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Clients' perspectives of professional ethics for civil engineers

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Many parties in the construction industry claim that codes of professional ethics can help mitigate the unethical conduct of civil engineers and improve the ethical level amongst construction players. However, the fact is, even though most organisations have their own codes of ethics, there still are many instances of unethical conduct in the construction industry. For this reason, this research attempted to study clients' perceptions of the impact on civil engineering works that codes of professional ethics have. Unethical conduct in the construction industry, such as fraud, bribery and collusive tendering, were addressed in 55 structured interviews. The interviews indicated the causes of the unethical conduct, as well as ways for mitigation. Finally, two models of disciplinary procedures to deal with unethical conduct were developed for the construction industry, particularly for civil engineers. One model is for non-serious unethical conduct such as "being late for work", "punching card on behalf of a friend", and "disappointing work performance", while the other model is for serious unethical conduct such as "fraud", "dishonesty", and "collusion with the other party".

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INTRODUCTION

Professional ethics is defined as a system of norms that controls both the morality and behaviour of professionals in their day-to-day practice. Professional ethics also ascribe moral responsibility not only to an individual, but to all professionals practising in a particular profession (Suen *et al* 2007; Bayles 1989; Wasserman *et al* 2000). Carey & Doherty (1968) stated that it automatically tied up with more practical concepts and expectations from the public, encompassing issues such as competence, responsibility and willingness to serve the public. The adoption of ethical principles and the enforcement of standards become matters of increasing importance to society as the number of professions and professionals increase and the work environment becomes more ethically sensitive, because the credibility of the entire profession is endangered when lapses of ethical behaviour occur. Brien (1998) feels that the problem faced by any professional community is how to regulate itself effectively to justify its autonomy, while ensuring that the clients of its members, and society as a whole, benefit from the profession's and the individual professional's actions, rather than becoming their victims.

Morton (2008) defined the construction industry as all those firms involved directly in the design and construction of building projects. The construction industry prides itself on being the provider and facilitator of global physical development through the provision of infrastructure, manpower development, resource employment, fixed capital formation and improvement of the GDP (Hillebrant 2000). Almost every profession has its codes of ethics to provide a framework for arriving at good ethical choices. Therefore, professional ethics is a system of norms to deal with both the morality and behaviour of professionals in their day-to-day practice, and to ascribe moral responsibility not only to an individual, but to all professionals practising in a particular profession. For the building and designing professions, the incalculable value of human life demands nothing less than the highest moral considerations from those who might risk it otherwise (Vee & Skitmore 2003; Chakley 1994; Hinman 1997).

PROFESSIONAL ETHICS, CONSTRUCTION INDUSTRY, AND CLIENTS

The construction industry is a "perfect" environment for ethical dilemmas, with its low-price mentality, fierce competition, and paper-thin margins. Unethical behaviour is increasingly taking a toll on the reputation of the industry (Corvellec & Macheridis 2010; Jordan 2005). Surveys conducted by researchers in Australia (Vee & Skitmore 2003) and South Africa (Pearl *et al* 2005) identified several instances of unethical conduct and ethical dilemmas in the construction industry, such as corruption, negligence,

Table 1 Advantages of a code of ethics

Advantages of a code of ethics	Mean	Rank
Let professionals know when they are in breach of statement	2,06	1
Motivate and inspire practitioners	1,92	2
Set out the ideals and responsibilities of the profession	1,84	3
Raise awareness and consciousness of issues	1,82	4
Improve ethical belief and behaviour	1,76	5
Minimise the chances of unethical or illegal act	1,73	6
Improve the profile of the profession	1,71	7
Improve quality and consistency	1,69	8
Provide guidance on acceptable conduct	1,61	9
Protection of both clients and professionals	1,59	10
Self discipline and providing standard for all staff to follow	1,00	11
* **Notes:** Rank no 1 = Most important; Rank no 11 = Least important		

Table 2 Remaining questions: Disadvantages of a code of ethics

Disadvantages of a code of ethics	Mean	Rank
What is the point of specifying responsibilities, given the limited regulatory function of a code	2,36	1
Whether the so-called standards are obligatory, or are merely an aspiration	2,20	2
Whether such a code is desirable or feasible	2,19	3
The difficulty of providing universal guidance given the heterogeneous nature of the profession	2,18	4
Whether ethical values are universal or culturally realistic	2,17	5
* **Notes:** Rank no 1 = Most important; Rank no 5 = Least important		

bribery, conflict of interest, bid-cutting, under-bidding, collusive tendering, cover pricing, frontloading, bid-shopping, and withdrawal of tender. It is evident that there are significant areas of concern pertaining to the ethical conduct of construction professionals.

Many efforts have been made to increase ethical standards and integrity among professionals in construction sectors worldwide. According to Pearl *et al* (2005), the regulatory professional acts relating to the built environment professional sector in South Africa were totally overhauled in the late 1990s, and a new suite of professional acts were promulgated in 2000 to enhance professionalism. Meanwhile, in America, the Construction Management Association of America (CMAA) has updated its code of ethics to include a wider range of professional services, as well as professional services among construction players (CMAA 2006). A Standard of Professional Conduct to govern ethical practices in the American civil engineering profession was published by the American Society of Civil Engineers (ASCE 2008). Australia has its own codes of tendering to enhance fairness and transparency (Ray *et al* 1997). There are many parties involved in the construction industry, such as clients, architects, surveyors, civil engineers, and other kinds of engineers. Codes of ethics act as control systems which are used as guidelines by the members of those parties to be more disciplined and more ethical in their professions (Smyth *et al* 2010; Johari 2001).

Clients are the people or bodies who finance construction projects and who act as a major driving force within the construction sector (Cavil & Sohail 2008; Bologna *et al* 1996). Hillebrant (2000) states that clients are the initiators of the whole process in the construction industry, and can be categorised into public sector clients and private sector clients. In the private sector, there are two types of clients. The first type comprises clients who commission projects for their own purposes. The second type comprises developers who sell or rent their developed buildings to end users. Public sector clients, on the other hand, fall into three categories, namely: a) public authorities who are running commercial or industrial buildings, although they may be subsidised by the government; b) clients who provide the infrastructure, but are not paid by the users; and c) clients who provide facilities that are paid for by the users, but not on a commercial basis. As the client is the major steering force, the involvement of the client in every aspect of the construction process is important for the project to be completed within the scope, cost and time allowed, and to the desired standard (Hillebrant 2000). The authors only partly agree with this statement, since it is debatable whether the client should be involved in all processes, as there are certainly some processes where the client should be excluded to avoid direct interference and conflict of interest, and hence possible undermining of the engineer's authority.

RESEARCH METHODS AND SCOPE

Structured interviews were conducted to obtain a consistent response from the interviewees. In the structured interview, questions were presented in the same order and with the same wording so that the interviewer could be in full control of the interview all the time. The researcher approached 55 developers from both the public and the private sectors for interviews. The interviewees consisted of 23 project managers (41,8%), 7 company directors (12,7%), and 25 executive managers (45,5%). In these structured interviews, four main issues regarding clients' perception of professional ethics in the construction industry were addressed, namely: the level of professional ethics in the Malaysian construction industry, interviewees' experiences with instances of unethical or illegal conduct in the construction industry, the causes of unethical or illegal conduct, and the ways to mitigate the occurrence of unethical or illegal conduct in the construction industry. This research limits its scope to the nation of Malaysia, but its findings could be utilised in other nations as a source of reference, for Malaysia is a member of the Commonwealth of Nations.

RESULTS OF THE STRUCTURED INTERVIEW SURVEY

Impacts of codes of ethics in the construction industry

Table 1 ranks the advantages of a code of ethics. The top three advantages that emerge are "let professionals know when they are in breach of statement", "motivate and inspire practitioners", and "set out the ideals and responsibilities of the profession". Table 2 ranks the disadvantages of a code of ethics, where "what is the point of specifying responsibilities, given the limited regulatory function of a code" is ranked uppermost. This is probably because interviewees usually apply more than one code of ethics, including the code of ethics of the general organisation and the code of ethics of their professional bodies. Sometimes this causes a dilemma for professionals in that they are

Table 3 Ranking of unethical conduct in the Malaysian construction industry

Unethical conduct	Mean	Rank
Illegal award to contractor	2,64	1
Bribery	2,59	2
Breaches of professional responsibility	2,57	3
Disclosure of confidential project baseline	2,53	4
Collusive tendering	2,47	5
Fraud	2,45	6
Negligence	2,44	7
Dishonesty and unfair behaviour	2,26	8
* **Notes:** Rank no 1 = Most important; Rank no 8 = Least important		

Table 4 Causes of unethical conduct in the construction industry

Causes of unethical act	Mean	Rank
Insufficient ethical education in schools	2,48	1
Economic downturn	2,41	2
Insufficient ethical education from professional institution	2,37	3
Demand from authority	2,27	4
Lack of training to handle non-compliance	2,23	5
Fierce competition	2,22	6
Insufficient legislative enforcement	2,10	7
Construction industry's culture	2,06	8
* **Notes:** Rank no 1 = Most important; Rank no 8 = Least important		

Table 5 Ways to minimise unethical conduct in the construction industry

Solutions	Mean	Rank
Making the unethical act a criminal activity	1,93	1
Training and programmes on professional ethics	1,85	2
Law, regulation and enforcement by the government	1,63	3
Provide good system in construction process	1,60	4
Code of ethics in organisation	1,60	4
* **Notes:** Rank no 1 = Most important; Rank no 4 = Least important		

unsure which code to follow. For instance, in some circumstances, conduct that could increase the organisation's profit is encouraged by the code of ethics of the general organisation, but is prohibited by the code of professional ethics. In this kind of dilemma, professionals have to be very watchful.

Unethical or illegal conduct in the Malaysian construction industry

Table 3 ranks the unethical conduct in the Malaysian construction industry, where "illegal award to contractor" and "bribery" are the two worst concerns, followed by "breaches of professional responsibility", "disclosure of confidential project baseline", "collusive tendering", "fraud", "negligence", and "dishonesty and unfair behaviour". According to clients' perception, "illegal award of contract" is very common, because the client is the party who offers the contracts. However, interestingly, all the interviewees preferred the word "unethical" rather than "illegal", because the latter represents a criminal activity. In the interviewees' opinion, a client has the right to award the contract to any contractor and it is not considered illegal, even though it is not the most qualified tender.

According to Table 3 "bribery" is ranked as the second worst concern. This is supported by three previous researches – Berawi *et al* (2008); Pearl *et al* (2005); and Yap (2006). During the interviews, many interviewees stated that "bribery" has become a culture in the construction industry. This statement is supported by the American Society of Civil Engineers, which reveals that corruption accounts for an estimated $340 billion each year in the construction sector worldwide (Sohai & Cavill 2008). "Dishonesty and unfair behaviour" is ranked at the bottom in Malaysia, which is not in line with the study done by Vee and Skitmore (2003), where "dishonesty and unfair behaviour" is ranked at the top in the Australian construction industry. This is probably because the transparency level in the Australian construction industry is higher than that in Malaysia, as commented by interviewees.

Table 4 ranks the causes of unethical conduct in the Malaysian construction industry, where "insufficient ethical education in schools" is at the top, followed by "economic downturn", "insufficient ethical education from professional institution", "demand from authority", "lack of training to handle non-compliance", "fierce competition", and "insufficient legislative enforcement". Although most interviewees commented that people were normally shaped during their school years, they agreed that professional institutions (through ways such as monthly meetings, codes of ethics, and regular training) should continue educating professionals to act ethically. "Economic downturn" is also one of the major causes of unethical conduct. This is because, during an economic downturn, contractors are unprecedentedly competing to "grab" a contract.

Table 5 ranks the ways to mitigate unethical conduct in the construction industry. The highest ranking for this section is "making the unethical act a criminal activity" with a mean value of 1,93. The result is associated with a study by Mason (2008) where he stated that making an unethical act a criminal activity was one way to promote ethical improvement. Interviewees stated that the law and its enforcement are very important ways to solve the ethical problems in the industry. The Malaysian construction industry had introduced many laws and regulations, but the enforcement thereof was not well implemented. One interviewee suggested that the laws and regulations need to be reviewed and amended in order to suit the current situation, because some regulations established decades ago are no longer suitable. Another interviewee suggested that, in order to improve the ethical level, the penalties imposed should be stiffer than the existing ones. The suggestion is in line with the finding from the FMI (2004) where "stiffer penalties" is one solution for unethical conduct. The interviewee further suggested that the fine should be so high that the guilty person would hardly be able to afford it. "Code of ethics in the organisation" ranks right at the bottom, the reason being, according to interviewees, that codes of ethics were meaningless without enforcement by the government and professional bodies.

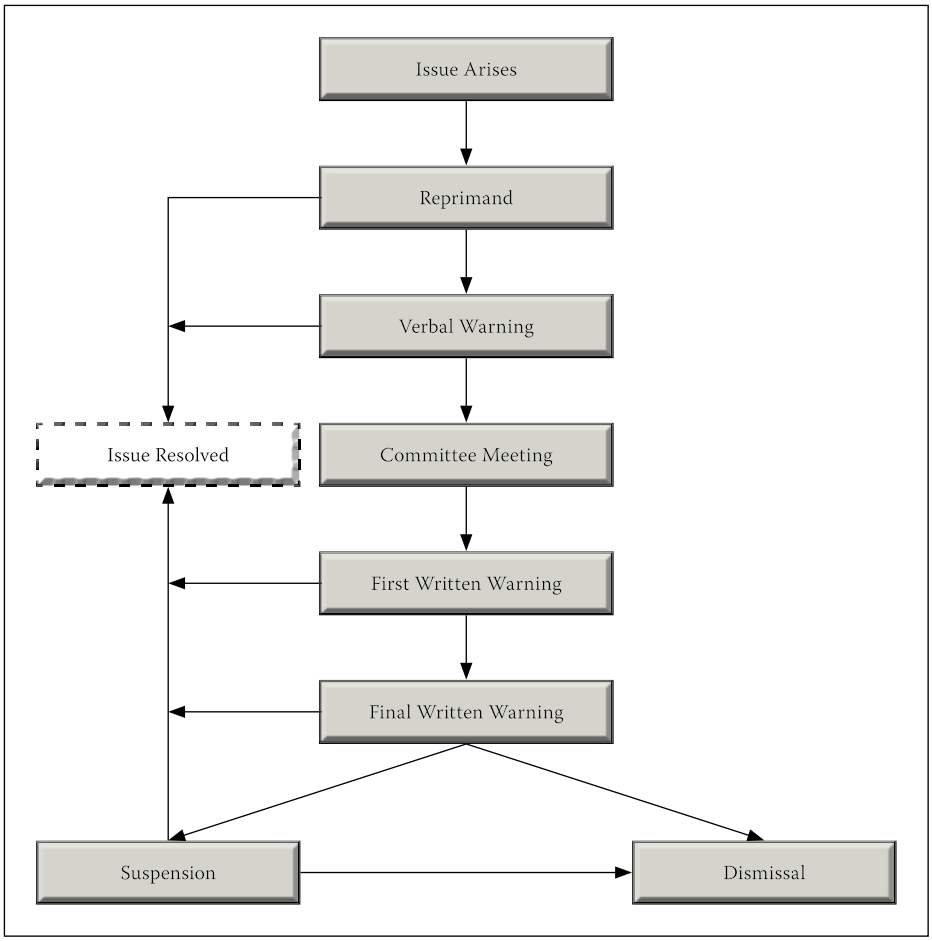

Figure 1 Disciplinary procedure model for non-serious ethical problems

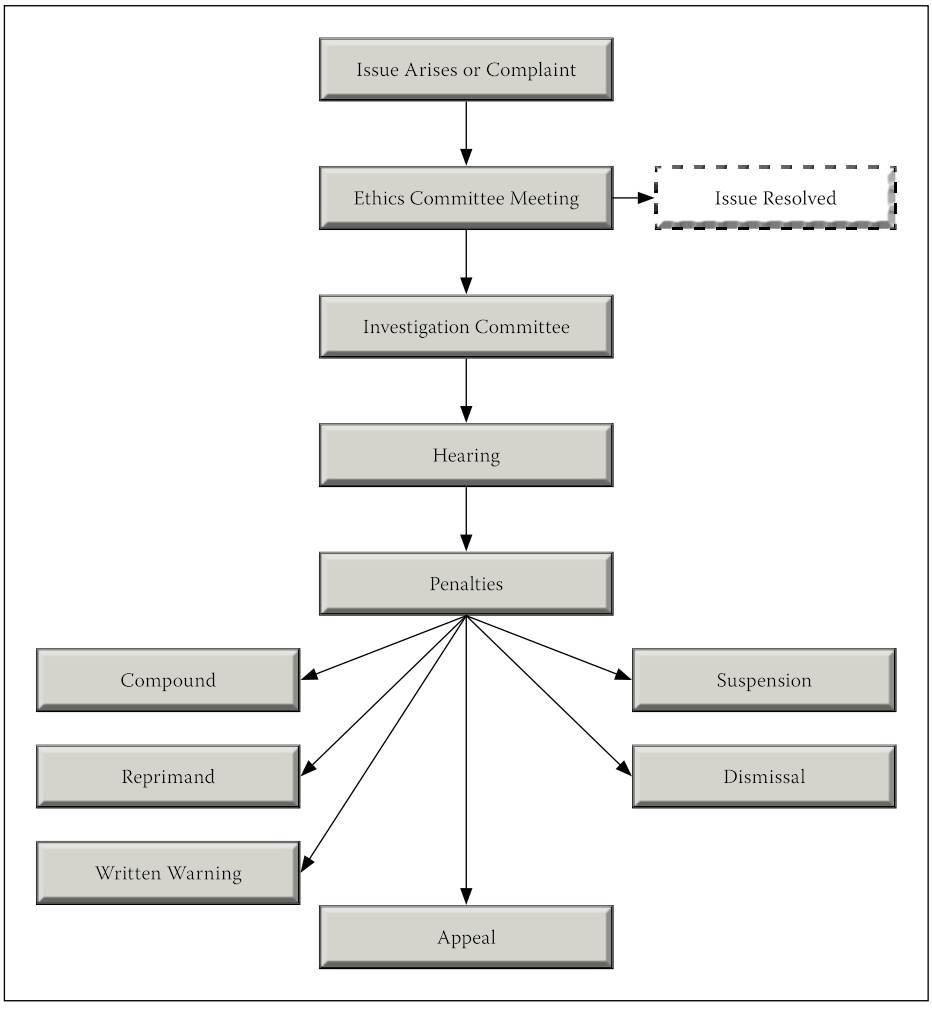

Figure 2 Disciplinary procedure model for serious unethical conduct

Models for disciplinary procedures

Two disciplinary procedure models, to deal with ethical problems in the construction industry, were developed by the authors, supported by the findings from the structured interviews. One model (Figure 1) is for non-serious unethical conduct such as "being late for work", "punching card on behalf of a friend", "disappointing work performance", and so on. Another model (Figure 2) is for serious unethical conduct such as "fraud", "dishonesty", and "collusion with another party", and so on.

In dealing with non-serious unethical conduct in the construction industry, as illustrated in Figure 1, the first step when an issue arises is to deal with it by means of a reprimand. At this stage, the employee is given opportunities to correct what he/she has done wrong. The organisation also conducts counselling sessions for this employee. Managers, supervisors, and/or directors of the organisation should be given the right to reprimand the staff member. The staff member should be given a probation period to prove his/her improved handling of ethics. The probation period suggested by interviewees should be 30 days from the reprimand date.

The supervisor or manager should proceed to the next stage ("verbal warning") if the reprimanded staff member does not show sufficient improvement by the probation expiry date. At this stage the verbal warning shall be recorded in documents. As in the case of "reprimand", "verbal warning" allows a 30-day probation period. If "verbal warning" is not effective after 30 days, the director should organise a committee meeting to address the unethical issue. The committee consisting of three to six members should determine the best approach to address the situation without affecting the smooth running of the business. After the meeting, the committee should issue a "first written warning" to the unethical staff member, and the duration for the "first written warning" should be given. The suggested probation period for this stage is 15 days from receipt of the first written warning.

The next stage, "final written warning", will be activated if the "first written warning" is not effective. Once the final written warning has been signed by the committee, a period of 15 days is granted for appeal or explanation. After 15 days, the committee has two options – either to suspend the employee or to dismiss him/her from the organisation. It is suggested that the period of suspension should be three months. The severest action in the disciplinary procedure is the dismissal.

Figure 2 illustrates the model of disciplinary procedure in dealing with serious unethical conduct. When the ethics committee receives a complaint regarding serious unethical issues, a meeting will be organised by the committee to find solutions without "reprimand" and "verbal warning". In the meeting, the complainant has to prove that the staff member has violated the code of ethics. The complainant has to bring hard evidence or witnesses to convince the ethics committee. For fairness, an investigation committee should be organised to investigate the matter.

The members of the investigation committee should be from the human resources (HR) department and should comprise three to six persons. The investigation committee is given 30 days or longer to investigate the case, depending on its complexity. When the investigation stage is complete, the "hearing" session will be organised by the ethics committee. The "hearing" session should be attended by the complainant, the staff member being accused, and members of both the ethics committee and the investigation committee. Penalties are imposed on the accused staff member during the "hearing". The specific penalty depends on the seriousness of the unethical conduct, and could include: compound, reprimand, written warning, suspension, and dismissal. After the penalty has been imposed on the staff member, he/she is given an opportunity to appeal. The staff member has to submit the appeal to the ethics committee no later than 14 days after the decision had been made.

As for more serious unethical conduct, such as "bribery" and "sexual harassment", the matter has to be forwarded to the proper authority for investigation. For example, in Malaysia, a "bribery" case has to be taken to the Malaysian Anti-Corruption Commission (MACC) for further action. This is because unethical conduct could lead to criminal / illegal activities. Such criminal / illegal activities should be reported directly to the police or to other equivalent authorities.

CONCLUSIONS AND RECOMMENDATIONS

All the participants in the structured interview survey have their own codes of ethics in their organisations. The top three advantages of codes of ethics are "making professionals aware when they are in breach of statement", "motivate and inspire practitioner", and "set out the ideals and responsibility of the profession", while the top three remaining questions for codes of ethics are "what is the point of specifying responsibilities, given the limited regulatory function of a code", "whether the so-called standards are obligatory or merely an aspiration", and "whether such a code is desirable or feasible". The research probed clients' perceptions of professional ethics in the construction industry in terms of unethical conduct, causes of unethical conduct, and ways to mitigate the unethical conduct. The five worst forms of unethical conduct, as ranked by interviewees, are "illegal award to contractor", "bribery", "breach of professional responsibility", "disclosure of project confidential baseline", and "collusive tendering". The three worst causes of unethical conduct are "insufficient ethical education in schools", "economic downturn" and "insufficient ethical education from professional institution". The three most effective ways to mitigate unethical conduct in the construction industry are "make unethical conduct a criminal activity", "training and programmes on professional ethics", and "law, regulation and enforcement by the government". Supported by these findings, two models of disciplinary procedures to deal with ethical problems in the construction industry were developed. One model is for non-serious unethical conduct such as "being late for work", "punching card on behalf of a friend", and "disappointing work performance". The second model deals with serious unethical conduct such as "fraud", "dishonesty", and "collusion with the other party". Further studies based on the trial run of these two models are strongly recommended to ensure their improvement.

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