourcing and outsourcing of consultants on construction project performance in Nigeria. *Australasian Journal of Construction Economics and Building, The*, 11(4), 45-58.
- Jaafar, M., & Radzi, N. M. (2012). Building procurement in a developing country: a comparison study between public and private sectors. *International Journal of Procurement Management*, 5(5), 608-626.
- Matthew, A. (2014). A study on ethical construction management. *Scholedge International Journal of Business Policy & Governance*, 1(1), 1-7.
- McCarthy, S. F. (2012). Developing an Australian code of construction ethics. *Australasian Journal of Construction Economics and Building, The*, 12(2), 87-100.
- Momoh, A. O., & Alutu, U. U. (2017). Institutions and sustainable industrial-led development in Sub-Saharan Africa. *Journal of African Foreign Affairs*, 4(1-2), 99-119.
- Oyewobi, L. O., Ganiyu, B. O., Oke, A. A., Ola-awo, W. A., & Shittu, A. A. (2011). Determinants of unethical performance in Nigerian construction industry. *Journal of sustainable development*, 4(4), 175.
- Patrick, O. (2016). Aiding Corruption through Governance Structures in sub-Saharan Africa: What Role for E-Government?. *SOCRATES: An International, Multi-Lingual, Multi-Disciplinary, Refereed (peer-reviewed), Indexed Scholarly Kjournal*, 4(3), 58-78.
- Scalza, A. (2008). Ethics in the construction industry teaching students ethics in this 21st century global market. In Proceedings of the 2008 Mid-Atlantic Conference of the American Society for Engineering Education. Retrieved from [https://web.stevens.edu/asee/fileadmin/as\\_ee/pdf/Scalza\\_-\\_final.pdf](https://web.stevens.edu/asee/fileadmin/as_ee/pdf/Scalza_-_final.pdf).