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Research Article

Unethical Professional Practices and Poor Craftsmanship of Construction Projects Performance in Nigeria: Consequences and the Way Forward

Abstract

Construction professionals and craftsmen are expected to exhibit high level of professionalism by adhering to their professional ethics when discharging their duties. This study observed that unethical professional practices and poor craftsmanship on construction projects consequences are evident in the Nigerian Construction Industry (NCI). This negative trend affects performance of construction projects and the role of the industry in enhancing the economic growth of the country. Hence, the study sought to identify these effects to provide remedies for curbing them. Explorative studies and questionnaire survey methods were used to obtained data from interviews and interactions with construction professionals and craftsmen. Data obtained were analysed using SPSS for reliability, correlation tests, significance test, and descriptive statistics. Result reveals identified effects of unethical professional practices and poor or unskilled craftsmanship to be severed on projects performance. Amongst them are: vulnerability to frequent maintenance work, delays, cost overruns and lack of adequate training for craftsmen are the extremely severe effects. Adherence to professional ethics, transparency and accountability in contract administration, the use of approved construction designs from certified professionals, training and retraining of both professionals and craftsmen is considered highly effective for curbing unethical professional practices and poor craftsmanship. The research recommends construction professional bodies, regulatory bodies and the government to adopt the research findings on the remedies and these organizations should be synergized in implementing the remedies. The research result will assist in curbing unethical practices and poor craftsmanship, thus, facilitates professionalism in the NCI to meet international best practice.

Introduction

According to Dantong [1], Construction is a process or method of making or building things like houses, roads, bridges and so on, and the onus of coordinating the process or method in achieving the aim of any construction activity lies with the construction industry.

The construction industry, which is globally acknowledged as an economy driver especially to the developing countries involves construction professionals and Craftsmen in discharging its project development activities [2-4]. The level of success in these development activities depend heavily on the quality of the managerial, financial, technical, organisational performance of the respective construction professionals and craftsmanship [5]. These professionals includes architects, construction and project managers, land surveyors, quantity surveyors, structural and service engineers, town planners, etc. [3,6], and BBC Dictionary (2002) in Dantong [1], defines craftsmen as one who makes things skilfully while The Industrial Training Fund [7], enumerated craftsmen to include brick layers(Masons), iron benders, carpenters, plumbers, electricians etc. They work either in client, contracting or consultancy organizations, and these organizations constitute the triads of construction project management in the construction industry [3,8,9].

In a client organization, construction professionals' plays a dual role as [3], in-sourced consultants who are on permanent employment of the client; or out-sourced consultants who operate consultancy outfits. Same goes for craftsmen, though in most case they are on temporary (daily pay). Both are responsible for developing the requirements of project clients, setting targets, deadlines and establishing standards for meeting these requirements, preparing project documents that describe the targets, deadlines and standards set and sometimes monitoring the activities of contractors, all for the craftsmen to execute [3]. In a contracting organization,

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construction professionals play key roles as technical and management staff in discharging construction contractors project tasks [10]. Professionals are expected to exhibit high level of professionalism by adhering to their professional ethics, same goes for craftsmen when discharging their duties [11]. Usman et al. [11], defines professionalism as the act of exhibiting the qualities and features of a profession by a professional or craftsman in the discharge of his or her duty. These feat can only be attained when professionals understand the ethics guiding their profession [11]. Professional ethics is a system of moral principles or rules of behaviour which defines occupational moral (Hornby, 2001). Professional's ethics and craftsmen's skills is giving of one's best to ensure that clients interest are properly cared for, while wider public interest is also properly recognized and protected [11].

However, consequences of unethical professional practices and poor craftsmanship, which involves professionals and craftsmen not conforming to approved standards of professional behaviour are very evident in the Nigerian construction industry (NCI) [6,12]. Consequently affecting the performance of construction projects and the role of the industry in enhancing the economic growth of the country [12,13]. Hence, the study sought to identify the effects of unethical professionals also factors and most severe factor affecting craftsmanship practices on construction projects performance in Nigeria and to identify remedies for curbing them. The significance of the study stems from the fact that the incalculable value of human life demands nothing less than the highest moral considerations from those who might risk it otherwise [14]. Moreover, construction industry account for a major proportion of the Gross Domestic Product (GDP) of Nigeria [15]. Therefore seeking to improve the efficiency of the industry is very essential in enhancing the performance of the NCI, as well as promoting the growth of the Nigerian economy [16].

The performance of professionals and craftsmen in the nigerian construction industry

The NCI is routinely accused of being wasteful, inefficient and falling short of quality and quantity targets and being late in delivery [1]. However the construction industry in Nigeria accounts for almost 70% of the nation's fixed capital formation, 1.4% GDP [17,18], and employs approximately 8 million people, which represents approximately 25% of Nigeria's workforce and the largest employer of construction labour in Africa [19]. This achievement according to Oladimeji and Ojo [16], is an indication of the significance of the sector to the Nigerian economy.

Despite its achievements, the NCI is characterised by evidence of underperformance due to [15], high construction cost; delay in project delivery; poor quality works; incidences of collapsed buildings; high level of corruption; poor or lack of regulation; dominance of substandard materials; non-patronage of indigenous contractors; over dependence of imported materials and components; non-involvement of the right professionals or the use of non-professionals in project delivery; ineffective physical developmental control regulations, structures and processes; contract trafficking; excessive cost overrun; poor supervision of projects; high level of ignorance of project delivery regulations and processes; poor physical planning and control; and conflict in professional services. These problems resulted to the industry's inability to deliver services effectively and efficiently [15,19], consequently, creates dissatisfaction amongst clients [19]. Dantong [1], stressed that these accusations are particular due to poor workmanship of the workforce (craftsmen), which can also be traced to the negligence of the employers morals in training them. The companies are concentrating on financial gains and forgetting the people that make the job and money, The problem of the industry according to Bokinni (2005) in Dantong [1], is how to reconcile the need for a supply of manpower capable of high productivity in the carrying out of simplified sequential operations and at the same time retain a substaintial number of craftsmen capable of highly skilled work. Unless an adequate supply of appropriately trained workers can be ensured, the industry will consistently fail to satisfy the demands of the market for an adaptive, innovative and capable service. Researchers attributed most of the construction industry's underperformance to unethical professionals and poor craftsmen practices [6,11,12].

The concept of construction project performance

A project is said to have performed when it is successfully completed and commissioned [20]. Though, the completion and/or commissioning of a project without satisfying the project parameters originally set down to describe it, amount to underperformance [20]. The gauging of project performance in the construction industry is done through the use of key performance indicators [5,21]. At the early stage of project management, the major indicators of performance were time, cost and quality, however, contemporary indicators of project performance includes health and safety, stakeholders' involvement and satisfaction [21]. Takim and Akintoye [5], reported that the UK identified 10 key performance indicators for construction projects in response to Egan's report of 1998: construction cost; construction time; defects; client satisfaction with the product and service; profitability; productivity; predictability of design cost and time; predictability of construction cost and time; and safety. To Morris and Hughes (1987) cited in Ogwueleka [22], performance of a construction project must be linked to: community involvement; project objectives; technical innovation; uncertainty; politics; schedule duration urgency; financial contract; legal factors and; implementation process.

Construction professionals ethics in Nigeria

According to Ameh and Odusami [6], in Inuwa, et al. [23], there is scarce empirical academic research on professionals ethics in the NCI. The few were conducted by: Usman, et al., Ayodele et al. [13], Oyewobi, et al. [12]; Ameh and Odusami (2010a) [6], Ameh and Odusami [24], Alutu [25], Ameh, et al. [26]. Usman, et al., 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

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Nigeria. Ayodele et al. [13], identified causes of corruption in the NCI as: poverty, greed, politics in the award of contract/ godfatherism, professional indiscipline, profit maximization by Contractor, quackery, fall-out of endemic societal corruption and favouritism. Oyewobi et al. [12], 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 [6], studied Nigerian building professionals' ethical ideology and perceived ethical judgement. Their finding reveals that the dominant ethical ideology of building industry professionals is situationism. Hence, predicted that the attitude of building industry professionals in practice, given the current socio-political and economic situation of Nigeria would possibly be unethical due to the extreme influence situational factors have on their behaviour. In another study Ameh and Odusami [24], assessed the perceptions of construction professionals regarding ethical issues in the Nigerian construction industry and discovered that there is a decline in unethical practices within the industry compared to the pre-1999 era. The more common form of bribery according to them, is financial and Quantity surveyors were perceived the most susceptible to bribery among the professionals in the industry. The builder/ construction manager according to them, faces the greatest pressure to act unethically among the professionals in the construction industry.

Alutu [25], investigates unethical practices in the NCI and reveals 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. These according to Alutu [25], clearly indicates the prevalence of unethical practices in the NCI. Ameh, et al. [26], assessed professional ethics content in the academic curriculum of construction disciplines in Nigerian Universities. They discovered that there is a gross inadequacy in the ethics education of potential construction professionals and that there is no variation in the level of coverage of professional ethics in the curriculum of undergraduate construction students. In addition, the least covered ethics related topics are ethics of gifts, meals and entertainment and whistle blowing. All the researches reviewed highlighted essential information on ethical issues in the NCI, unfortunately none of the research focused on the effects of unethical professional practices on construction project performance.

Effects of unethical professional practices on construction craftsmen and project performance

Unethical practices are found in every phase of the procurement of building projects in Nigeria; during planning and design, in the award of contracts, during the construction process, and post construction stage including maintenance of completed projects [24]. These practices have adverse effects on construction craftsmen and project performance in the construction industry, and thereby hamper the development of the economy and human resources [12]. For the construction industry in Nigeria be able to service the economy, it has to parade competent hands in its operations, which includes credible consultants and contractors with qualified and competent operatives inclusive of craftsmen. The need for maintaining standards in construction operations, it requires an investment in research and development. This venture will empower the operatives (craftsmen) in upgrading and improving on skills so as to meet the ever-increasing demands in today's constantly changing world. Hence, the need to train its operatives has become imperative so as to meet its responsibility in the economy. It has been observed that gone are the days when construction craftsmen actually go to the various works departments of state and federal governments to under-go extensive training to obtain the various levels of trade test as it were in the past. Presently it is rather pertinent that these trade-test including driver's license are just bought and owned without the usual training and test. ITF [7], in [1]. The government and NCI, particularly the unethical professional practices are responsible for this ugly trend.

According to Obiegbu (2003), training is giving teaching and practice to a person or persons in order to bring him or her to a desired standard of behavior, efficiency or physical condition. He further defined training as: "submitting a person to discipline and instruction, to educate, to bring up, rear in habits of good behaviour and conduct". This is precisely what must be done in training of construction craftsmen - it is essential to educate, instruct and above all, discipline and bring up habits of "good behaviour". Failure to do so will result ultimately in errors, omissions and consequent disaster. However, training types/methods are numerous, and to achieve the main aim in training, it is necessary to pursue the most suitable training types/methods that will be economical and relevant to the industry, especially in its contribution to productivity. A thorough review of extant literatures exposed the effects of unethical professional practices on construction project performance as: 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 [6,12-14,27] .

Remedies for unethical professional practices and poor craftsmanship in the construction industry

Unethical professional practices distort economic development and good governance [12], and has also result to loss of finance and human lives in Nigeria [26]. Hence, the need to curb it has been a major concern to many authors. According to Vee and Skitmore [14], curbing unethical professional practice depends on the implementation and policing of the ethical guidelines and policies of both professional bodies and private organisations together with the leadership of

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public sector procurement agencies. In Alutu's [25], view, seminars and workshops, and the introduction of a course on professional ethics in polytechnics and universities will aid in curbing unethical professional practices in Nigeria. Ameh, et al. [26], advocated for the inclusion of professional ethics in postgraduate curriculum of construction disciplines in Nigeria. In another study, Ameh et al. [6], recommends professional institutions in Nigeria to give more priority consideration to ethical discourse at technical sessions, public lectures and seminars. Oyewobi, et al. [12], proffers viable legislation mechanism in Nigeria to deal with unethical practices by strengthening professional institutions to punish erring members, and the introduction of enforcement and monitoring measures. Usman et al. [11], advocates for more government commitment in fighting corruption in Nigeria, and advised that professionals, contractors, craftsmen and civil servants exhibits hallmark of excellence through adherence to ethics, values, competence and integrity. Adebanjo [27], recommends a mindset changing seminars and workshops by professional institutions and professional regulatory bodies in Nigeria. Dantong & Lekjep [28], recommended training and re-training of construction craftsmen, the need for Government to increase support to technical and vocational institutions and for the NCI be made to ensure not only the existence of training policy but its full implementation for the construction craftsmen.

Research Methodology

Research design and hypotheses

This research used explorative and descriptive survey methods. The explorative method employs literature search to obtain the effects of unethical professional practices and poor craftsmanship on construction project performance and the possible remedy for curbing them. Afterwards, interviewed eight (8) academicians' who are construction experts from questionnaire respondents, to inputs on the literature findings. The experts have over 15 years' experience traversing the entire country and were drawn from the departments of: Architecture; Building; Civil engineering and; Quantity surveying. Their academic status are: Professors (3); Associate Professors (2); and Senior Lecturers (3: two Ph.D. holders and one Ph.D. research student). The explorative method produced 20 effects and 13 possible remedies. The descriptive survey method used the findings from the explorative method as the basis of ranking in the research questionnaire.

This research was delimited to Bauchi state in the north-eastern zone of Nigeria and Abuja, Jos and Kaduna in the north-central states of Nigeria targeted architects, construction manager, civil engineers, project managers, and quantity surveyors.

Hundred questionnaires were evenly distributed through purposively sampling technique to public sector professionals (Academics and Public works/Maintenance unit) and private sector professionals only (contracting and consulting firms). This technique allows the research to target professionals whose experience traverse the entire country and the most appropriate to respond to the research enquiry (Ibrahim, 2011). This provides a generalized view on the state of unethical professional practices being one of the causes of poor craftsmanship amongst other ugly trends in the industry because of the professionals traverse experience in the country [29]. The questionnaire distribution record a response rate of 56% (56). This rate is higher than other studies conducted in the construction industry: 25.4% [30], 33.5% [31], and 35% [32]. SPSS version 17 was used to run reliability test using Cronbach's Alpha, significance test, measures of relationship and descriptive statistics on the data obtained from the questionnaire responses.

The study tested the following two null hypotheses (H_o) and corresponding alternative hypotheses (H_1).

A. **H_o**: There is no agreement among construction professionals on the severity of the effects of unethical professional practices on construction project performance

H_1: There is agreement among construction professionals on the severity of the effects of unethical professional practices on construction project performance

B. **H_o:** There is no agreement among construction professionals on the effectiveness of the possible remedies for curbing unethical professional practices in construction Projects management.

H_1: There is agreement among construction professionals on the effectiveness of the possible remedies for curbing unethical professional practices in construction projects management.

The questionnaire

The research questionnaire comprised of 4 sections. Section 1 sought demographic information on respondents' organization, education and profession. Section 2 requested respondents' to score the severity of the effects of unethical professional and poor craftsmanship practices on construction projects performance in Nigeria. For construction professionals Section 3 requested respondents' to score the effectiveness of the possible remedies for curbing unethical professional practices and poor craftsmanship in construction projects management in Nigeria. Section 4 contains 2 open ended questions requesting respondents to state effects of unethical professional practice and poor craftsmanship on public construction project performance not included in section 2 and any likely remedies for curbing unethical professional practices and poor craftsmanship on public construction projects management not captured in section 3. The scores used a 5-point Likert-scale to measure range of respondent's opinion of severity and effectiveness. The scale interpretations are: 1-Not severe/ineffective; 2-least severe/least effective; 3-fairly severe/fairly effective; 4-severe/effective; 5-extremely severe/ highly effective. The questionnaires were hand-delivered to and retrieved from respondents.

Method of data collection

Data collection was by use of structured questionnaire. The questionnaire was well informed by the rich literature and oral interview.

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Method of data analysis

Average mean score was used as data collected for rankings in the questionnaire were ordinal in nature and to measure the opinions of respondents' on severity and effectiveness in ranking the variables on effects and remedies in the questionnaire. These methods have been used for construction industry research by: Inuwa, et al. [23], Ibrahim (2011). The AMS according to Sambo [33], is the most reliable and accurate descriptive statistic because: it is a single value, it can be algebraically tractable, it considered every observed value, and it considered the frequency of every observed value. The mean scores are only used as "indicators" to establish a rank order of severity/effectiveness for the factors used in the rankings (Idrus and Newman, 2002 in A.D. Ibrahim, 2011). The formula for computing the AMS is given as [33].

$$SI/EI=\sum_{i=1}^{n=5}(fxi)/\sum f$$

SI is the severity index, EI is the effectiveness index, f is the frequency of response, x_i is the score for each ranking.

Analysis and Discussion of Results

Reliability and measures of relationships

The Cronbach's alpha test show the questionnaire construct items on the effects of unethical professional practices and poor craftsmanship on construction project performance, and the remedies for curbing it to be 0.75 and 0.96 respectively, signifying high reliability and consistency in a scale of 0-1; with a cut off value of 0.7 [22]. Spearman's ρ (rho) used to test the measures of relationships in the rankings of the effects and remedies between the rank pairs of: academics and public works; public works and consultancy firms; consultancy firms and contracting firms; contracting firms and academics, academics and consultancy firms. The computed coefficients were: 0.993, 0.985, 0.994, 0.991 and 0.989 for the five pairs respectively on the effects; and 0.960, 0.970, 0.926, 0.936 and 0.960 for the five pairs respectively on the remedies. These indicate a high degree of agreement among the groups [23,33].

Hypotheses tests

This research used Kruskal-Wallis analysis-of-variance (Kruskal-Wallis H-test) to test its hypotheses. Kruskal-Wallis H-test is used to tests for differences in the way three or more independent groups or samples rank a variable in order to establish whether the independent groups or samples are from the same population [34]. Table 1 above shows the details of the hypotheses test. The research Rejected the two null hypothesis it tested, because the computed chi-square value is greater than the chi-square table value at 5% significance level and the computed p-value is less than the study p-value of 0.05 [34].

Respondents' demographic profiles

Table 2 below depict the respondents' demographic profiles. Almost 93% of the respondents fall under the top (41.1%) and middle (51.8%) management status in their respective organizations. All the respondents specialized in core construction disciplines involved in project management [6], Architecture (23.2%); Building technology (17.9%); Construction management (7.1%); Engineering (32.1%); and Quantity surveying (19.6%). Seventy nine percent of the respondents hold at least a bachelor's degree and higher degrees

Table 1: Details of Kruskal Wallis H-Test.

Attribute	X^2 Computed	X^2 value at p= 0.05	DF	Computed p-value	Significance	Decision
Effects	23.41	7.815	3	0.000	Significant	Rejected
Remedies	21.25	7.815	3	0.000	Significant	Rejected

Table 2: Demographic Profiles.

Management Status		
Status	**Frequency**	**%**
Top management	23	41.1
Middle management	29	51.8
Lower management	3	5.4
Others	1	1.8
Total	**56**	**100**
Educational Specialisation		
Specialisation	**Frequency**	**%**
Architecture	13	23.2
Building Technology	10	17.9
Construction management	4	7.1
Engineering	18	32.1
Quantity surveying	11	19.6
Total	**56**	**100**
Educational Qualification		
Qualification	**Frequency**	**%**
National Diploma	1	1.8
Higher National Diploma	4	7.1
Post Graduate Diploma	7	12.5
Degree	12	21.4
MSc	23	41.1
PhD	9	16.1
Total	**56**	**100**
Professional Membership		
Institutions	**Frequency**	**%**
NIA	9	16.1
NIOB	11	19.6
NIQS	11	19.6
NSE	17	30.4
Not applicable	8	14.3
Total	**56**	**100**
Construction Industry Experience		

Experience (yrs.)	Mid value (X)	Frequency(F)	FX	% F
Less than 5	2.5	2	5	3.6
5-10	7.5	10	75	17.9
10-15	12.5	14	175	25.0
15-20	17.5	8	140	14.3
Exceeding 20	22	22	484	39.2
Total		**56**	**879**	**100**

Mean years of experience = ∑FX/∑F= 879/56 = 15.70 years

Source: Field survey (2014)

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as their highest educational qualification. The respondents have a mean year experience of 15.7 years. All these reveal that the respondents' are well experienced and educated enough to respond to this research enquiry.

Assessment of the effects of unethical professional practice on project performance

Table 3 below is the individual group's ranking of the effects of unethical professional practices on construction projects performance in Nigeria. The minimum and maximum AMS of the rankings are: 3.1429-4.6429, 3.1111-4.3889, 3.7647-4.9875, and 3.2857-5.0000 for academics, public works, consultancy firms and contracting firms respectively. The SD's of all the AMSs' (not shown in the table) are very small: 0.00-2.70. These results reveal that all the identified effects of unethical professional practices that contribute to poor craftsmanship are severe on performance of construction projects in Nigeria. The extremely severe effects according to academics are: cost and time overrun, delays, and portrays bad image of the construction industry. The extremely severe effects according to public works are: portrays bad image of the construction industry, cost overrun and delays, and underutilization of resources. For consultancy firms, extremely severe effects are: vulnerability to frequent maintenance work, delays and portrays bad image to the construction industry. For contracting firms: time overrun, rework, underutilization of resources, poor value for money, delays and cost overruns.

Table 4 below shows combined respondents' AMS range of 3.4107-4.7679. This reveals that all the respondents' are in agreement that all the effects of unethical professional practices that led to poor craftsmanship identified are severe on construction projects performance in Nigeria. The extremely severe effects as agreed by the respondents' are: vulnerability to frequent maintenance work (4.7679), delays (4.5179) and cost overruns (4.5000). The result reveals low values for the SDs' indicating a high degree of consistency in the combined respondents' opinions.

Table 5 below shows that AMS ranges concern effectiveness of the remedies of: 3.8571-4.5714, 3.7778-4.6111, 3.7059-4.5882 and 4.2857-4.8571 for academics, public works, consultancy and contracting firms respectively. These reveal that all the identified remedies will be effective in curbing unethical professional practices in construction project management in Nigeria. The highly effective remedies as assessed by individual respondents are: adherence to professional ethics, adherence to project management methodology, pre-emptive measures by regulatory bodies to supervise professionals, legislate laws that spelt out punishment for any type of unethical practice, and the use of approved designs from certified professionals (academics); adherence to professional ethics, the use of approved designs from certified professionals, transparency and accountability in contract administration, adherence to project management methodology, legislate laws that spelt out punishment for any type of unethical practice, engaging certified construction professionals and craftsmen, pre-emptive measures by regulatory bodies to supervise professionals, and Strong policy framework & enforcement (public works); adherence to professional ethics and craftsmen performance, strong policy framework & enforcement, the use of approved designs from certified professionals, transparency

Table 3: Respondent's ranking of the Effects of Unethical Professional Practices and poor craftsmanship on Project Performance.

S/N	Effects	Public Sector				Private Sector			
		Academics		Public works		Consultancy firms		Contracting firms	
		Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
1	Abandonment	4.0714	7	4.0556	4	4.2941	8	4.2857	6
2	Building clients/users dissatisfaction	3.1429	14	3.3889	10	3.8824	10	3.2857	10
3	Collapse of building	4.2143	6	4.0000	5	4.2941	8	4.0000	8
4	Conflict/disputes/litigation	3.8571	10	3.5556	9	4.1765	9	4.2857	6
5	Cost overrun	4.6429	1	4.2778	2	4.5294	4	4.7143	3
6	Delays	4.5714	2	4.2778	2	4.6471	2	4.7143	3
7	Deterioration of the environment	3.7857	11	3.3889	10	3.8235	11	3.7143	9
8	Deterioration of professionalism	4.2857	5	4.0556	4	4.4118	6	4.5714	4
9	High maintenance cost	3.9286	9	4.0556	4	4.2941	8	4.1429	7
10	High rate of site accidents	3.2143	13	3.1111	11	3.7647	12	3.7143	9
11	Poor aesthetic value	3.5000	12	3.6667	8	4.4118	6	4.5714	4
12	Poor basis for project monitoring & control	4.0714	7	3.9444	6	4.4706	5	4.5714	4
13	Poor clients' confidence on professional competence	3.9286	9	3.6667	8	4.4706	5	4.4286	5
14	Poor value for money	4.0000	8	3.9444	6	4.5294	4	4.7143	3
15	Poor workmanship	4.2143	6	3.6667	8	4.5294	4	4.1429	7
16	Portrays bad image of the construction industry	4.4286	3	4.3889	1	4.5882	3	4.1429	7
17	Rework	3.8571	10	3.7222	7	4.4706	5	4.8571	2
18	Time overrun	4.5714	2	4.0556	4	4.4706	5	5.0000	1
19	Underutilization of resources	4.3571	4	4.1667	3	4.3529	7	4.8571	2
20	Vulnerability to frequent maintenance work	4.0714	7	3.7778	7	4.9875	1	4.4286	5

Source: Field survey (2014)

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Table 4: Combined Respondents' ranking of the Effects of Unethical Professional Practices and poor craftsmanship on Project Performance.

S/N	Effects	Mean	SD	Ranks
1	Vulnerability to frequent maintenance work	4.7679	1.4104	1
2	Delays	4.5179	.7383	2
3	Cost overrun	4.5000	.6876	3
4	Time overrun	4.4286	.8058	4
5	Portrays bad image of the construction industry	4.4286	.8058	5
6	Underutilization of resources	4.3571	.9803	6
7	Deterioration in Professionalism	4.2857	.8249	7
8	Poor value for money	4.2321	.9144	8
9	Poor basis for project monitoring & control	4.2143	.9088	9
10	Abandonment	4.1607	.9298	10
11	Collapse of buildings	4.1429	.9230	11
12	Rework	4.1250	.9735	12
13	Poor workmanship	4.1250	1.0280	13
14	High maintenance cost	4.1071	.8879	14
15	Poor clients' confidence on professional competence	4.0714	1.0763	15
16	Poor aesthetic value	3.9643	1.1276	16
17	Conflicts/disputes/litigation	3.9107	1.0140	17
18	Deterioration of the Environment	3.6607	1.0318	18
19	Building clients/user dissatisfaction	3.4643	.9138	19
20	High rate of site accidents	3.4107	1.2027	20

Source: Field survey (2014)

Table 5: Respondent's Assessment of Remedies for Unethical Professional Practices and poor craftsmanship.

S/N	Effects	Public Sector				Private Sector			
		Academics		Public works		Consultancy firms		Contracting firms	
		Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
1	Adherence to professional ethics	4.5714	1	4.6111	1	4.5882	1	4.8571	1
2	Adherence to project management methodology	4.2857	2	4.4444	2	4.2353	6	4.5714	3
3	Conduct project auditing using certified professionals	3.8571	7	4.3889	3	4.3529	4	4.2857	6
4	Continuous professional development	4.2143	3	4.2222	5	4.1765	6	4.4286	4
5	Elimination of quackery	3.9286	6	4.3333	4	3.9412	7	4.7143	2
6	Engaging certified construction professionals	4.1429	4	4.4444	2	4.2941	5	4.5714	3
7	ICT application in project management	4.0000	5	3.7778	7	3.7059	8	4.2857	5
8	Legislate laws that spelt out punishment for any type of unethical practice	4.2143	3	4.4444	2	4.3529	4	4.7143	2
9	Pre-emptive measures by regulatory bodies to supervise professionals	4.2857	2	4.4444	2	4.3529	4	4.7143	2
10	Strict disciplinary measures from professional bodies	4.1429	4	4.1111	6	4.3529	4	4.7143	2
11	Strong policy framework & enforcement	4.0000	5	4.4444	2	4.5294	2	4.7143	2
12	The use of approved designs from certified professionals	4.2143	3	4.6111	1	4.4706	3	4.4286	4
13	Transparency and accountability in contract administration	4.1429	4	4.6111	1	4.4706	3	4.7143	2

Source: Field survey (2014).

and accountability in contract administration (consultancy firms); and adherence to professional ethics and regulatory bodies, legislate laws that spelt out punishment for any type of unethical practice, pre-emptive measures by regulatory bodies to supervise professionals and craftsmen, strict disciplinary measures from professional bodies, strong policy framework & enforcement, and transparency and accountability in contract administration (contracting firms). The result reveals low values for the SDs' (0.37-1.4) indicating high degree of consistencies in the respondents' opinions.

Table 6 below shows combined respondents AMS range of 3.8750- 4.6250 for the remedies effectiveness in curbing unethical professional practices and poor craftsmanship in

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construction project management in Nigeria. This reveals that most of the respondents are in agreement that all the identified remedies will be effective in curbing unethical professional practices and poor craftsmanship in Nigeria. The most highly effective remedies are: adherence to professional ethics (4.6250), transparency and accountability in contract administration (4.4643), and the use of approved construction designs from certified professionals (4.4464). The result also reveals low values for the SDs' indicating a high degree of consistency in the combined respondents' opinions.

Discussion of Results

Professionals and Craftsmen who by virtue of their training are expected to direct the activities of construction projects, including craftsmanship to successful completions are unfortunately unable to exhibit the calling of their profession or trade due to unethical professional practices in the NCI. Several researches have confirmed the presence and perpetuation of unethical professional practices and poor craftsmanship in the NCI [11,12,27]. These unethical professional practices and poor craftsmanship obviously takes a negative toll on the performances of the projects under which such dubious professionals supervised. Consequences of such practices in the management of construction projects in Nigeria has made the NCI delivered construction projects far in excess of similar ones in other parts of the world [35]. Moreover, the NCI is routinely accused of being wasteful, inefficient, and unsafe, falling short of quality and quantity targets, and being late in delivery (Omole, 2001). Hence, it is often said that there is total absence of value-for-money in Nigeria's construction project development matrix. The remedies proffer by this research for curbing unethical professional practices in the NCI are in agreement with the solutions proffer by studies conducted by: Adebanjo [27], Usman et al. [11], Oyewobi, et al. [12], Ameh, et al. [6], Alutu [25], Ameh, et al. [26]. However, this research contrasts with other studies in the sense that it investigated the order of the effectiveness of the remedies it proffer for curbing unethical professional practices and poor craftsmanship in Nigeria.

Table 6: Combined Respondents' Assessment of Remedies for Unethical Professional Practices and craftsmanship.

S/N	Remedies	Mean	SD	Ranks
1	Adherence to professional ethics	4.6250	0.9058	1
2	Transparency and accountability in contract administration	4.4643	0.8304	2
3	The use of approved construction designs from certified professionals	4.4464	0.7367	3
4	Pre-emptive measures taken by professional regulatory bodies to supervise activities of their practitioners	4.4107	0.9298	4
5	Legislate laws that explicitly spelt out punishment for any type of unethical practice	4.3929	0.9850	5
6	Strong policy framework & enforcement	4.3929	0.9473	6
7	Adherence to project management methodology	4.3571	0.9031	7
8	Engaging certified construction professionals	4.3393	0.9000	8
9	Strict disciplinary measures from professional bodies	4.2679	1.1199	9
10	Continuous professional development	4.2321	0.9722	10
11	Conduct project auditing using certified construction professionals	4.2321	0.9722	10
12	Elimination of quackery	4.1607	1.0560	11
13	ICT application in the management of construction projects	3.8750	1.1764	12

Source: Field survey (2014).

Conclusion And Recommendations

This study sought to identify the effects of unethical professional practices and poor craftsmanship on construction projects performance in Nigeria and to identify remedies for curbing it, through explorative and questionnaire survey methods. This study was informed by the widespread evidence of unethical professional practices and poor craftsmanship in the NCI. These practices are seriously affecting the performance of construction projects and the role of the industry in enhancing the economic growth of the country. The research result reveals that all the respondents' are in agreement that all the identified effects of unethical professional and Craftsmen practices are severe on construction project performance in Nigeria. Vulnerability to frequent maintenance work, delays and cost overruns are the extremely severe effects. The respondents' are also in agreement that the remedies identified for curbing unethical professional practices are effective. Adherence to professional ethics, transparency and accountability in contract administration, the use of approved construction designs from certified professionals and ensure proper training & re-training of craftsmen are considered highly effective for curbing unethical professional practices. The research recommend construction professional bodies, construction regulatory bodies and the government to adopt the research finding on the remedies and these organizations should be synergize in implementing the remedies for curbing unethical professional practices in Nigeria. The research result will assist in curbing unethical practices, thus, facilitates professionalism and good craftsmanship in the NCI to meet international best practice.

Though this study was delimited to identifying the effects of unethical professionals practices and poor craftsmanship on the performance of construction projects in Nigeria and the likely remedies for curbing it, more study can be conducted on how construction professional bodies, construction regulatory bodies and the government can be synergize in implementing the remedies for curbing unethical professional and Craftsmen practices in Nigeria.

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