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Pushing Elephants Uphill – Teaching Ethics. It Works!

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Abstract

Recent releases from the International Federation of Accountants (IFAC) highlight the importance of ethics education. Academic institutions employ varying methods of teaching ethics and place varying levels of emphasis on ethics teaching during a business/accounting degree. This paper attempts to evaluate whether teaching ethics to final year accountancy students is beneficial. At the commencement of a semester one class of 155 students were given five ethical scenarios on which to make an ethical decision. During the semester they were subject to three different methods of teaching ethics, a traditional lecture/tutorial; use of a computer based interactive case study to work through an ethical dilemma; and, forming groups to complete a group written assignment solving another ethical dilemma.

The subjects were subsequently given the original five ethical scenarios and asked to complete them again. In all five instances the mean responses were more ethical after the instruction methodologies (4 significantly so). When asked to evaluate the methodologies the subjects considered all three to have a positive effect on their ethical thinking and the combined effect was more positive than any individual method. Hence it appears teaching ethics can impact positively, the challenge is to find the optimal method(s).

Pushing Elephants Uphill – Teaching Ethics. It Works!

Introduction

The accounting profession has placed ethics and ethical behaviour on a new level of importance. This is evidenced by recent releases from the International Federation of Accountants (IFAC, 2006) such as IFAC's *International Accounting Education Standards Board's* (IAESB) new guidance “International Education Practice Statement (IEPS)”. This statement focuses on the implementation of good practice and maintenance of professional values, ethics and attitudes in accordance with International Education Standard (IES) 4. This increased emphasis on ethics is primarily due to accounting scandals which surrounded the failure of large corporate firms such as Enron and WorldCom. The accounting profession has subsequently received much undesirable negative attention (Molyneaux, 2004).

Accounting ethics refers to ways in which ethical principles are applied in the accounting context. Numerous empirical studies have been conducted attempting to comprehend the moral reasoning skills of accountants as well as the factors that influence ethical behaviour (Shaub, 1994; Armstrong, 1987; Eynon *et al.*, 1997; Douglas *et al.*, 2001). Studies have noted individual factors (such as demographic and psychological) and situational factors (such as organisational culture and industry regulatory environment) which have all been found to influence the ethical decision-making processes of accountants (Jones *et al.*, 2003).

This paper considers the ethical decisions of accountancy students, the practitioners of tomorrow. According to the Accounting Education Change Commission (AECC, 1990 p. 131), one of the intellectual skills required by accounting graduates is the “ability to identify ethical issues and apply a value-based reasoning system to ethical questions”. Unfortunately, past research studies have revealed conflicting results in relation to the moral reasoning abilities of accountancy students. Some of these studies are discussed below. Results of past research studies relating to the ethical attitudes of accountancy students are concerning, as it is these future accounting graduates who will play an important role in enhancing public confidence in the accounting profession. Hence, conducting a research study in this area, to determine whether or not ethics education is effective, and if so, which particular methods, appears warranted.

Objective and Motivation

The purpose of this research is to gain a better understanding of final year accounting students’ ethical decisions. Specifically, it considers the effects of different educational methods on ethical decision making. There are two major motivating factors for this study. First is the need to better understand accountancy students’ outlook on accounting ethics and the impact, if any, of ethics instruction in accountancy courses. Questions have been raised on whether ethics education is being adequately emphasised in business schools, particularly within the accounting program (Ahadiat and Mackie, 1993). Second, this study attempts to evaluate whether some instruction methods are more effective than others.

Background and Research Questions

The accounting ethics literature shows mixed evidence regarding the moral development of accountancy students. On the one hand, some research has established that accounting students tend to demonstrate lower levels of moral development than non-business students (Armstrong, 1987; Ponemon and Glazer, 1990). In a comprehensive review of past research examining the effect of discipline on students' moral development, Ponemon and Gabhart (1993) revealed a number of studies that have found accounting students receiving lower Defining Issues Test (DIT) scores than students from other disciplines. The DIT, developed by Rest (1979) is commonly used in this area of research, as the outcome criterion variable enables researchers to determine the phase of moral development of a respondent.

However, other research studies have noted contradictory findings concerning accounting students' moral development as opposed to students of other disciplines (Jeffrey, 1993; Ponemon and Glazer, 1990). Based on the suggestion of Sierles *et al.* (1980), that cheating in college is a precursor to unethical behaviour in subsequent professional settings, a number of studies were conducted to examine the ethical attitudes of accountancy students in the university context. Using general business ethical vignettes that covered a variety of topics, Cohen *et al.* (1998) found that in several cases, subjects who were from the accounting discipline were more likely to judge actions as being unethical and were less likely to take a similar action than subjects from other business and liberal arts disciplines.

Ameen *et al.* (1996) studied the responses of female and male accounting students regarding their encounters with opportunities to engage in various unethical academic behaviours (i.e. most common one being cheating). The survey results found female accounting students to be more sensitive to and less tolerant of unethical behaviours, less cynical, as well as less likely to engage in unethical academic activities than were the male accounting students. The finding of this study, which suggested male accounting students were more likely to engage in unethical academic activities than females, is additionally supported by O'Leary and Radich (2001). They found 28% of students appeared willing to cheat in an examination, with males appearing significantly more likely to do so than females. In a comparative study involving Australian and Irish students, 56% of Irish students indicated a willingness to cheat in an exam. Both the percentage of willingness to cheat in exams by Irish students and Australian students was reduced significantly when the risk of being caught was introduced (O'Leary and Cotter, 2000). This illustrates the use of consequentialist ethics approach in reaching an ethical decision.

In a comparative study of Australia, South Africa and the UK regarding accounting students and cheating (Haswell *et al.*, 1999), the major finding was concerned with the extent to which students claim they are prepared to cheat if there is no risk of detection. Unless followed up by a strong penalty, an increased risk of detection is not effective. However, a small risk of detection combined with a strong penalty can be an effective deterrent to cheating. Another international comparative study of accountancy students, by O'Leary and Mohamad (2005), also discovered cultural differences in students' attitudes towards ethical scenarios.

Many of the studies which have been conducted to analyse the ethical attitudes of accountancy students have used vignettes that pose ethical dilemmas likely to be confronted in the accounting work environment. The results from some of these studies on accounting students' ethics have been disturbing.

In a study by Cree and Baring (1991) 61% of students were found to be open to an insider-trading proposition. Almost 50% of male and 25% of female students indicated a willingness to accept a bribe if there was no risk of being caught (Haswell and Jubb, 1995). More recent studies have also yielded unsettling results. O'Leary and Cotter (2000) found that 58% of Irish students and 23% of Australian students were willing to participate in fraud. However, as the risk of being caught was introduced, these percentages plummeted significantly. Similar findings were attained by O'Leary and Radich (2001), whereby 26% of Australian students were willing to defraud the taxation office and 21% to defraud shareholders. Again, these percentages fell significantly when the risk of getting caught was introduced.

Based on the analyses and findings of past research, it can be observed that behaving ethically does not seem vital to students' attitudes to working in the accounting profession. Moreover, the only motivation for students to act ethically is if the risk of getting caught exists. But, if as mentioned above, ethics is considered a critical component of accounting education, then either the amount of time being devoted to it is inadequate or the methods being used are ineffective.

This paper therefore sets two research questions (RQ) as follows:

RQ1: Does teaching ethics to final year accounting students have any impact on their ethical decision making? And

RQ2: Are some methods of ethics instruction more effective than others for accounting students?

Research Method

Sample

One final year undergraduate accounting class, studying auditing, took part in the experiment. Enrolled numbers for the class totalled approximately 200. From these students, 155 completed the survey instrument in the first lecture. When the survey instrument was completed again in week 6 (refer to the *Procedures* section below) 118 valid responses were received. This is how the final numbers as per Table 1 were arrived at. The median age bracket for these final year students was 19-21 years and 65% were females and 35% males.

Survey Instrument

For the purpose of collecting data, five ethical vignettes were used as an instrument within the experiment. This instrument allows ethical problems to be placed in a reasonably realistic context and directs the focus on to a particular area of interest. Ethical vignettes provide significant advantages over other research instruments when investigating ethical principles and ethical behaviour (Cavanaugh and Fritzsche, 1985). Within the accounting field, numerous studies in accounting ethics have used ethical vignettes (Douglas *et al.*, 2001; Patterson, 2001). The ethical vignettes in this study similarly describe possible ethical dilemmas that may arise in an accountant's working environment.

The five ethical vignettes are all accounting-related vignettes and have been specifically developed for this study. (Refer to Appendix 1 for a copy of the first vignette from the survey instrument). All the vignettes portray a scenario in which a recently graduated accountant has spent six months in his/her first job and is faced with an ethical dilemma. The following describes the five vignettes:

Vignette 1 - describes a situation where an assistant accountant working in a chemical company is offered a once-off payment by the Chief Accountant to keep silent regarding improper accounting practices.

Vignette 2 - depicts a scenario where an accounting clerk working in a confectionary company witnesses a respected senior colleague stealing a box of chocolates.

Vignette 3 - describes a situation in which the assistant accountant, is being presented with the opportunity to falsify his/her resume application for a job.

Vignette 4 - illustrates a scenario in which a trainee accountant is being pressured to inflate travel expenses for reimbursement.

Vignette 5 - depicts a situation whereby a trainee accountant is being pressured to make necessary adjustments to a client's accounts, in order for a bank loan to be approved.

At the end of each of the five scenarios, students were asked to select one response from five alternatives (Appendix 1). Although the five responses in each of the scenarios are tailored to the particular ethical dilemma, the first response in all scenarios always represented the response to act *highly unethically*; the second response to act *unethically*; the third response to act *neutral*; the fourth response to act *ethically*; and the fifth response to act *highly ethically*. The *highly ethical*

response involved going beyond just doing the right thing. It entailed becoming a whistleblower on the perpetrator(s) of the unethical behaviour.

Procedures

The survey instruments (SIs) were distributed as follows. At the first lecture in a final year Bachelor of Business subject (*Auditing*) a copy of the SI was distributed to each individual and they were advised to complete them individually and hand them up during the lecture break. They were told it did not form part of the assessment procedures for the subject, that there were no right or wrong answers and they were to answer according to how they genuinely felt at the time. Completion of the survey instrument took approximately 10 minutes. This distribution yielded the 155 *pre* instruction responses.

The first lecture consisted of a one hour introduction to auditing and then a one hour lecture on ethics in auditing. This included an introduction to the Code of Ethical Conduct of the professional accounting bodies in Australia, a discussion of ethical theory and examples of unethical accounting practices. The students were set readings from their text and questions on ethics to be answered in the following week's tutorial. This lecture/tutorial combination comprised ethics instruction method number 1.

In the second week of the course the students were given a one hour lecture on how to solve an ethical dilemma using a six-step model explained in their textbook. Their tutorial work for the following week was to work through an interactive computer based (CBE) ethics training case study, formerly used as an instruction instrument by

the Institute of Chartered Accountants in Australia as part of their training programme. They had a week to work through the CBE tool and present a one page memo as to their recommended solution to the problem (an opinion-shopping request). This they did as individuals and this comprised ethics instruction method number 2.

In the third week of the course students were given a group assignment. They were to form groups of 3 students and present a full written assignment (6 pages approximately) answer to two ethical dilemmas, a confidentiality dilemma and an independence issue. They were given two weeks to complete the assignment. This group written assignment comprised ethics instruction method number 3. All formal ethics instruction ceased as part of the *Auditing* unit at this point.

In week six of the course, after the students had handed up their assignment previously, the students were given the same survey instrument they had received in week 1. This was a total surprise to them in that they had not been told they would be doing it again, when doing it in week 1. Again it was stressed to them it did not form part of the assessment procedures for the subject, that there were no right or wrong answers and they were to answer according to how they genuinely felt at the time. This distribution yielded the 118 *post* instruction responses assessed as per Table 1. The last page of the SI then asked them to rank the three teaching methods they had been subject to, and the overall impact of all methods, on a nine point scale. The bottom end of the scale represented a response stating the ethical teaching had made them inclined to act more unethically than previously, the mid-point (5) represented a response stating the ethical teaching had no effect on their ethical attitudes. Finally,

the top of the scale represented a response stating the ethical teaching had made them inclined to act more ethically.

Results

Table 1 provides a summary of the mean responses to the five vignettes *pre* and *post* the three instruction methods.

Table 1 – Comparison of Means Pre and Post Ethics Teaching Methods							
		N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Scenario 1	Pre	155	3.9290	1.20124	-1.644	271	.101 n/s
	Post	118	4.1525	.98386	-1.689	269.522	.092 *
Scenario 2	Pre	154	3.6429	.94058	-.116	271	.908 n/s
	Post	119	3.6555	.82787	-.118	266.391	.907 n/s
Scenario 3	Pre	155	2.5871	.88851	-3.292	271	.001 ****
	Post	118	2.9237	.76412	-3.359	266.946	.001 ****
Scenario 4	Pre	154	3.1558	.99100	-2.265	270	.024 **
	Post	118	3.4407	1.07451	-2.241	240.945	.026 **
Scenario 5	Pre	155	3.4387	1.24881	-3.014	270	.003 ***
	Post	117	3.8889	1.18014	-3.038	256.784	.003 ***

**** = significant at .001, *** = significant at .01, ** = significant at .05, * = significant at .10, n/s = not significant.

In all five instances the mean score was higher for each scenario after the instruction methods. Four responses are statistically significantly different and the fifth is in the same direction. This would tend to suggest that after considering the importance of ethics in accounting, the students considered a more ethical response to an ethical vignette than had they not been exposed to the importance of the topic. Hence it would appear as if RQ1 can be answered in the affirmative.

When asked about the effectiveness or otherwise of the three instructional methods, participants again rated all three as effective and the combined effect even more so. Table 2 lists the results of this test. The mid-point of the nine point scale (5) was set up as a dummy response indicating zero impact on attitudes. The respondents then rated the three instruction methods and a combined overall effect, as significantly greater than the mid-point.

Table 2 - Accountancy Students Assessment of Effectiveness of Ethics Teaching						
Method	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
(Dummy Variable – zero effect)	119	5.0000	.00000			
Lecture/Tutorial	119	6.2521	1.33543	51.07	118	.000 ****
CBE Case Study	119	5.5882	2.03533	29.95	118	.000 ****
Group Assignment	119	6.6639	1.63270	44.52	118	.000 ****
Overall combined effect	118	6.7119	1.12548	64.78	117	.000 ****

**** = significant at .0001.

Hence, as regards RQ2, it would appear the participants considered all three methods effective. Interestingly, the combined effect of all three appeared to have a greater impact than any one individual method.

Discussion

Considering RQ1 first, it would appear as if there is indeed a place for ethics education in accountancy courses. Inclusion of ethical components may not be simply altruistic. They appear to have had a positive impact on the students in this study. Every attempt was made to protect the validity of the study, subject to the limitations noted below. The answers to the survey instrument were not part of the assessment

procedures for the unit. It was continually stressed to students their responses were to be what they considered they would do, not what they considered should be done. There was no benefit of any kind for a student to give any answer other than the one they considered relevant. A significant time period was allowed to lapse between when the students were being instructed in ethics and when they completed the SI for the second time.

The researchers had anticipated the ethical instruction methods would not have had any impact on ethical attitudes. It was considered final year accounting students, most of whom have had significant “real world” experience with part time work etc. by the time they get to their final year, would have their ethical values thoroughly formed. As earlier studies - some referred to in the literature review - have established, ethical attitudes are significantly affected by individual factors (such as demographic, cultural, religious and psychological) and situational factors (such as organisational culture). Most of these influences impact significantly on individuals well before they reach the final year of their university degree. It was anticipated their ethical attitudes would have been strongly developed and a few weeks of instruction would be unlikely to impact them to a significant degree. The results tended to suggest otherwise however. Ethical behaviour in an accounting context was positively impacted upon in all five scenarios, four of them significantly so. This would tend to suggest there is benefit in including ethics teaching and indeed emphasising its importance in accountancy courses. This then leads to the second research question, are some methods better than others?

Considering RQ2, Table 2 would tend to suggest all three instruction methods had a positive impact on students' ethical attitudes. Due to the basic nature of the measuring procedure it would appear dubious to say that just because method number 3 had a higher mean difference than the other two, that it was the best method. Additional research in this area – discussed below – would appear necessary before that definitive conclusion could be reached. However all three were assessed as having a positive impact. Interestingly, the combined effect had a greater impact than any of the individual items. This would tend to suggest a slow continuum of relevant instruction may be a more effective method of getting the ethics message across than any intensive instruction technique(s).

It is also interesting to note that the most effective method of improving ethical attitudes – bearing in mind the measurement limitation mentioned above – appeared to occur when students considered ethical issues with their peers, rather than any instruction from an outside “expert” or sophisticated educational tool (CBE) in the area. This raises the question of whether or not ethics is one of those areas best studied with peers as opposed to independent expert facilitators. Again this is referred to below as a potential future area for research.

Summary and Conclusion

One of the greatest challenges facing the accounting profession today is maintaining exemplary ethical standards. It follows therefore that one of the greatest challenges for accounting academics is how to get the ethical message across to accountancy students, the practitioners of tomorrow.

This study examines whether or not ethical instruction is effective within an accountancy course and if so, which methods are the most effective. Results would tend to suggest, ethical instruction can indeed impact positively on accountancy students' ethical attitudes. A combination of teaching techniques yielded significantly positive results in the main. Some methods appear more successful than others and learning from peers appeared to have more of a positive impact on students than learning from outside experts in the area. Additional research in this area would therefore appear justified.

Limitations

There are two main limitations to this research study. Firstly, the relatively small sample size may not be considered to be representative of the overall population that is the accountancy student population, although there are no reasons to believe that the students who participated from this university are any different from students from any other universities. As a result, the generalisability of the results to the final year accountancy students of other universities is unclear. Secondly, in terms of the responses to the ethical vignettes, whether the responses are true reflections of what the participants would really do in a real situation is a factor which will remain unknown. However, there are no reasons to believe that students would react differently to the ethical vignettes than to a real life situation. The findings of this research study must therefore be read in light of these limitations.

Future Research

Where this paper leads academic instructors is the most important outcome of this research. Results tend to suggest teaching ethics can be effective and some methods are possibly more effective than others. Indeed a combination of methods may achieve more than any one individual method, no matter how effective that individual method appears. It would appear beneficial therefore to continue research into this area. Specifically, future research could focus on: better ways of measuring ethical attitudes and changes therein; better methods of comparing the various methods and evaluating differences; and even developing new methods of teaching ethics.

Appendices

Appendix 1 – Example of Ethical Vignette (Extracted from Survey Instrument)

ETHICAL SCENARIO # 1

1. You have completed your business degree and have spent six months in your first job, as assistant accountant in a chemical company involved in various research and development projects. Projects that have high probabilities of earning sufficient future revenue to cover costs are capitalised. You find out that one particular research and development project, already capitalised, has serious doubts regarding its ability to generate sufficient future revenue. You confront your superior, the chief accountant, who reluctantly admits to this fact. You soon learn the chief accountant's bonus is performance-related based on the company's annual profit, so you become suspicious of his motives for not writing off this and other doubtful projects. The chief accountant becomes concerned this matter troubles you and offers you an annual payment of \$10,000 - 25% of your annual salary - for your silence.

Please circle one option:

Would you:

- (1) Accept the offer and keep silent?
- (2) Accept the offer for one year, but insist it finish then?
- (3) Decline the offer and tell no one?
- (4) Decline the offer and encourage your boss to confess to the directors (but inform him you won't pursue the matter if he doesn't)?
- (5) Decline the offer and report to the directors of the company?

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