1 DIFFERENCES IN STAKEHOLDER ABILITY IN ADDRESSING UNETHICAL

2

PRACTICES: INSIGHTS FROM THE SURVEYING PROFESSION

Patrick Manu^{1*}, Ph.D; Kofi Agyekum², Ph.D; Abdul-Majeed Mahamadu³, Ph.D; Paul Olomolaiye³,
Ph.D; Emmanuel Adinyira², Ph.D.

¹ School of Mechanical Aerospace and Civil Engineering, The University of Manchester, United
 Kingdom.

² Department of Construction Technology and Management, Kwame Nkrumah University of Science
 and Technology, Kumasi, Ghana.

³ Faculty of Environment and Technology, University of the West of England, Bristol, United
 Kingdom

- 11 *Corresponding author email: <u>Patrick.Manu@manchester.ac.uk</u>
- 12

13 Abstract

14 While several measures have been suggested to address unethical practices within the built 15 environment, it remains unclear whether some stakeholders are more able to influence improvement in unethical practices than others, and if so whether such phenomenon manifests similarly or 16 17 differently in different national contexts. This study pioneers the exploration of: whether different built environment profession stakeholders (i.e. the practitioner/individual professional, the 18 19 practitioner's organization/company, and the professional body/association) have different abilities to 20 influence improvement (i.e. positive change) in unethical practices; and subsequently whether such 21 phenomenon manifests differently in different national contexts. The study used cross-sectional 22 surveys of built environment surveying professionals in three countries: Ghana, Nigeria and Tanzania. The findings revealed that there are significant differences in the abilities of stakeholders to influence 23 24 improvement in unethical practices like political interference, and discrimination and nepotism. The findings further revealed that differences in stakeholder ability to influence improvement in unethical 25 practices can manifest differently in different national contexts. The implication is that, in different 26 27 national contexts, specific stakeholders could play a leading role in efforts to address unethical practices in which they are more capable of influencing improvement. 28

29

30 Keywords: ethics; questionnaire survey; surveying profession; unethical practices.

31 Introduction

While the built environment sector of no particular nation may be able to claim perfection in terms of the absence of unethical practices, there are indications that the prevalence of unethical practices is not uniform across countries (Transparency International, 2014).

35

Regardless of the disparities in the prevalence of unethical practices among market sectors, there is 36 37 acknowledgment that these practices in general have dire repercussions for the health of industries, professions and eventually the growth of a country (see Schwab, 2013; Runde et al., 2014). Globally, 38 39 various estimates put the cost of corruption to be in excess of US \$1 trillion (Runde et al., 2014). For the construction and property sectors, the costs resulting from unethical practices are not only in the 40 41 form of colossal financial losses but also often in human life (e.g. deaths resulting from the collapse of structures due to sub-standard construction (CIOB, 2010). Clearly, the detrimental impact of unethical 42 practices presents a strong case for their mitigation, especially in the built environment where 43 44 unethical practices are pervasive.

45

Generally, it is recognised that unethical practices are a complex and multi-faceted problem which 46 47 require appropriate mitigation efforts by several stakeholders at various levels e.g. profession, industry, national, regional and global. At the level of professions, the role of key stakeholders such as 48 49 practitioners, their firms/organisations, and professional bodies cannot be neglected. While the 50 contribution of each of these stakeholders towards addressing unethical practices is interconnected, it 51 is also reasonable to state that for some unethical practices, individual practitioners by themselves 52 may have limited influence in bringing about improvement (i.e. positive change). For such practices, 53 the firms/organisations or the professional bodies may be more able to influence improvement. The 54 notion of different industry stakeholders being able to influence improvement at varying extents runs 55 parallel to the view in risk management that some risks are more easily mitigated by some parties more than others and therefore the recommended practice that risk items should be transferred to or 56 57 held by the party that is most capable of dealing with them (CIOB, 2010). Although this notion may

so hold true and perhaps be fundamental in addressing unethical professional practices in the built environment, it is also important to clarify that an argument is not being made for various stakeholders to be boxed into solely or exclusively focussing on addressing some particular unethical practices. Rather, the notion of some stakeholders being better placed to influence improvement in some unethical practices is being presented. This argument is presented from the standpoint that some stakeholders could consequently act as 'champions' or 'frontrunners' to spearhead efforts to address unethical practices while others continue to lend support in a unified manner.

65

66 While such an approach could be useful given the complex and multi-faceted nature of the problem of unethical practices, the built environment lacks any empirical study that seeks to ascertain the 67 differences in stakeholder influences in addressing unethical practices. Such empirical inquiry is 68 69 necessary to provide a sound basis for guided action against unethical practices so that mitigation efforts are appropriately applied. This study therefore explores whether different stakeholders of the 70 71 built environment surveying profession have different abilities to influence improvement (i.e. positive 72 change) in unethical practices; and whether such a phenomenon manifests differently in different 73 national contexts.

74

75 Literature review

76 As a term that is very difficult to define, various researchers have tried to give meaning to the word 'ethics' by describing it in several ways. According to Mason (2009), ethics broadly describe the way 77 78 in which one looks at and understands life, in terms of good and bad or right and wrong. Sohail and Cavill (2008, p. 730) indicated that "it is the study of what one ought to do (actions and decisions) 79 80 when faced with ethical dilemmas and how he/she does it, both as part of an organization and as an 81 individual". Delbridge (2000) defined ethics in a broader way to include: a system of moral principles, 82 by which human actions and proposals may be judged good or bad, or right or wrong; the rules of conduct recognized in respect of a particular class of human actions; and moral principles, as of an 83 84 individual. The issue of ethics continues to be topical, with particular emphasis on unethical practices

in the construction sector. This section is dedicated to reviewing literature on ethics and it is in two
parts: 1) highlighting the prevalence of unethical practices in the construction sector; and 2) various
forms of unethical practices in the sector.

88 Prevalence of unethical practices in construction

89 As a global industry, the construction industry has seen contractors and consultants operating across international markets (Moodley et al., 2008). If properly harnessed, such an industry can make a 90 91 significant impact on the economic well-being of citizens and countries as a whole (Mukumbwa and 92 Muya, 2013). Though the construction industry has become a key driver to the economic growth of 93 many countries, it does so with numerous ethical challenges (Ho, 2011). As a matter of fact, code of 94 ethics has become increasingly important to the construction industries in most developed and 95 developing countries worldwide (Oladinrin and Ho, 2016). Oladinrin and Ho (2016) further iterated 96 that, though the code of ethics exists, it has not contributed much to the reduction in the intensity of 97 ethical problems within the industry, probably because of the domineering effect of unethical practices which is restricting its progress. 98

99 Unethical practices have the tendency to impose negative costs at personal, group and organizational 100 levels, and an organization that is in the constant behavior of creating such negative behaviors will 101 encounter a diminishing market for its services and withdrawal of public approval (Poon and Hoxley, 102 2010). This has been the case of the global construction industry because of the inter-organizational 103 relationship that exists between the project team members (Poon and Hoxley, 2010). Researchers have 104 studied the issue of ethical behavior in the construction industry and have reported that there are clear cases of unethical practices during the delivery of construction projects (May et al., 2001; Vee and 105 106 Skitmore, 2003; Seun et al., 2007; Adnan et al., 2012; Mukumbwa and Muya, 2013). The following sections discuss examples of unethical practices in the construction sector. 107

108 Common unethical practices in the construction industry

109 Different professions have different reputations as far as ethical behaviors are concerned (Vee and 110 Skitmore, 2003). Unethical practices within the corporate and operational levels of the construction 111 industry have become commonplace, making the industry no stranger to the issues of ethical 112 malpractices (Oladinrin and Ho., 2014). Issues relating to construction faults and ethical malpractices are often directed towards all the parties who are directly involved in the execution of such projects
(Adnan et al., 2012). Examples of commonly reported unethical practices in the construction industry
are discussed below.

116 *Fraud, Bribery and Corruption*

117 Defining corruption has always been a problem because what one perceives to be a corrupt practice may not be so by another person. However, over the years, one definition that has received attention is 118 that given by Shakantu (2006, p. 43), who defined corruption as the "offering, giving, receiving or 119 120 soliciting of anything of value to influence the action of an official in the procurement or selection 121 process or in contract execution". Fraud, bribery and corruption is without doubt a pervasive trait in 122 doing business, with a growing worldwide concern over a high level of corrupt activities among 123 corporate organizations of which construction is key (Arewa and Farrell, 2015). Vee and Skitmore 124 (2003, p. 119) presented fraud to indicate "deceit, trickery, sharp practice, or breach of confidence, by 125 which it is sought to gain some unfair or dishonest advantage". The construction industry is frequently 126 noted as one of the most fraudulent and corrupt industries worldwide (Kenny, 2009). According to Arewa and Farrell (2015, p. 61), corrupt practices may normally manifest in the form of "bribery, 127 128 embezzlement, extortion, influence peddling, unlawful gratuity, favor, commission, nepotism and 129 illegal payments". Research on fraud, bribery and corruption has been extensively reported in 130 literature (see Vee and Skitmore, 2003; Bowen et al., 2007; Kenny, 2009; Osei-Tutu et al., 2010; Ameh and Odusami, 2010; Bowen et al., 2012; Liao, 2013; Mukumbwa and Muya, 2013; Le et al., 131 2014; Arewa and Farrell, 2015; Loosemore and Lim, 2015; Ameyaw et al., 2017). 132

133 *Conflict of interest*

Conflict of interest if pursued, could keep professionals from meeting their professional duties (Vee and Skitmore, 2003). This ethical malpractice is defined to mean "a situation in which someone in a position of trust, has competing professional or personal interests which could make it difficult to fulfil his or her duties impartially" (Bowen et al., 2007, p. 634). Liao (2013, p. 88) also defined conflict of interest to mean "any situation in which an individual or corporation is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit". To the engineering professionals, conflict of interest is closely related to impartiality, and it is very necessary that one does not encroach upon conflicts that may bias their judgements in technical aspects ofreviewing a design, or in the construction of a project (Liao, 2013).

Clear cases of conflict of interests are presented in literature (Ameyaw et al., 2017). It is very much 143 mentioned among construction procurement (Bowen, 2007; Osei-Tutu et al., 2010), and it is defined 144 145 as a clash between the interest of the client organization and personal interest of an official in the client organization (Ameyaw et al., 2017). Bowen et al. (2007) indicated that it is better to declare all 146 147 potential instances of conflicts of interests before proceeding to undertake any projects. This ethical 148 malpractice has been mentioned in the construction industry of several countries including Australia (Vee and Skitmore, 2003), Zambia (Mukumbwa and Muya, 2013), Nigeria (Ameh and Odusami, 149 150 2010), Ghana (Osei-Tutu et al., 2010), among others.

151 Unfair conduct

152 According to Loosemore and Lim (2015), fairness has a close relationship with ethical concepts and 153 justice. It involves "treating people consistently, impartially and equally without favoritism, discrimination or improper prejudices; not taking unfair advantage of people's mistakes or ignorance; 154 and fully considering peoples' rights, interests and perspectives" (Loosemore and Lim, 2015, p. 310). 155 156 Bowen et al. (2007) indicated that these unfair conducts may occur in competitions, contracts, staff 157 promotion/dismissal/demotion, and in business practice. According to Ameyaw et al. (2017), this ethical malpractice may also be termed as 'fronting', and it may manifest itself when officials within 158 government agencies or client organizations create front companies to obtain construction contracts. 159 160 Such companies obtain unfair or illegal benefits in awarding public contracts because of the owners' powerful positions in government (Ameyaw et al., 2017). 161

162 Collusion

163 Collusion is contrary to the principle of free competition because it only benefits the parties to the 164 collusive agreement at the expense of those who are not privy to the agreement (Bowen et al., 2007). 165 Ameyaw et al. (2017) indicated that collusive tendering and bid rigging are referenced alike, possibly 166 because it is a secret agreement between two or more parties engaged in a fraudulent activity. This 167 ethical malpractice though serious has not received much attention from the research community. 168 However, for those studies that have addressed this issue, it has been revealed that collusion is very serious and should be addressed. Available literature has revealed that this issue is evidenced by
tender rigging that predominantly transpire at bid evaluation and tendering phases of project
developments (see Vee and Skitmore, 2003; Bowen et al., 2007; Kenny, 2009; Osei-Tutu et al., 2010;
Ameh and Odusami, 2010; Bowen et al., 2012; Liao, 2013; Mukumbwa and Muya, 2013; Le et al.,
2014; Arewa and Farrell, 2015; Loosemore and Lim, 2015; Ameyaw et al., 2017).

174 Other unethical practices in the construction industry

In addition to the commonly encountered unethical practices previously described, literature further reports on other unethical practices in the construction industry such as: failure to protect public health, safety and welfare; mishandling of sensitive data (e.g. revealing or discussing confidential information); failure to protect the environment; improper relations with other parties (e.g. excessive gifts); abuse of company resources; abuse of client resources; misrepresentation of competence; and political interference (Jackson, 2004; Kang, 2009; Kang et al., 2017).

181

182 Research methodology

Aligned with the study's aim, a quantitative research strategy, particularly a survey was used. The choice of this strategy is supported by its suitability for obtaining a generalized view of a phenomenon (Fellows and Liu, 2008; Creswell, 2014), which in this study is stakeholders' ability to influence improvement (i.e. bring about positive change) in unethical practices. Consequently, three crosssectional surveys were conducted in Ghana, Nigeria, and Tanzania. The administration of surveys in the different locations was mainly to enable further exploration of the phenomenon in terms of whether it could manifest differently in different national contexts.

190

191 Survey design

A questionnaire was designed for the survey and it consisted of two main sections: respondent 192 demographic information; and respondents' assessment of the extent to which different built 193 194 environment stakeholders (i.e. the practitioner/ individual professional, practitioner's 195 organization/company, and professional body/association) can influence improvement in unethical 196 practices.

198 Section 1: respondent demographic information. This section captured respondent demographic199 information including: professional role; highest level of education; and professional experience.

200

Section 2: assessment of the extent to which different built environment stakeholders can influence 201 improvement in unethical practices. There are several stakeholders within the built environment and it 202 203 is not practicable to survey them all in a single study. As such this section focused on three important 204 stakeholders: the practitioner/ individual professional; practitioner's organization/company (i.e. 205 practitioners' employer); and the professional body/association (i.e. the national professional 206 body/association related to the practitioner's profession). The assessment of the extent to which each 207 stakeholder can influence improvement in unethical practices was done by relying on the judgement 208 of the practitioners. This approach was used because practitioners, through personal knowledge of 209 themselves, their organizations, and through their knowledge and interactions with their professional 210 association are well placed to provide credible assessment of the extent to which they, their organization and professional association can influence improvement in unethical practices. 211 212 Consequently, this section requested built environment professionals to rate the extent to which they 213 perceive that they (personally), their organization and their national professional association can 214 influence improvement (i.e. bring about positive change) in the unethical practices. A five-point 215 Likert scale (1 = Not at all; 2 = Low; 3 = Moderate; 4 = High; 5 = Very High) was used. Drawing 216 from the review of literature, the unethical practices that were examined in the study are: failure to protect public health, safety and welfare; collusion; mishandling of sensitive data (e.g. leakages); 217 production of fraudulent documents (e.g. invoices & claims); failure to protect environment; bribery; 218 improper relations with other parties (e.g. excessive gifts); abuse of company resources; abuse of 219 client resources; discrimination and nepotism; misrepresentation of competence; and political 220 221 interference. The questionnaire is presented in Appendix A.

222 Survey administration

To enable exploration of the phenomenon of different built environment stakeholders having varyingability to influence improvement in unethical practices, the survey was administered to built

225 environment surveying professionals (i.e. quantity surveyors, property/estate valuers, and land surveyors) within three study locations. The Commonwealth Association of Surveying and Land 226 Economy (CASLE) (www.casle.org), which is an association for built environment surveying 227 professionals in the Commonwealth, holds annual conferences in conjunction with the surveying 228 229 professional bodies in Commonwealth countries. These conferences bring together surveying professionals (usually predominantly from the country of the conference venue) to share information 230 and discuss issues that are relevant to the surveying profession. Considering the difficulty in obtaining 231 232 participation in built environment surveys, the CASLE conferences presented a useful platform to administer the survey. A cross-sectional survey was thus administered to delegates at the CASLE 233 conferences held in Ghana, Nigeria, and Tanzania from 2015-2017. The survey yielded a total of 266 234 235 useable responses comprising 121 from Ghana, 86 from Nigeria, and 59 from Tanzania.

236 Data analysis

237 The data from the retrieved questionnaire were coded into IBM SPSS Statistic version 23 for analysis. Descriptive statistical analyses (e.g. frequencies, mean and standard deviation) and inferential 238 239 statistical analysis - one-way analysis of variance (ANOVA) – were performed on the collected data. 240 The ANOVA was applied to the aggregated sample from the three locations (i.e. 266 responses) in 241 order to address the primary research objective of exploring whether there are differences in 242 stakeholder ability to influence improvement in unethical practices. In order to further explore whether such differences could manifest differently or similarly in different national contexts, the 243 244 ANOVA was also applied to each country-specific sample. ANOVA was used due to its suitability for assessing differences in responses for different groups (Field, 2013). 245

246

247 Findings

The findings of the study are presented below under three sub-headings: respondent demographic information; differences in stakeholder ability to influence improvement in unethical practices; and country-specific differences in stakeholder ability to influence improvement in unethical practices.

251 Respondent demographic information

The respondents were drawn from three countries (Ghana, Nigeria and Tanzania), and their combineddemographic information is shown in Table 1.

- 254
- 255

[Insert Table 1]

Table 1 shows that the respondents occupied various roles ranging from Land Surveyors/Geomatic Engineers (40.6%), Estate Surveyors/Valuers (28.6%), and Quantity Surveyors (26.3%). The majority of respondents (i.e. 85.7%) hold a bachelor's or postgraduate degree, and over half of the respondents have more than 10 years of professional experience. Overall, based on the demographic information, the respondents are sufficiently well placed to respond to the subject of inquiry.

261 Differences in stakeholder ability to influence improvement in unethical practices

For each of the unethical practices examined, respondents rated the extent to which they can influence improvement, the extent to which they perceive that their companies can influence improvement, and the extent to which they perceive that their professional associations can influence improvement. Table 2 shows the mean scores, standard deviations and standard errors of the twelve unethical practices that were assessed.

267

268 From Table 2, 'company' is seen as the topmost ranked stakeholder that is able to influence 269 improvement in 11 out of the 12 unethical practices examined. Among the unethical practices are: 270 'failure to protect public health, safety and welfare' (mean score (MS) = 3.32, standard deviation (SD) 271 = 1.314); 'mishandling of sensitive data' (MS = 3.30, SD = 1.296); 'abuse of company resources' (MS = 3.27, SD = 1.350); and 'bribery' (MS = 3.22, SD = 1.373). The professional association 272 emerged as the topmost stakeholder that can influence improvement in 'political interference' (MS =273 3.34, SD = 1.373), while the individual professional did not emerge as the topmost stakeholder for 274 275 any of the unethical practices.

276

While the ranking gives an indication of the stakeholders' relative ability to influence improvements in unethical practices, inferential statistical analysis is required in order to establish whether the differences in stakeholder ability to influence improvement are significant. A one-way analysis of 280 variance (ANOVA) test was conducted to determine if there are any statistically significant differences in the means between groups (i.e. the individual professionals, the professional's 281 companies, and the professional association) in terms of the ability to influence improvement in the 282 unethical practices. From the one-way ANOVA test, the combined sample revealed that different 283 284 stakeholders are perceived to have significantly different abilities to influence improvement in three out of the 12 unethical practices: abuse of company resources; discrimination and nepotism; and 285 political interference (as shown by Table 3). Tukey post hoc comparisons (as shown by Table 4) was 286 287 further conducted to determine the differences in the stakeholders' ability to influence improvement in 288 the three unethical practices. The post hoc comparison is frequently used in conjunction with ANOVA 289 to determine which pairs of groups show statistically significant mean differences (De Vaus, 2002). 290 The Tukey's test detects a pairwise comparison with means that are significantly different from each 291 other at a 0.05 significance level (Skibniewski, 2009).

292

From the Tukey post hoc test, the differences in the mean scores for the various groups were 293 294 determined and the mean differences are shown in Table 4. The pairs of groups which showed 295 statistically significant mean differences at 0.05 significance level are shown in the superscript 'a'. 296 Table 4 further shows that the mean score of organization ability to influence improvement in the 297 'abuse of company resources' is significantly higher than that of the professional association (mean 298 difference (MD) = 0.405, p = 0.003). The comparison of the mean score of the individual professional 299 with that of the organization and professional association yielded no significant difference. The post 300 hoc comparison in Table 4 further reveals that the comparison of the mean score of organization 301 ability to influence improvement in 'discrimination and nepotism' is significantly higher than that of the individual professional (MD = 0.347, p = 0.022). The comparison of the mean score of the 302 professional association with that of the organization and individual professional yielded no 303 significant differences. Finally, Table 4 shows that the mean scores of the ability of the organization 304 (MD = 0.670, p < 0.001) and the ability of the professional association (MD = 0.717, p < 0.001) to 305 influence improvement in political interference is significantly greater than that of the individual 306 307 professional.

309	[Insert Table 2]
310	[Insert Table 3]

- 311
- 312

313 Country-specific differences in stakeholder ability to influence improvement in unethical practices

[Insert Table 4]

Country-specific ANOVA analysis was conducted to further explore whether the observed differences
in stakeholder ability to influence unethical practices manifest similarly or differently in the three
survey locations: Ghana, Nigeria, and Tanzania. The results are in the following sections.

317

318 *Differences in stakeholder ability to influence improvement in unethical practices (Ghana sample)*

The one-way ANOVA test conducted for the Ghana sample revealed that different stakeholders are 319 perceived to have significantly different abilities to influence improvement in 3 unethical practices as 320 321 follows: abuse of company resources; discrimination and nepotism; and political interference (as 322 shown by Table 5). The Tukey post hoc test multiple comparisons for the Ghana sample ANOVA is shown in Table 6. The Tukey post hoc test revealed differences in the means for the various groups. 323 324 Table 6 shows that the mean score of company's ability to influence improvement in the 'abuse of company resources' is significantly greater (MD = 0.719, p < 0.001) than that of the professional 325 326 association. With regards to 'discrimination and nepotism', the mean score of company's ability to influence improvement is also significantly greater than that of the individual professional. 327 Concerning 'political interference', the ability of the company (MD = 0.992, p < 0.001) and the 328 professional association (MD = 0.688, p = 0.001) to influence improvement is significantly greater 329 330 than that of the individual professional.

331

[Insert Table 5]

[Insert Table 6]

- 332 333
- 334
 - Differences in stakeholder ability to influence improvement in unethical practices (Nigeria sample)

As shown by Table 7, the one-way ANOVA test conducted for the Nigeria sample revealed that different stakeholders are perceived to have significantly different ability to influence improvement in only one unethical practice (i.e. political interference). Table 8 which shows the Tukey post hoc test multiple comparisons reveal that the mean score of the professional association's ability to influence improvement in political interference is significantly greater (MD = 0.726, p = 0.001) than that of the individual professional.

[Insert Table 8]

343

342

344 Differences in stakeholder ability to influence improvement in unethical practices (Tanzania sample)

Like the Nigeria sample, the one-way ANOVA test conducted for the Tanzania sample revealed that different stakeholders are perceived to have significantly different ability to influence improvement in only one unethical practice (i.e. political interference). This is shown in Table 9. The Tukey post hoc test multiple comparisons (shown by Table 10) shows that the mean score of the ability of the professional association to influence improvement in 'political interference' is significantly greater (MD= 0.761, *p*-value=0.010) than that of the individual professional.

[Insert Table 9]

[Insert Table 10]

351

352

353

354

355 Discussion

356 Discussion based on combined results

Over the years the issue of ethics has received much attention among companies, professional associations, and individual professionals (Perry et al., 2014; Joyce, 2014). The combined results of the study show that, out of the three stakeholders, 'company' emerged as the topmost stakeholder that is able to influence improvement (i.e. positive change) in the examined unethical practices, followed by the professional association, with the individual professional having a relatively limited ability to influence improvement. The results of the combined sample ANOVA also revealed significant 363 differences in stakeholder ability to influence improvement in 'abuse of company resources',364 'discrimination and nepotism', and 'political interference'.

365

366 *Abuse of company resources*

367 Organizations should act to protect their assets against misuse and abuse by employees. Such assets may be physical, intellectual and electronic or digital in nature. According to the Association of 368 Certified Fraud Examiners' (ACFEs) 2016 Report to the Nations, abuse of company resources is 369 370 considered as the most common form of occupational fraud, and it occurs in approximately 83% of all unethical cases reported. From the finding of this study, it is evident that the respondents perceive 371 372 organization to be more able to influence improvement in this unethical practice than the other 373 stakeholders. In most instances, client databases with personal and financial information, internal 374 documentations which detail out trade secrets, contents and technologies produced can be exposed, 375 opening the real possibility for data to be misused, either intentionally for personal gain, or inadvertently. Maicibi and Yahaya (2013) and Wilks (2011) have reported this unethical practice to be 376 377 an issue which is of a major concern to organizations. It is a practice that is very difficult to curb, 378 especially on individual or professional association basis. There is therefore the need for a collective 379 action by an entire company to be able to control such practices. These acts of misconducts are vastly 380 reported in other industries, apart from construction, a typical example being the ICT (Kernel, 2011). Since it manifests itself in different ways among different stakeholders, there is the need to identify 381 382 different ways to address it. It causes a huge challenge to organizational and societal development (Maicibi and Yahaya, 2013), and organizations should seek to lead efforts to design and implement 383 measures to tackle the abuse of company resources by employees. In most instances, organizations 384 can put in place measures like identifying common asset misappropriation schemes (e.g. skimming, 385 billing schemes, and information theft), analytical reviews, independent checks, segregation of 386 functions and duties and access limitation and authorization controls to check the misuse of company 387 assets. However, such measures may be more likely to be effective if their design were to include 388 389 some level of employee involvement so that employees would take some ownership of the measures.

390 Discrimination and nepotism

391 Discrimination and nepotism are often seen in actions which actors may not consider as unethical (Sezer, 2015). These unethical practices if encouraged in companies, among professional associations 392 and amongst individuals can cause great feelings of resentment. The findings of this study revealed 393 394 that the respondents perceive companies to be more able to influence improvement in discrimination 395 and nepotism than the individual professional. Nepotism is favoritism that is shown to relatives by individuals in a position of authority (Pelletier and Bligh, 2008). This means that as an individual 396 397 professional, there is always the temptation of favoring a family member or a close ally when it comes 398 to providing a service. Such individuals if left unchecked may always prefer to fill vacancies in the companies in which they work with people they are very much familiar with. In most instances, 399 companies are seen to be well positioned to have the needed structures in place to check against these 400 401 unethical acts. This means that, in a company where nepotism is very common, there must be clear 402 policies and practices against such acts. When organizations fail to enforce their anti-discrimination 403 and anti-nepotism policies with consistency, they expose themselves to liability. For instance, Büte 404 (2011) found that within the Turkish banking sector, nepotism had a significant negative effect on 405 intention of employees to quit the job, job satisfaction, organizational commitment, and human 406 resource management practices. Furthermore, in the Turkish Police Organization, it is reported that 407 the most essential problems encountered stem from discrimination and nepotism (Mutlu, 2000). Mutlu 408 (2000) further reported that though the police organization had its own culture, appointments, 409 promotions, and the honoring system were left in the hands of individuals who could easily be 410 manipulated by political organizations. Addressing discrimination and nepotism can be controversial and difficult. In view of this, organizations should seek to design and enforce measures that would 411 412 address discrimination and nepotism within businesses and in cross-business interactions. Organizations should not leave efforts to address discrimination and nepotism to individuals but 413 should have systems or procedures in place to help detect such practices and encourage individuals to 414 voice out acts of discrimination (Good Practice Note, 2006). 415

416

417 *Political interference*

418 The findings of the study show that the professional association and company are perceived as being more able to influence improvement in political interference than the individual professional. Politics 419 420 plays a key role in the procurement of construction projects. This is because several large projects 421 undertaken in different countries are government sponsored projects. This therefore creates the needed 422 room for governments to politically interfere in such projects (Mukumbwa and Muya, 2013). Political interference in unethical practices within the construction industry is greatly seen in what is termed 423 'fronting' (Bowen et al., 2007; de Jong et al., 2009; Ameyaw et al., 2017). According to Ameyaw et 424 al. (2017, p. 3), 'fronting occurs when officials within government agencies or client organizations 425 create front companies to obtain construction contracts'. de Jong et al. (2009) iterated that such 426 companies obtain unfair benefits in awarding public contracts because of the owners' powerful 427 positions in government. In Ghana for instance, Ameyaw et al. (2017) revealed that high political 428 429 connections were used to enhance secrecy in the award of public contracts. Ameyaw et al. (2017) 430 further indicated that individuals did not report corrupt practices because of the fear of dismissal (or 431 other occupational penalties) that may be imposed by their employers on them. There is also the fear 432 that if such an unethical practice is conducted by an official with high political influence, the whistle 433 blower may not be well protected, leaving him and the family exposed to danger in the future. The 434 inference drawn from this finding is that professional bodies and organizations may be more capable 435 of influencing improvements in political interference than the individual practitioner because the 436 individual practitioner could more easily become a victim or target of political 437 victimization/persecution. Hence, professional bodies and organizations could champion efforts to tackle political interference within the industry. 438

439 Discussion of results on country specific basis

On country-specific basis, the ANOVA revealed some differences as well as similarity in the findings.
For all the three samples the professional association is perceived as being more able to influence
improvement in 'political interference' than the individual professional. However, within the Ghana
sample only, organization is also perceived as being more able to influence improvement in 'political
interference' than the individual professional. Furthermore, within the Ghana sample only, significant

445 differences emerged regarding stakeholder ability to influence improvement in 'abuse of company446 resources' and 'discrimination and nepotism'.

According to Christie et al. (2003), responses to questions of an ethical nature from any particular 447 group of individuals from any country are a function of multiple constructs. It is worth noting that 448 449 such differences are possible and may stem from the differences in culture, organizational behaviors or dynamics across the countries, among others. Several studies have shown that ethical behavior 450 varies cross-culturally (Arnold et al., 2007). For instance, Ahmed et al. (2003) found that while there 451 452 was a basic agreement on ethical business practices, differences were present in respondents' tolerance to damages caused by a particular unethical behavior. Jackson (2000) believed that the 453 structure of ethical judgements varied by countries, and so conducted a study to prove this. The 454 455 findings of his study revealed that managers' ethical judgements were influenced by country specific 456 cultural differences. In the light of organizational dynamics, Kuntz et al. (2013) indicated that the 457 extent to which an organization exhibits ethical capability is contingent upon the interplay of competencies and behaviors of incumbents, the organizational infrastructure, and the ethical stance of 458 459 organizational leaders. It is therefore very likely that across countries, individuals and organizations 460 may share different ethical principles. Vitell and Hidalgo (2006, p. 31) therefore suggested that "as 461 businesses have globally expanded, the study of ethics has become increasingly important due to the 462 different cultural/country specific environments in which global businesses operate on a daily basis". 463 Hence, as countries differ greatly in terms of their levels of economic development, legal-political 464 systems, cultural standards, and expectations concerning business conduct, decision makers who operate in other countries and negotiate with the business people from such countries should take into 465 466 consideration the ethical stance of such individuals and their businesses in order to learn to trade cautiously (Vitell and Hidalgo, 2006). 467

In summary, the empirical realities revealed by the country-specific analyses demonstrate that the phenomenon regarding differences in stakeholder ability to influence improvement in unethical practices can indeed manifest similarly as well as differently across different countries. More importantly, what that implies is that measures designed to tackle unethical practices need to also consider local contextual issues within a particular country rather than simply adopting or 'borrowing' measures from other contexts which may eventually not be effective. Nonetheless, within the confines
of this study, across the three study locations, the professional association could be a better champion
for spearheading efforts to address political interference within the surveying profession.

476

477 Conclusions

The built environment is notorious for the prevalence of unethical practices and while concerted effort 478 by all stakeholders is needed to address such practices, some stakeholders within the sector may be 479 480 more capable to lead change or influence improvement. This study has examined: whether different built environment profession stakeholders, particularly the surveying professional, the professional's 481 company, and the professional association, have different abilities to influence improvement in 482 483 unethical practices; and whether such phenomenon manifests differently in different national contexts. 484 The results from the study demonstrate that for some unethical practices there are significant 485 differences in the ability of stakeholders to influence improvement. Such unethical practices are 'abuse of company resources', 'discrimination and nepotism', and 'political interference'. The results 486 487 also show that the differences in stakeholder ability to influence improvement can manifest similarly 488 and differently in different national contexts. The results hold significant practical implications in the 489 sense that stakeholders that are more able to influence improvement in an unethical practice should 490 spearhead efforts aimed at addressing those unethical practices. Within the specific context of the 491 three study locations, professional bodies could spearhead efforts to address political interference 492 within the surveying profession or more broadly within the built environment sector in those locations. As shown from this study that differences in stakeholder ability to influence improvement 493 494 in unethical practices can manifest differently in different national contexts, it is imperative that further studies of this nature are undertaken in other countries in order to understand what pertains in 495 each specific country. It is based on such studies that tailored efforts to address unethical practices can 496 be designed and implemented within a country. Such studies could also eventually inform the 497 development of a tool to assist companies and professionals to navigate ethical issues in different 498 499 countries.

500	Additionally, a limitation of this study is that it was restricted to built environment surveying
501	professionals within three countries. Further studies involving other built environment professions
502	could yield additional empirical realities to broaden understanding of various stakeholders' ability to
503	address unethical practices within the construction sector.
504	
505	Acknowledgement
506	Appreciation is extended to the Commonwealth Association of Surveying and Land Economy for the
507	assistance given in data collection.
508	
509	References
510	Adnan, H., Hashim, N., Yusuwan, N.M., and Ahmad, N. (2012). "Ethical issues in the construction
511	industry: Contractor's perspective." Procedia Soc. Behav. Sci., 35, 719-727.
512	Ahmed, M., Cheung, K., and Wichenseher, J. (2003). "Business students' perception of ethics and
513	moral judgment: A cross-cultural study." J. Bus. Ethics, 43(1/2), 89-102.
514	Ameh, O.J., and Odusami, K.T. (2010). "Professionals' ambivalence toward ethics in the Nigerian
515	construction industry." J. Profl. Issues Eng. Educ. Pract., 136 (1), 9-15.
516	Ameyaw, E., Parn, E., Chan, A.P.C., Owusu-Manu, D., Edwards, D.J., and Darko, A. (2017).
517	"Corrupt practices in the construction industry: Survey of Ghanaian Experience." J. Manage.
518	<i>Eng.</i> , 33 (6), 1-11.
519	Arewa, A.O., and Farrell, P. (2015). "The culture of construction organizations: the epitome of
520	institutionalized corruption." Const. Econ. Build., 15 (3), 59-71.
521	Arnold, D.F., Bernardi, R.A., Neidermeyer, P.E., and Schmee, J. (2007). "The effect of country and
522	culture on perceptions of appropriate ethical actions prescribed by codes of conduct: A Western
523	European perspective among Accountants." J. Bus. Ethics, 70(4), 327-340.
524	Association of Certified Fraud Examiners (2016). "Report to the Nations on Occupational Fraud and
525	Abuse." (http://www.acfe.com/rttn2016/docs/2016-report-to-the-nations) (Nov. 6, 2018).

- Bowen, P.A., Edwards, P.J., and Cattel, K. (2012). "Corruption in the South African Construction
 industry: A thematic analysis of verbatim comments from survey participants." *Constr. Manage. Econ.*, 30 (10), 885-901.
- Bowen, P.A., Akintoye, A., Pearl, R., and Edwards, P.J. (2007). "Ethical behavior in the South
 African Construction Industry." *Constr. Manage. Econ.*, 25 (6), 631-648.
- Büte, M. (2011). "The effects of nepotism and favoritism on employee behaviors and human resource
 practices: A research on Turkish Public Banks." *Todaie's Rev. Pub. Admin.*, 5(1), 185-208.
- 533 Christie, P., Ik-Whan, J., Kwon, G., Stoebert, P., and Baumhart, R. (2003). "A cross-cultural
 534 comparison of ethical attitudes of business managers." J. Bus. Ethics, 46(3), 263-287.
- 535 CIOB (2010). "Code of Practice for Project Management for Construction and Development." 4th edn.
 536 Oxford: Wiley-Blackwell.
- 537 Creswell, J. (2014). "Research design: Qualitative, quantitative and mixed methods approach." 4th ed.,
 538 Los Angeles (CA): Sage Publications.
- 539 Delbridge, A. (2000). "Macquarie Dictionary." Macquarie Point, N.S.W.
- de Jong, M., Henry, W.P., and Stansbury, N. (2009). "Eliminating corruption in our
 engineering/construction industry." *Leadersh. Manage. Eng.*, 9(3), 105-111.
- 542 De Vaus, D. (2002). "Analysing social science data—50 key problems in data analysis." SAGE
 543 Publications: Thousand Oaks, CA, USA.
- Fellows, R., and Liu, A. (2008). "Research methods for construction." 3rd ed. Chichester: Blackwell
 Publishing.
- Field, A. (2013). "Discovering statistics using IBM SPSS statistic." 4th ed. Los Angeles (CA): Sage
 Publications.
- 548 Good Practice Note (2006). "Non-discrimination and equal opportunity."
 549 (http://www.ifc.org/enviropublications) (Oct. 17, 2018).
- Ho, C.M.F. (2011). "Ethics management for the construction industry: A review of ethical decisionmaking literature." *Eng. Constr. Archit. Manage.*, 18 (5), 516-537.
- Jackson, B. (2004). "The perceptions of experienced construction practitioners regarding ethical
 transgressions in the construction industry." Int. J. Constr. Educ. Res., 1(2), 1-10.

- Jackson, T. (2000). "Making ethic judgements: A cross-cultural management study." *Asia Pac. J. Manage.*, 17(3), 443-472.
- Joyce, P. (2014). "The culture of ethics that the public sector needs."
 (http://www.governing.com/columns/smart-mgmt/col-cultureethics) (Aug. 20, 2018).
- 558 Kang, B.G., Long, K., Zhang, C., and Hao, J.L. (2017). "Comparative study on the ethical perceptions
- of contractors and designers in the China construction industry." *IOP Conf. Series, Materials Science and Engineering*, 291, 1-7.
- Kang, B.G. (2009). "Principles and practices of construction ethics management: With a comparative
 study between the UK and Korea." VDM Verlag Müller Publishing, Germany.
- Kenny, C. (2009). "Transport Construction, corruption and developing countries." *Transp. Rev.*, 29
 (1), 21-41.
- 565 Kernel (2011). "Stop misuse of organizational resources through Spyware tools."
 566 (http://www.pressexposure.org) (Oct. 17, 2018).
- Kuntz, J.R.C., Kuntz, J.R., Elenkov, D., and Nabirukhina, A. (2013). "Characterising ethical cases: A
 cross-cultural investigation of individual differences, organizational climate, and leadership on
 ethical decision-making." *J. Bus. Ethics*, 113(2), 317-331.
- 570 Le, Y., Shan, M., Chan, A.P.C., and Hu, Y. (2014). "Investigating the causal relationships between
- 571 causes of and vulnerabilities to corruption in the Chinese public construction sector." *J. Constr.*572 *Eng. Manage.*, 140 (9), 1-11.
- Liao, S.S.C. (2013). "Enhancing ethics and the competitive environment by accounting for conflict of
 interest in project procurement." *Leadersh. Manage. Eng.*, 13 (2), 86-95.
- 575 Loosemore, M., and Lim, B. (2015). "Inter-organizational unfairness in the construction industry."
 576 *Constr. Manage. Econ.*, 33 (4), 310-326.
- 577 Maicibi, N.A., and Yahaya, S.A. (2013). "Criminal and unethical behaviors in organizations: misuse
 578 of assets and false or misleading advertising." *Global J. Hum. Soc. Sc. Pol. Sci.*, 13 (1), 1-11.
- 579 Mason, J. (2009). "Ethics in the construction industry: the prospects for a single professional code."
- 580 *Int. J. Law Built Environ*, 1 (3), 194-204.

- May, D., Wilson, O., and Skitmore, M. (2001). "Bid cutting: An empirical study of practice in SouthEast Queensland." *Eng. Constr. Archit. Manage.*, 8 (4), 250-256.
- Moodley, K., Smith, N., and Preece, C.N. (2008). "Stakeholder matrix for ethical relationships in the
 construction industry." *Constr. Manage. Econ.*, 26 (6), 625-632.
- Mukumbwa, B., and Muya, M. (2013). "Ethics in the construction industry in Zambia." *Int. J. Constr. Manage.*, 13 (2), 43-65.
- 587 Mutlu, K. (2000). "Problems of nepotism and favoritism in the police organization in Turkey." *Pol.*588 *Int. J. Pol. Strat. Manage.*, 23(3), 381-389.
- Oladinrin, O.T., and Ho, C.M.F (2016). "Critical enablers for codes of ethics implementation in
 construction organizations." *J. Manage. Eng.*, 32 (1), 1-10.
- Oladinrin, O.T., and Ho, C.M.F (2014). "Strategies for improving codes of ethics implementation in
 construction organizations." *Proj. Manage. J.*, 45 (5), 15-26.
- 593 Osei-Tutu, E., Badu, E., and Owusu-Manu, D. (2010). "Exploring corruption practices in public
 594 procurement of infrastructure projects in Ghana." *Int. J. Manage. Proj. Bus.*, 3 (2), 236-256.
- Pelletier, K.L., and Bligh, M.C. (2008). "The aftermath of organizational corruption: Employee
 attributions and emotional reactions." *J. Bus. Ethics*, 80(4), 823-844.
- 597 Perry, J.L., de Graaf, G., van der Wal, Z., and van Montfort, C. (2014). "Returning to Our Roots:
 598 Good Government Evolves to Good Governance." *Pub. Admin. Rev.* 74 (1), 27 28
- Poon, J., and Hoxley, M. (2010). "Use of moral theory to analyse the ethical codes of built
 environment professional organizations: A case study of the Royal Institution of Chartered
 Surveyors." *Int. J. Law Built Environ.*, 2 (3), 260-275.
- 602 Runde, D.F., Hameed, S., and Magpile, J. (2014). "The costs of corruption."
- 603 (http://csis.org/files/publication/140204_Hameed_CostsOfCorruption_Web.pdf) (Jul. 30,
- 604 2015).
- 605 Schwab, K. (2013). "The Global competitiveness report 2013-2014."
- 606 (http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2013-14.pdf) (Jul. 30,
- 607 2015).

- Sezer, O., Gino, F., and Bazerman, M.H. (2015). "Ethical blind spots: explaining unintentional ethical
 behavior." *Cur. Opin. Psych.*, 6, 77-81.
- Shakantu, W. (2006). "Corruption in the construction industry: forms, susceptibility and possible
 solutions." *J. South African Inst. Civ. Eng.*, 14 (7), pp. 43-44.
- 612 Skibniewski, M.J., and Ghosh, S. (2009). "Determination of key performance indicators with
- 613 enterprise resource planning systems in engineering construction firms." J. Constr.
- 614 *Eng. Manage.*, 135, 965–978.
- Sohail, M., and Cavill, S. (2008). "Accountability to prevent corruption in construction projects." *J. Constr. Eng. Manage.*, 134 (9), 729-738.
- Suen, H., Cheung, S.O., and Mondejar, R. (2007). "Managing ethical behavior in construction
 organizations in Asia: How do the teachings of Confucianism, Taoism and Buddhism and
 Globalization influence ethics management?" *Int. J. Proj. Manage.*, 25, 257-265.
- 620 Transparency International (2014). "Bribe payers index 2011."
- 621 (http://files.transparency.org/content/download/98/395/2011_BPI_EN.pdf) (Jul. 30, 2015).
- 622 Transparency International (2014). "Corruption perceptions index 2014."
- 623 (http://files.transparency.org/content/download/1856/12434/file/2014_CPIBrochure_EN.pdf)
 624 (Jul. 30, 2015).
- Vee, C., and Skitmore, C. (2003). "Professional ethics in the construction industry." *Eng, Constr. Archit. Manage.*, 10 (2), 117-127.
- Vitell, S.J., and Hidalgo, E.R. (2006). "The impact of corporate ethical values and enforcement of
 ethical codes on the perceived importance of ethics in business: A comparison of U.S. and
 Spanish Managers." *J. Bus. Ethics*, Vol. 64(1), pp. 31-43.
- Wilks, D.C. (2011). "Attitudes towards unethical behaviors in organizational settings: an empirical
 study." *Ethics Prog. Quart.*, 2(2), 9-22.

Demographic information Percent Frequency Role Estate Surveyor/Valuer 76 28.6 Quantity Surveyor 70 26.3 108 40.6 Land Surveyor/Geomatic Engineer Other e.g. cartographer 2.3 6 Non-response 6 2.3 Education 32 12.0 Pre-degree education (i.e. basic education, secondary education, diploma and higher national diploma) Bachelor's degree 112 42.1 Postgraduate degree (i.e. masters' degree and 116 43.6 doctorate degree) Non-response 6 2.3 Professional Experience 0-10 years 116 43.6 11-20 years 29.3 78 Over 20 years 69 25.9 Non-response 3 1.1 633 634 635 636 637 638 639 640 641 642 643 644

Table 1. Respondent demographic information (N=266)

Unethical Practice	Stakeholder	Ν	Mean Sore (MS)	Std. Deviation (SD)	Std. Error (SE)	Rank by mean score
Failure to Protect Public Health, Safety and Welfare	Individual Professional	266	3.15	1.286	0.079	3
	company	266	3.32	1.314	0.081	1
	Professional association	266	3.30	1.327	0.081	2
Collusion	Individual Professional	266	3.04	1.444	0.089	3
	Company	266	3.09	1.301	0.080	1
	Professional association	266	3.08	1.316	0.081	2
Mishandling of Sensitive Data (e.g. Leakages)	Individual Professional	266	3.19	1.514	0.093	2
	Company	266	3.30	1.296	0.079	1
	Professional association	266	3.08	1.343	0.082	3
Production of Fraudulent Documents (e.g. invoices & claims)	Individual Professional	266	2.95	1.688	0.104	2
	Company	266	3.06	1.474	0.090	1
	Professional association	266	2.87	1.516	0.093	3
ailure to Protect Environment	Individual Professional	266	3.00	1.373	0.084	3
	Company	266	3.18	1.221	0.075	1
	Professional association	266	3.09	1.323	0.081	2
Bribery	Individual Professional	266	3.05	1.687	0.103	2
	Company	266	3.22	1.373	0.084	1
	Professional association	266	3.03	1.432	0.088	3
Improper Relations with Other Parties (e.g. Excessive gifts)	Individual Professional	266	2.97	1.467	0.090	2
	Company	266	3.04	1.280	0.078	1
	Professional association	266	2.94	1.306	0.080	3
Abuse of Company Resources	Individual Professional	266	3.09	1.598	0.098	2
	Company	266	3.27	1.350	0.083	1
	Professional association	266	2.87	1.324	0.081	3
Abuse of Client Resources	Individual Professional	266	2.94	1.626	0.100	2

Table 2. Stakeholder ability to influence improvement in unethical practices

	Company	266	3.08	1.397	0.086	1
	Professional association	266	2.89	1.424	0.087	3
Discrimination and Nepotism	Individual Professional	266	2.88	1.626	0.100	3
	Company	266	3.22	1.451	0.089	1
	Professional association	266	3.04	1.433	0.088	2
Misrepresentation of Competence	Individual Professional	266	2.97	1.538	0.094	3
	Company	266	3.21	1.354	0.083	1
	Professional association	266	3.16	1.457	0.089	2
Political Interference	Individual Professional	266	2.62	1.447	0.089	3
	Company	266	3.29	1.377	0.084	2
	Professional association	266	3.34	1.373	0.084	1
Note: Scale: $1 - not at all: 2 - low: 3 - moderate:$	4 = high: 5 = very high					

0.51

655	Table 3.	One-way	ANOVA	test	for	stakeholders'	ability	to	influence	improvement	in	unethical
656	practice											

Unethical practice	Comparison	Sum of Squares	df	Mean Square	F	Sig.
Abuse of company	Between Groups	Between Groups 21.844 2 10.		10.922	6.104 ^a	0.002
resources	Within Groups	1624.119	527	2.043		
	Total	1645.963	529			
Discrimination and nepotism	Between Groups	16.007	2	8.004	3.403 ^a	0.030
	Within Groups	1802.439	528	2.267		
	Total	1818.446	530			
Political interference	Between Groups	85.573	2	42.787	21.848	0.034
	Within Groups	1556.942	795	1.958		
	Total	1642.515	797			
Note: ^a Welch's F is used	due to significant diffe	rence in group variances				

Unethical practice	Stakeholder (I)	Stakeholder (J)	Mean Difference	Std. Error	Sig.	95% Confidence Interval		
practice			(I-J)	LIIOI		Lower Bound	Upper Bound	
Abuse of	Individual	Company	-0.181	0.124	0.309	-0.47	0.11	
company resources	Professional	Professional body	0.223	0.124	0.170	-0.07	0.51	
	Company	Individual Professional	0.181	0.124	0.309	-0.11	0.47	
		Professional body	0.405ª	0.124	0.003	0.11	0.70	
	Professional association	Individual Professional	-0.223	0.124	0.170	-0.51	0.07	
		Company	-0.405 ^a	0.124	0.003	-0.70	-0.11	
Discrimination	Individual	Company	-0.347 ^a	0.131	0.022	-0.65	-0.04	
and nepotism	Professional	Professional body	-0.161	0.131	0.432	-0.47	0.15	
	Company	Individual Professional	0.347ª	0.131	0.022	0.04	0.65	
		Professional body	0.185	0.131	0.332	-0.12	0.49	
	Professional association	Individual Professional	0.161	0.131	0.432	-0.15	0.47	
		Company	-0.185	0.131	0.332	-0.49	0.12	
Political	Individual	Company	-0.670 ^a	0.121	0.000	-0.96	-0.39	
interference	Professional	Professional body	-0.717 ^a	0.121	0.000	-1.00	-0.43	
	Company	Individual Professional	0.670 ^a	0.121	0.000	0.39	0.96	
		Professional body	-0.046	0.121	0.923	-0.33	0.24	
	Professional association	Individual Professional	0.717 ^a	0.121	0.000	0.43	1.00	
		Company	0.046	0.121	0.923	-0.24	0.33	

Table 4. Tukey post hoc test multiple comparisons table for stakeholders' ability to influence
 improvement in unethical practice

Table 5. One-way ANOVA test for stakeholders' ability to influence improvement in unethical practice (Ghana sample)

Unethical practice	Comparison	Sum of Squares	df	Mean	F	Sig.
				Square		
Abuse of company resources	Between Groups	31.335	2	15.668	9.727ª	0.000
	Within Groups	669.885	238	1.861		
	Total	701.221	240			
Discrimination and	Between Groups	17.915	2	8.957	4.032 ^a	0.019
nepotism	Within Groups	826.137	239	2.295		
	Total	844.051	241			
Political	Between Groups	62.483	2	31.242	15.409	0.000
interference	Within Groups	729.892	360	2.027		
	Total	792.375	362			
Notes ^a Walsh's E is u	and due to significant	difference in group vo				

Note: a Welch's F is used due to significant difference in group variances

Unethical	Stakeholder (I)	Stakeholder (J)	Mean Difference	Std. Error	Sig.	95% Co	nfidence
practice			(LI)	LIIUI		Lower	Unnor
			(1-J)			Bound	Bound
Abuse of	Individual	Company	-0 339	0.175	0.131	-0.75	0.07
company	Professional		0.557	0.175	0.151	0.75	0.07
resources	1101000101101	Professional	0.380	0.175	0.078	-0.03	0.79
		association	0.000	0.175	0.101	0.07	0.75
	Company	Individual	0.339	0.175	0.131	-0.07	0.75
		Professional	0.7100	0.175	0.000	0.01	1.10
		Professional	0.719 ^a	0.175	0.000	0.31	1.13
		association	0.200	0.175	0.070	0.70	0.02
	Professional	Individual	-0.380	0.175	0.078	-0.79	0.03
	association	Professional	0.710	0.175	0.000	1.10	0.01
		Company	-0.719 ^a	0.175	0.000	-1.13	-0.31
Discrimination	Individual	Company	-0.521ª	0.195	0.021	-0.98	-0.06
and nepotism	Professional	Professional	-0.123	0.195	0.802	-0.58	0.34
		association					
_	Company -	Individual	0.521ª	0.195	0.021	0.06	0.98
		Professional					
		Professional	0.397	0.195	0.104	-0.06	0.86
		association					
	Professional	Individual	0.123	0.195	0.802	-0.34	0.58
	association	Professional					
		Company	-0.397	0.195	0.104	-0.86	0.06
Political	Individual	Company	-0.992 ^a	0.183	0.000	-1.42	-0.56
interference	Professional	Professional	688ª	0.183	0.001	-1.12	-0.26
		association					
	Company	Individual	0.992ª	0.183	0.000	0.56	1.42
	1 5	Professional					
		Professional	0.304	0.183	0.223	-0.13	0.73
		association					
	Professional	Individual	0.688ª	0.183	0.001	0.26	1.12
	association	Professional					
		Company	-0.304	0.183	0.223	-0.73	0.13

664 Table 6. Tukey post hoc test multiple comparisons table for stakeholders' ability to influence665 improvement in unethical practice (Ghana sample)

667	Table 7. One-way ANOVA	test for	stakeholders'	ability	to influence	improvement	in	unethical
668	practice (Nigeria Sample)							

Unethical	Comparison	Sum of Squares	df	Mean	F	Sig.
practice				Square		
Political	Between Groups	23.046	2	11.523	6.314	0.002
interference	Within Groups	465.394	255	1.825		
	Total	488.439	257			

Table 8. Tukey post hoc test multiple comparisons table for stakeholders' ability to influence
 improvement in unethical practice (Nigeria sample)

Unethical	Stakeholder (I)	Stakeholder (J)	Mean	Std.	Sig.	95% Confide	nce Interval
practice			Difference	Error		Lower	Upper
			(I-J)			Bound	Bound
Political	Individual	Company	-0.283	0.206	0.357	-0.77	0.20
interference	Professional	Professional	-0.726 ^a	0.206	0.001	-1.21	-0.24
		association					
	Company	Individual	0.283	0.206	0.357	-0.20	0.77
		Professional					
		Professional	-0.443	0.206	0.082	-0.93	0.04
		association					
	Professional	Individual	0.726 ^a	0.206	0.001	0.24	1.21
	association	Professional					
		Company	0.443	0.206	0.082	-0.04	0.93
Note: ^a The me	ean difference is si	gnificant at the 0.0.	5 level.				

674 Table 9. One-way ANOVA test for stakeholders' ability to influence improvement in unethical
 675 practice (Tanzania sample)

· · · · · · · · · · · · · · · · · · ·	1 /					
Unethical	Comparison	Sum of Squares	df	Mean	F	Sig.
practice				Square		
Political	Between	18.601	2	9.301	4.736	0.010
interference	Groups					
	Within	341.694	174	1.964		
	Groups					
	Total	360.295	176			

Table 10. Tukey post hoc test multiple comparisons table for stakeholders' ability to influence
 improvement in unethical practice (Tanzania sample)

Unethical practice	Stakeholder	Stakeholder	Mean	Std.	Sig.	95% Confidence Interval				
	(I)	(J)	Difference	Error						
			(I-J)			Lower	Upper			
						Bound	Bound			
Political interference	Individual	Company	-0.576	0.258	0.068	-1.19	0.03			
	Professional	Professional	-0.761ª	0.258	0.010	-1.37	-0.15			
		association								
	Company	Individual	0.576	0.258	0.068	-0.03	1.19			
		Professional								
		Professional	-0.185	0.258	0.754	-0.79	0.42			
		association								
	Professional	Individual	0.761ª	0.258	0.010	0.15	1.37			
	association	Professional								
		Company	0.185	0.258	0.754	-0.42	0.79			
Note: ^a The mean difference is significant at the 0.05 level.										

684 Appendix A: Questionnaire

Section 1: Please provide the following background Information	n. Please tick the most appropriate box
--	---

Professional Role	Estate Surveyor/Valuer Quantity Surveyor							
	□ Land Surveyor/Geomatic engineer □ Other, specify:							
Highest level of Education	□ Basic education □ Secondary education □ Diploma □ Higher national diploma							
	□ Bachelor's Degree □ Master's Degree □ Doctorate Degree							
Length of Professional Experience (years)	□ 0-10 □ 11-20 □ 21-30 □ 31-40 □ Over 40							

685

Section 2: Please rate the extent to which *you feel, you (individual professional), your organization* and your *affiliated national* surveying *professional body* can influence improvement (i.e. bring about positive change) in the following practices. Rate using the following scale:

	Professional				ıl	Organisation					Professional Body				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Failure to Protect Public Health, Safety and Welfare															
Collusion															
Mishandling of Sensitive Data (e.g. Leakages)															
Production of Fraudulent Documents (e.g. invoices & claims)															
Failure to Protect Environment															
Bribery															
Improper Relations with Other Parties (e.g. Excessive gifts)															
Abuse of Company Resources															
Abuse of Client Resources															
Discrimination and Nepotism															
Misrepresentation of Competence															
Political Interference															

1 = Not at all; 2 = Low; 3 = Moderate; 4 = High; 5 = Very High