Professionals' Ambivalence toward Ethics in the Nigerian Construction Industry

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Abstract: Following the growing consensus within and outside the Nigerian construction industry that corruption and other unethical practices are endemic in the industry, coupled with scarce empirical study on professional ethics in the industry, there is a need to examine the perceptions of the professionals regarding ethical issues. This study therefore assesses the perceptions of construction professionals regarding ethical issues in the Nigerian construction industry. One hundred and ninety two professionals were sampled from 108 construction organizations comprising 55 consultancy organizations, 35 contracting organizations, and 18 client organizations in selected Nigerian major cities. A survey research design was employed. Descriptive statistics were used in analyzing the data. The results indicate that there is a decline in unethical practices within the industry compared to the pre-1999 era. The more common form of bribery is financial. Quantity surveyors were perceived as the most susceptible to bribery among the professionals in the industry. The builder/construction manager faces the greatest pressure to act unethically among the professionals in the construction industry. The study recommends that professional institutions should give more priority consideration to ethical discourse at technical sessions, public lectures, and seminars. Furthermore, project financiers should ensure adequate and prompt remuneration for professional services. Since the quantity surveyors are perceived as the most susceptible to bribery, clients should ensure that their discretionary powers in the procurement of building projects are limited or subjected to third party verification. Finally, additional research is needed to explore the types of measures that might help curb professionals' unethical practices in Nigeria.

DOI: 10.1061/(ASCE)1052-3928(2010)136:1(9)

CE Database subject headings: Construction industry; Ethics; Nigeria; Africa; Professional personnel; Professional practice; Professional services.

Author keywords: Construction industry; Ethics; Nigeria; Professional personnel; Professional practice; Professional services.

Introduction

Ethics affects corporate credibility and economic sustainability as well as personal security. There is a growing consensus within and outside the construction industry that corruption and other unethical practices are endemic in the construction industry. Among the most critical ethical issues faced by the construction industry is bias in tendering or unethical tendering practices (Doran 2004; Vee and Skitmore 2003; Jackson 2001; Ray et al. 1999). Others are misrepresentation of completed work or work value, poor quality control or quality of work and technical incompetence (Weihen 1999; Robb 1996; Fan et al. 2001; Ameh and Odusami 2005). Spurred partly by Nigeria's poor performance in the Transparency International Rankings of Corrupt Nations, the high cost of construction contract, and prominent media coverage of frequent building collapse in Nigeria, this study assesses the perceptions of construction professionals regarding ethical issues in the Nigerian construction industry.

It is the belief of the international community that corruption and other ethical lapses are common at all levels of the Nigerian workforce going by the recent consecutive rankings by the Transparency International. Transparency International [Corruption Perception Index (CPI) 2007] ranked Nigeria as the second, third, sixth, 18th, and 37th most corrupt nation in the world in 2003, 2004, 2005, 2006, and 2007, respectively. CPI uses acceptance of bribes and misuse of post by elite politicians and government officials to gain personal benefits as a yardstick to determine the rank of a country. Transparency International (CPI 2001) also ranked the construction industry as the industry most likely to include bribes in transactions. The professionals in the Nigerian construction industry cannot be exonerated from this national trend in ethical erosion. This is because there are evidences which suggest that the ethical behavior of Nigerian building professionals might give cause for concern.

Studies have shown that 50% of building failure cases in Nigeria is traceable to design faults (carelessness and negligence), 40% to construction faults (professional incompetence and fraudulent practices), and 10% to product failures (Oyewande 1992). Kolawole (2001) classified the unethical practices common to the Nigerian construction industry into "professional misconduct" and "professional negligence." Professional ethical lapses often lead to project abandonment, capital flight, and huge economic loss in the form of additional cost of projects, which runs, between 40 and 60% of awarded contract sum. Such additional costs often result from rework, contractual claims, litigation cost, and so on. In extreme cases, professional ethical lapses might lead to the collapse of building. Building collapse is a very common feature in Nigeria, especially in Lagos metropolis. Some

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Note. This manuscript was submitted on July 10, 2007; approved on June 3, 2009; published online on December 15, 2009. Discussion period open until June 1, 2010; separate discussions must be submitted for individual papers. This paper is part of the ***Journal of Professional Issues in Engineering Education and Practice***, Vol. 136, No. 1, January 1, 2010. ©ASCE, ISSN 1052-3928/2010/1-9–16/$25.00.

of these collapses regrettably led not only to financial losses, but also to both financial and human losses. Though many factors are responsible for these collapses, nevertheless, about 37% of these collapses are because of carelessness and greed on the part of construction professionals and 22% are traceable to design faults (Chinwokwu 2000; Windapo 2006). These and other emerging issues indicate that there is a growing demand for better ethical practice in the Nigerian construction industry.

Characteristics of the Nigerian Construction Industry

The construction industry in Nigeria comprises a group of heterogeneous and fragmented firms and, within firms, there is often a great diversity of activities. No other industry has similar characteristics. Typically, a large construction company may be engaged in activity ranging from general building and civil engineering to material manufacturing, property development, and trade specialization. Peripheral services such as material supply, plant hiring, and the newly emerging project management firms contribute to a complex industrial structure.

Ward (1979), Fellows et al. (2002), and Bamisile (2004) all highlighted important characteristics of the construction industry that distinguish it from other industry. These essentially include:

1. The industry is a project-based industry. Firms undertake a range of discrete projects characterized by relatively long duration and difficult ground conditions. Construction work are carried out in the open and subject to interference from the weather, the plan of work on each construction site varies and changes from day to day, and sites are often situated many miles from the head office or regional center of organization.
2. Labor force in the industry is considered as nomadic in nature. Operatives who are predominantly young male and employed on casual basis do not only move from site to site but from one employer to the other. Construction also involves high level of specialist work and several professionals could be involved in a single construction project.
3. The separation of design functions from production. Traditionally, design is carried out by the design team (architects, structural engineers, and services engineers) while the production is carried out by a separate team, the building team comprising the builders/construction manager and the quantity surveyors who carries out the cost management.
4. Ease of entry to the industry. While the professionals (design and production management professionals) have an effective form of registration and control over members, there are few constraints to setting up a building contracting business. The system of paying mobilization fee, interim payments during the construction phase, coupled with extensive credit concessions for material purchasing and plant hiring has encouraged an influx of entrepreneurs. Sadly, this has resulted in many unethical practices leading to shoddy jobs, structural failures, and project abandonment among others.

The Nigerian construction industry shares similar characteristics with construction industry all over the world. Hence, this study will be relevant to professionals in other countries and foreign professionals who will be doing business in Nigeria in the future.

Definition of Corruption

The most often cited definition of corruption is the one used by the World Bank in its procurement guidelines. The World Bank defines corruption as the abuse of public (entrusted) power for private benefit (Tanzi 1998). Private benefit (as used here) is most often a bribe in the form of an illicit money or payment in-kind. Bribe involves anything of value solicited, bestowed, or offered to induce or influence the receiver's conduct in the discharge of public or legal duty. It may be money, good, right in action, property, privilege, object of value, advantage, or promise. Rose-Ackerman (1999) classifies bribery into four main groups according to their nature: market-clearing bribes, bribes as incentives for officials, bribes to reduce costs, and bribes permitting crime. She posits that negative externalities associated with each of these have harmful effects on economic performance. Economic literature on corruption tends to focus on bribery. Bribery certainly is a form of corruption, and corruption most often involves bribery. Bribery in relation to the award of contract is the most visible form of corruption in the procurement of building projects. Recent empirical research has shown a strong relationship between the pervasiveness of corruption and poor development performance in developing countries. Mauro (1995) in his study found that corruption index has a significant negative impact on investment and growth. The impact on investment is said to be robust to the inclusion of other control variables, while the impact on growth is not.

Corruption in the Construction Industry

Recent survey conducted by the Chartered Institute of Building (CIOB 2006) within the U.K. construction industry revealed corruption to be high in many areas of the U.K. construction industry. The survey, which consists of 1,404 respondents who work in a variety of sectors within the industry indicate that many respondents (41%) had direct experience of corruption. Prior to this survey, the CIOB conducted an online poll in which 335 construction professionals were asked on what scale corruption exists in the U.K. construction industry; 41% thought it was "widespread," 37% believed it was "occasional," 18% voted that it was "rare," while 4% of the respondents felt it was nonexistent (CIOB 2006). The scale of corruption in construction is magnified by the fact that both governments (public works) and the private sector initiate projects in this sector.

Many features of the construction industry provide enormous opportunities for corruption to flourish. The size of building projects where contracts tend to be huge in monetary value and yet the companies with financial and technical capability to implement them are few (Shakantu 2003). The uniqueness of many projects makes costs difficult to compare, which in turn makes it easier to inflate costs or hide bribes (Robb 1996; Zhuwakinyu 2003). Furthermore, the fact that the government is the major client, even privatized projects requires government approval, which requires numerous permits and there are insufficient controls on how government officials behave. There is issue of concealed nature of large proportion of building works. For example, foundation, which cost between 10–15% (depending on foundation types) of the total building cost is concealed beneath the ground, structural steel works are concealed within the concrete, electrical and mechanical fittings are concealed beneath the wall. This makes it costly or difficult to verify bad workmanship or inferior materials after the work is completed. Finally, building projects usually involve a large number of participants in a complex contractual structure. These include architects and engineers who set the technical parameters of building projects, the quantity

Table 1. Population and Sample Size of Respondents in the Three Organizational Groups

Construction organization	Estimated population of organizations in research area	Questionnaire responses			
		Total administered	Returned	Unreturned	Percentage of population covered
Public-sector client	18	200	102	98	100
Consultancy	198	100	55	45	27
Contracting	162	50	35	15	22
Total	378	350	192	158	

surveyors who prepare preliminary cost advice and estimate, the builders or main contractor who may subcontract key parts of the project to specialist subcontractors. Others are the suppliers who provide equipment and materials and the artisans (skilled and unskilled) involved in the production of building.

Indexes for Measuring Corruption

Kaufmann et al. (1999) opined that quantification of corruption at a country level could be "objective" or "subjective." Objective quantifications are based on verifiable information, such as the number of corruption charges (which again depends on the efficiency of the judiciary) in a given year, or the number of Internet search-engine hits on corruption, which reflect the media attention given to particularly scandalous instances of corruption in a particular country (Tanzi 1998). Subjective measures are based on surveys or polls in which individuals are asked to assess the level of corruption. Survey respondents are typically a panel of country or region experts, a random sample of locals, or business people. Subjective measures can be classified according to whether they gauge the respondents' perceptions or experience.

Aim and Objectives of the Study

The aim of this study is to assess construction professionals' ambivalence toward ethical issues in the Nigerian construction industry. The main objectives of the study include comparing the degree of unethical practices within the Nigerian construction industry between military and democratic eras, examining the degree of susceptibility of construction professional groups to bribery, and examining the degree of pressure professionals faced to act unethically.

Research Method

The target population for this study comprised core construction industry professionals involved in the procurement of building projects. These include architects, builders/construction managers, structural engineers, quantity surveyors, and building services engineers (electrical and mechanical services). The population sample as shown in Table 1 was drawn from professionals in client, consulting, and contracting organizations in the construction industry. The first category includes construction professionals who are employed in client (government ministries and parastatals) organizations. The consultancy organizations include architectural firms, project management firms, quantity surveying firms, and consulting engineering (structural and services) firms. The third category includes construction professionals who either are owners or employed in construction contracting organizations.

The lists of registered consulting firms in the respective professional institutions were used due to unavailability of a single directory or database for all construction professionals in the different organizations (consultancy, contracting, and client organizations) in the research areas from which accurate sampling size could be developed. This comprised consultancy firms registered with Nigerian Institute of Architects, Nigerian Institute of Building (NIOB), Nigerian Institute of Quantity Surveyors, and Nigerian Institute of Structural Engineers. Furthermore, data relating to contractors were sourced from the lists of contractors accredited by NIOB as published in the *Register of Contractors* (2003).

The population for professionals in consultancy and contracting organizations was stratified and a simple random sampling of the population within each city in the research areas was carried out using table of random numbers. Data for professionals in client organizations were obtained by snowball sampling technique. This technique was used because of the unavailability of a sample frame from which accurate sample size could be drawn. The research instrument adopted for this study comprised closed questionnaire with a set number of responses as determined by the researchers. Questionnaire was administered among 200 respondents in 18 client organizations in the research area. Questionnaire was sent to 100 consultancy firms within the research area. Fifty out of the 162 contracting organizations were covered.

One hundred and ninety-two questionnaires were received out of 350 sent out. This represents a response rate of 55%. The variation in the number of administered questionnaire is based on the population of respondents in client, consultancy, and contracting organizations in the research areas.

The nonpublic nature of (un)ethical behavior suggests that accurate information about individuals' behavior may not be available. Some researchers have proposed that a more promising path in assessing ethical behavior may involve exploring perceptions rather than actual behavior (Ambrose and Schminke 1999). Therefore, while perception surveys do not constitute an actual measure of behavior, they offer an indication of how a person may behave in the real sense because perceptions are based on facts.

The data collected were subjected to statistical analysis using the Microsoft Excel and Statistical Package for the Social Sciences version 10 software released in 1999 [*Statistical Package for the Social Sciences (SPSS) for Beginners* 1999]. The descriptive statistics of simple percentages, mean, and pie chart were used in presenting the data collected.

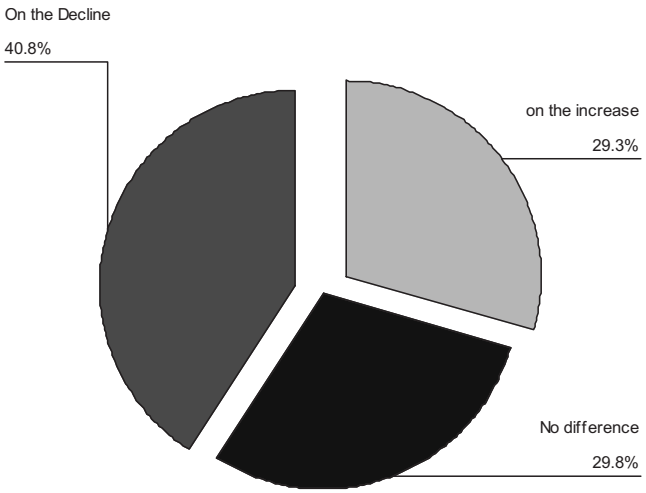

Fig. 1. Comparison of the level of unethical practice in the construction industry before and after 1999

Results and Discussion

Level of Unethical Practices within the Nigerian Construction Industry

Respondents were asked to compare the level of unethical conduct within the construction industry before and after 1999. The year 1999 was chosen because of its significance in the history of Nigeria as it marked the year of transition from military rule to democratic governance. 41% of the respondents as shown in Fig. 1 perceived that unethical practices within the industry has declined since 1999 (post military era). This may not be unconnected with the remarkable improvement in public procurement system in the country since the establishment of the Budget Monitoring and Price Intelligence Unit (BMPIU), popularly called "Due Process Office" to block the loopholes arising from reckless processes involved in contract awards. Other anticorruption agencies established by the Olusegun Obasanjo led government between May 1999 and May 2007 include the Independent Corrupt Practices and other related offenses Commission and the Economic and Financial Crimes Commission (EFCC). Part of the reasons for granting Nigeria debt relief by the Paris Club (an informal group of official creditors from 19 of the world's richest countries, which provides debt relief and debt cancellation to indebted countries) is the commendable renewed drive to curb corruption in the country and for transparency in government affairs. Funds realized from inflated contract tender by ministries, departments and agencies in the last decade through the BMPIU, according to Wahab (2005), amount to a whopping NGN800 billion (US$4,444 M as at May 18, 2009).

There is disagreement between respondents who perceive that there is an increase and those who perceive that there is no difference in professionals' unethical practice between the two eras. The respondents who perceived that the unethical practice has increased (29%) may have been persuaded by the negative report in the mass media and the fact that the BMPIU is yet to extend the public procurement reforms to all states and local government areas in the country (which both shares about 52% of the resource from the Federation Account). Ssegawa and Abueng (2006) reported that contractors perceived the level of unethical behavior in Botswana Construction Industry as below acceptable level. A similar study by Pearl et al. (2005) also reported an increase of 32% in collusive tendering practice in the last 10 years (1994–2004) with only 4% (all contractors) who are of the opinion that the practice has decreased within the same period in South Africa.

Table 2. Observed Frequency of Bribery among Project Team Members

Frequency	Number of respondents	Percentage	Cumulative percentage
Very often	24	13.11	13.11
Often	93	50.82	63.82
Rarely	65	35.52	99.45
Never	1	0.55	100.00
Total	183	100.00	

Bribery in the Construction Industry

Respondents were asked to indicate how often they observed the incidence of bribery among project team members in the construction industry. The result (Table 2) shows that bribery incidence is endemic in the construction industry, confirming the (CIOB 2006) report. This is evident in the low percentage of respondents (0.55%) who claimed they have never observed bribery incidence in the industry compared to the high response, 99.45% who indicated that they had observed the incidence of bribery in the industry. Specifically, 63.93 % of the sampled respondents experienced bribery incidence more often while 35.52% had experienced it at one time or the other in nearly all contracts awarded.

As shown in Table 3, there are two major forms of bribery in the construction industry. Overwhelming majority (91.76%) of the respondents say financial form of bribery is more common while a small proportion (8.24%) of the respondents says nonfinancial bribe is more common. This study does not cover the typical value of financial bribes. However, financial bribes are often in the form of simple (monthly) mobile phone recharge vouchers of about 2000 Naira (NGN2,000 or US$11), gifts to professionals during Christian festivals (Christmas or Easter) or Moslem festival (Sallah) of NGN50,000 (US$278), or more (at the exchange rate of NGN180 to US$1). Other forms include large donations to support a course, for example monies spent in sponsoring ones private events such as marriages, burial ceremonies of ones relations and so on. It may also come in the form of payment from the contractor or his representative to the consultants to ignore the project quality specifications or required material quantity, or to inflate value of interim valuation or design variation/additional works. Those in the junior to middle level managerial positions are often the target/recipient of financial bribes. Nonfinancial bribes, which may be in the form of a promised future contract, gifts, birthday party and/or entertainments, or even an all expenses paid holiday abroad, usually involve a higher monetary value in comparison to the financial bribe. Nonfinancial bribes, which are believed to be prevalent among the top public office holders (e.g., the president, ministers, state governors, vice

Table 3. Common Forms of Bribery in the Construction Industry

Forms of bribery	Number	Percentage	Cumulative percentage	Rank
Financial	167	91.76	91.76	1
Nonfinancial	15	8.24	100.00	2
Total	182	100.00		

Table 4. Bribe Perception Index of Construction Professionals

Professional	Highly susceptible	Susceptible	Moderately susceptible	Not susceptible	Number	Mean	Rank
Quantity surveyor	80	60	44	6	190	3.28	1
Builder/construction manager	49	75	60	7	191	2.87	2
Architect	50	61	59	21	191	2.73	3
Structural engineer	27	82	74	8	191	2.67	4

Note: Highly susceptible=4; susceptible=3; moderately susceptible=2; and not susceptible=1.

chancellors, and so on), are considered less common in this study. This is because these categories of public office holders will not accept financial bribe for security reasons. In either case, the bribe may be received directly or indirectly. Such bribes usually are from either consultants or their agents to the client to secure their continuous patronage or from the contractor to the client representatives or project consultants. More often than not, the costs of such bribes are built into the contract cost or are recouped by the contractor through variation in design or material specification. Gift giving and taking in many African traditions has often been perverted for bribes. Former Nigerian President, Olusegun Obasanjo during his 8-year tenure (May 1999–May 2007), once commented that, in African tradition, a gift is made in the open for all to see, never in secret. Where a gift is excessive, it becomes an embarrassment.

Bribery is very common in many developing countries and may account for their low pace of industrialization and high rate of poverty among the citizens. However, bribe taking or giving is not restricted to developing countries alone. According to the United Nations 1997 World Development Report, 15% of all companies in industrialized countries have to pay bribes to win or retain business. In Asia, the figure rises to 40% and for former Soviet Union countries, the figure is 60% (Rogge 2003). Ferrell et al. (2002) identified key factors thought to influence bribe taking. Low public-sector salaries, immunity of public officials, secrecy in government, and worsening public procurement practices top the list of factors. Bribery generally is never viewed as morally acceptable, and is always viewed as corruption of what is right and best for the people all over the world.

Bribe Perception Index of Professionals

The perception-based measure of corruption was adopted. This involved sampling the opinion of respondents on the professional most susceptible to bribery. The research strategy adopted to overcome the problem of bias in data collection is "triangulation." Triangulation involves the use of multiple research methods and/or measures of a phenomenon. The method adopted in this study is interdisciplinary triangulation where data concerning architects were obtained from the other professionals including the architects; data concerning structural engineers were obtained from the other professionals including the structural engineers and so on. The perpetrators of bribery will include both those who demand or receive the bribe (demand-side bribery) and those who offer or give it (supply-side bribery). Table 4 shows the overall ranking of the professionals in terms of the degree of their susceptibility to bribery. It is interesting to note that all the professional groups rank well above 2.0 (i.e., they are susceptible to bribery). Further analysis suggests that there is no significant difference in the bribe perception index of professional groups. It is not surprising that the quantity surveyors ranked as being overall the most susceptible to bribery since he is the cost expert who deals more with the financial aspect of the project than any other professionals do. Unethical practices carried out by the quantity surveyors include, over measurement of quantities of various trade items in bills of quantities (e.g., 70 m^3 of concrete instead of 50 m^3). The additional cost of this simple (or deliberate) error may amount to about 10 million Naira (NGN10 million or US$55,556 as at May 18, 2009) depending on the quantity of concrete required. Others include covering up unexecuted item of works in the periodic valuation; over blowing cost of design variation; and remeasurement; inflation in figures of day work account and fluctuation in prices of item of work as well as bribery just to mention but a few. Structural engineers ranked as being least susceptible to bribery. They sometimes over design, over specify, or fictitiously allow for certain quantity of item of work in the design. The quantity of materials or elements specified are reduced on site and in connivance with the quantity surveyor, the cost of the excess material are shared with the contractor at an agreed percentage. The majority of professionals who engaged in unethical practices tend to do so not because they want to, but because they feel they are forced to by the way the industry and political environment operate. It has been argued elsewhere (Ameh and Odusami 2008) that the majority of professionals in the Nigerian construction industry are situationist according to Forsyth (1980) ethical taxonomy. This implies that they are influenced by situational factors such as inadequate remuneration for professional services, delays in the payment of professional fees, demands from professionals to bribe in order to facilitate early release of professional fees, and so on. In addition, Ameh and Odusami (2008) opined that greed, deterioration in societal values and lack of patriotism tops 18 reasons for professionals' unethical behavior.

Temptation to Engage in Unethical Conduct

Respondents were asked to indicate whether they have experienced any temptation to act unethically during professional practice and to indicate whether greatly, slightly, very slightly, or never, depending on the extent of pressure they face to act unethically on the job. The result presented in Table 6 shows that, the builder/construction manager felt the greatest desire or temptation to act unethically on the job, followed by the architect and last, the structural engineer.

It is not surprising that the builder/construction manager felt the greatest desire to act unethically. In a desperate bid to win a contract for the survival of a firm, the builder/construction manager who doubled as the contractor (because he is mostly engaged in the contractor's team) may be unable to resist the temptation to bribe, or indulge in other unethical tendering practices. After the contract has been won in that way, in order to make profit and be able to pay wages and other office overheads, the contractor again may feel the temptation to cut corners. The desire or temptation faced by professionals may be because of demands from the project team members, the public office holders, or politicians. For example, if the contract was awarded for say ten million naira

Table 5. Pressure to Engage in Unethical Conduct

Profession	Pressure to engage in unethical conduct: Greatly	Slightly	Very slightly	Not at all	*N*	Mean	Rank
Builder/construction manager	8	18	14	7	47	2.57	1
Architect	9	11	9	11	40	2.45	2
Quantity surveyor	10	7	12	11	40	2.40	3
Structural engineer	4	13	15	13	45	2.18	4
Total	31	49	50	42	172	2.38	
Percentage total	18.02	28.49	29.07	24.42			

(NGN10 million or US$55,556 as at 05/18/09), the project officials (professionals in public office) may demand for about 10% of the contract value (for what is often referred to as "Public Relations"). The amount for public relation is often shared among the contract officials. After the contractor must have set aside his profit, the remaining amount will be grossly inadequate to execute the project. This can lead to the temptation to engage in unethical practices, which may include the use of inadequate or inferior materials for the project.

In Nigeria, public office holders corruptly enriched themselves and turn around to oppress the citizen by publicly displaying ill-gotten wealth in the form of exotic cars, extravagant housing development, expensive birthday parties, and burial ceremonies to mention but a few. This attitude of public office holders erodes one's sense of patriotism and may compel individuals to indulge in unethical conduct. This may account for the reason why people hardly feel ashamed of unethical practices. The feeling is that, "I am getting my own share of what belongs to all of us (the national cake). This attitude of public officers lowers societal values to the extent that hard work, honesty, fairness, integrity, and other virtues are relegated giving way to unfair conducts, unethical business practices, frauds, 'get rich quick syndrome' and other social vices."

Further analysis revealed that 18.02% of the respondents felt serious desire to act unethically on the job, 28.49% feels very slight desire, 29.07 feels slight desire while 24.42% are not tempted in any way to behave unethically. Respondents at the junior managerial position feel the least desire (mean=3.25) to engage in unethical conduct in comparison to those at the middle managerial level (mean=2.38) as indicated in Tables 5 and 6. As shown in Table 6, the quantity surveyor feels less temptation to engage in unethical practice but are the group most prone to unethical conduct. This is because of the roles they play such as recommending payments to contractors, valuation of project work stages, and approval of contractual claims. Sometimes, contractors offer bribes (indirectly) to the quantity surveyor in expectation of favor in return during valuation and approval of claims.

This finding is consistent with Chan and Armstrong (1999) who opined that individual behavior within the organization is most likely according to group norm or corporate culture. Bailey et al. (1991) who asserts that individuals are likely to behave according to the group norms even though this may go against what they would do outside the group setting further buttressed this. Halbesleben (2002) cited in Halbesleben et al. (2004) assert that pluralistic ignorance and its associated feelings of deviance lead a person to internalize the misperceived group norm. This suggests that individual think, "If you can't beat them, join them" and simply adopt the group norm.

Table 7 presents a self-confessed appraisal of professionals' unethical practices. The result shows that only 13 (7.6%) admitted taking advantage of every opportunity for corruption that came their way. About 63% admitted being involved but not all the time while the remaining 28.65% denied ever being involved in any act connected to unethical conduct. The results further indicate that architects and structural engineers ranked first and second in that order base on self-reporting of unethical practices. This is expected, as with any study of deviant behavior, which uses a self-report questionnaire approach, underreporting due to social desirability is a concern [Edwards 1957 cited in Harding et al. (2003)]. This is in spite of the fact that respondent's names were not required in the survey questionnaire.

Table 6. Desire to Engage in Unethical Conduct Based on Managerial Position

Managerial position	*N*	Mean	Rank
Middle	103	2.38	1
Top	84	2.35	2
Junior	4	3.25	3
Total	191	2.38	

Table 7. Self-Assessment of Professionals' Unethical Practices

Profession	Very often	Often	Sometimes	Rarely	Never	MIS	Rank
Architect	1	6	10	9	14	0.46	1
Structural Engineer	0	2	14	20	9	0.44	2
Quantity Surveyor	1	1	7	18	12	0.40	3
Builder/Construction Manager	1	1	9	22	14	0.40	4
Total	3	10	40	69	49		
Percentage total	1.75	5.85	23.39	40.35	28.65		
Cumulative percentage	1.75	7.60	30.99	71.34	100.00		

Note: MIS=mean item score.

Research Limitation

The major research constraint is the unavailability of current/updated directory of registered construction consultancy organizations from professional institutes, poor response rates, and respondents unwillingness to provide answer to some of the issues raised in the questionnaire. Furthermore, some of the problems associated with the accuracy of perception-based indexes such as bias resulting from the headline effect from media coverage are likely to affect the accuracy of the results.

Conclusions and Recommendations

This study aimed at assessing construction professionals' ambivalence toward ethical issues. The level of unethical practices in the Nigerian construction industry is believed to be on the decline following steps by the BMPIU or the "Due Process Office" to block loopholes arising from reckless processes involved with contract awards and execution at the Federal level. Bribery incidence is endemic in the Nigerian construction industry. Financial bribe is more common and mainly among junior and middle level managerial staff while the less common (nonfinancial) bribe, is prevalent among top public office holders, and accounts for over 80% of monetary value due to corruption. The quantity surveyor is the most susceptible to bribery. The builder/construction manager faces the greatest pressure to engage in unethical practices. Majority of respondents (72%) confessed their involvement in unethical practices.

Professional institutions have a crucial role to play in minimizing ethical lapses in the construction industry. From the foregoing, it is apt to recommend that professional institutions should give more priority consideration to ethical discourse such as professional negligence, liabilities, responsibility to the profession and the society, whistle blowing and other contemporary ethical issues at technical sessions, public lectures, and seminars. Furthermore, project financiers (public and private clients) should ensure adequate and prompt remuneration for professional services. When professionals are short-changed, they tend to collude with the contractors to defraud the client. Adequate and prompt payment will prevent professionals from depending on contractors and subcontractors. This will also enable professionals to perform their oversight function confidently and effectively. Since the quantity surveyors are most susceptible to bribery, clients should ensure that discretionary powers of quantity surveyors in the procurement of building projects are limited or subjected to third party verification. For example, strict monitoring, supervision and auditing of contract progress and performance by persons independent of the designers and the contractor in conjunction with government anticorruption agencies, such as EFCC and BMPIU. The government should establish a separate body, to be known as "National Council for the Built Environment," independent of professional bodies to act as ethical facilitators who polices standards, to receive petitions on professional misconducts, investigate and sanction on individuals and organizations that breach ethical principles and rules. Finally, further research is needed to explore the types of measures that might help curb professionals' unethical practices in Nigeria.

Acknowledgments

The researchers acknowledge the support of the University of Lagos Central Research Committee (CRC) for its grant (CRC/2004/27) which facilitated this research.

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