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Empirical Evidence of Group Impact in the Context of Ethical Decision Making.

ABSTRACT

Recent accounting scandals involving the collapse of large corporate firms have brought into question the adequacy of ethics education within accounting programs. This paper investigates the ethical decisions of accountancy students and in particular analyses the effect of *group* (as opposed to *individual*) decision-making on ethical decisions. Two classes of final year accountancy students were presented with five (5) ethical vignettes which they completed as individuals. The two classes were subsequently divided into groups of 3 participants and each group completed the same survey instrument. Group responses yielded a significantly more ethical attitude in three of the five scenarios, the other two displaying no significant difference. Evidence also exists however of groups restraining potential whistleblowing, suggesting group work can have both a positive and negative effect.

The critical implication of this finding is in relation to how accounting educators attempt to convey the ethical message. Many accounting programs place emphasis on group work. Group work may enhance students' abilities to work as a team and may be an effective means of producing the optimal decision in complex areas such as ethical decision-making but may on occasion retard highly ethical individuals

Key words:

Ethics, final year accountancy students, training, whistleblower.

INTRODUCTION

Background

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 examines the effects of a situational factor, group situation, on 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. While some studies have found accounting students to have a higher moral development than students of other disciplines (Jeffrey, 1993), others found accounting students to exhibit lower levels of moral development in comparison to non-business students (Armstrong, 1987; Ponemon and Glazer, 1990). More recently, a study by O’Leary and Radich (2001) on the ethical values of Australian final year accountancy students found that in their attitude to working in the profession, acting ethically does not always appear paramount.

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 means for improvement 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 will analyse the effects of individual versus group situations 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. As the public's level of awareness about the consequences of unethical behaviour by accounting practitioners heightens, questions have been raised on whether ethics education is being adequately emphasised in business schools, particularly within the accounting program (Ahadiat and Mackie, 1993). By understanding the ethical position of accountancy students, ethics education can be better incorporated within the accounting program. Second, the conflicting results of prior studies in the area (discussed below) tend to suggest a need for further research. This research study will therefore contribute to the limited literature on ethical group decisions in an accounting context.

Organisation of paper

The next section presents a literature review of prior research in the area. A hypothesis is then developed and the research design outlined. Subsequent sections analyse the findings, discuss the results, recognise limitations and identify areas for future research.

LITERATURE REVIEW

Although numerous studies have looked into factors affecting ethical decisions (Ferrell and Gresham, 1985; Trevino, 1986; Hunt and Vitell, 1986; Dubinsky and Loken, 1989), definitions of the terms ethical and unethical have not been provided. For the purpose of this paper an ethical decision is defined as a “decision that is both legal and morally acceptable to the larger community” whereas an “unethical decision

is either illegal or morally unacceptable to the larger community” (Jones, 1991 p.367). The nature of the accounting profession, which emphasises the accountants’ prime allegiance to the public, deems this definition to be relevant.

An individual ethical decision-making and behaviour model developed by Rest (1979) provided the context by which many empirical research studies were conducted. This four stage model highlights the path individuals typically progress through when making ethical decisions. The stages are: (i) recognise moral issue; (ii) make moral judgement; (iii) establish moral intent; and (iv) engage in moral behaviour.

Factors Influencing Ethical Decisions

Rest’s (1979) model of ethical decision-making paved the way for the development of several other ethical decision-making models. In developing these models, the authors identified contingent factors that are believed to affect the decision maker and subsequently, the decision itself. Ferrell and Gresham (1985) listed individual factors (knowledge, values, attitudes, and intentions) and organisational factors (significant others and opportunity) which affect ethical decisions. Hunt and Vitell (1986) identified environmental factors (cultural, industrial and organisational) and personal experiences as affecting decisions and behaviour. They incorporated these in their development of an ethical decision making model.

Brommer *et al.* (1987) listed over 20 variables believed to be relevant to ethical decision making. These can be grouped under the major factors of environmental (work, personal, professional, governmental, legal and social) and individual (demographic and psychological factors). Shifting from the individual and

environmental factors repeatedly identified in previous ethical decision-making models, Jones' (1991) ethical decision-making model proposes that a moral judgement is contingent upon the ethical issue rather than influential factors. Ford and Richardson (1994) in their review of the empirical literature on ethical decision-making summarised influential factors into two distinct categories of individual and situational factors.

A large proportion of the empirical studies examining factors influencing ethical decisions have focussed on *individual* factors. The individual factor is comprised of attributes that are unique to the decision-maker and covers two main features namely, demographic and psychological. Variables such as age and gender, national and cultural characteristics, religion, education, and employment comprise the demographic feature (Fisher and Lovell, 2003). Despite yielding mixed results among these variables, some studies have provided evidence of the influence of these variables on ethical decisions (Serwinek, 1992; Ameen *et al.*, 1996; McNichols and Zimmerer, 1985; Arlow and Ulrich 1980; Jones and Gautschi, 1988; Borkowski and Ugras, 1992). Psychological factors, which examine variables such as individuals' cognitive processes and locus of control have also been shown to influence ethical decisions (Trevino and Youngblood, 1990). Generally, the findings of several studies in the area have yielded mixed results as to the influential strength or otherwise of individual factors.

Group Decisions

Significant events which have impacted on the way organisations operate and make decisions, have included the increased use of teams/groups in organisational decision-

making (Schminke, 1997; Eisenhardt *et al.*, 1997). Emphasis on the importance of teams is on the rise for organisations wanting to achieve success in the changing modern economy (Cohen and Bailey, 1997). Empirical literature in group decision-making indicates that on average, group judgements have been shown to be more accurate and generally more confident than individual judgements (Holloman and Hendrick, 1971).

The superiority of group decision-making over individual decision-making is attributed to factors such as: the opportunity for group members to interact, thereby having a greater pool of abilities and insights; increased error checking and quality control; and eliciting and provoking new thoughts (Steiner, 1972). This highlights the *information load* theory which suggests that groups outperform individuals due to an improved decision consistency within the group and the ability of groups to process a high information load better than individuals (Chalos and Pickard, 1985).

However, on tasks with considerable intentional depth, groups are typically outperformed by their most capable members, suggesting the inability of interacting groups to utilise the full potential resources of their members (Hall *et al.*, 1963; Holloman and Hendrick, 1971; Hill, 1982). Thus it appears that groups arrive at a compromise decision which is shy of the best members' performance, but still better than the averages of the members of the group (Sniezek and Henry 1989; Rohrbaugh, 1979). This compromised decision may be attributed to a phenomenon known as *groupthink*.

Groupthink, a social psychology concept, is characterised by excessive efforts to reach agreement, and a strong need for group consensus that can override the group's ability to make the most appropriate decision (Janis, 1982). One of the signs of groupthink includes group members' tendency to feel increasing pressure to agree with others in the group, which as a result, produces a decision that is believed to be the consensus of the group. The fear of appearing foolish among others causes group members to restrain from expressing extreme ideas or opinions during group discussion (Whyte, 1956). This validates groups to be powerful sites for changing the thoughts and actions of individuals as many studies have proven (McGrath, 1984).

Group Ethical Decisions

In terms of ethical decisions, limited evidence exists as to whether group ethical reasoning is superior to individual ethical reasoning. Evidence comparing the ethical reasoning between group and individual was provided by Nichols and Day (1982), Abdolmohammadi *et al.* (1997) and more recently, Abdolmohammadi and Reeves (2003). These three studies used the Defining Issues Test (DIT) developed by Rest (1979). The DIT was developed "based on the premise that people at different points of development interpret moral dilemmas differently, define the critical issues of the dilemmas differently, and have intuitions about what is right and fair in a situation," (Rest, 1986b, p.196)

Nichols and Day (1982) provided evidence that group decisions were influenced by higher scoring (on the DIT) individuals who presumably shifted less in their decision i.e. the group decision was influenced by the dominant members. Abdolmohammadi *et al.* (1997) noted mixed results. They discovered interacting groups typically were

outperformed by their most capable members. Also they noted the average improvement – after instruction - for groups was less than that for individuals. Abdolmohammadi and Reeves (2003) concluded the finding of group decision-making being superior to individual decision-making may be valid for some decision making situations but may not extend to ethical reasoning.

Ethical Behaviour of Accountancy Students

The accounting ethics literature shows mixed evidence regarding the moral development of accountancy students. 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). However, other research studies have noted contradictory findings concerning accounting students' moral development as opposed to students of other disciplines (Jeffrey, 1993).

As regards gender effects, Ameen *et al.* (1996) found female accounting students to be more sensitive to and less tolerant of unethical behaviour, less cynical, as well as less likely to engage in unethical academic activities than were male accounting students. The finding of this study is supported by O'Leary and Radich (2001). They found male students appearing significantly more likely than females to cheat in an examination.

The impact of nationality on ethical decision making of accountancy students was considered in a comparative study involving Australian and Irish students. O'Leary and Cotter (2000) noted Irish students indicated a significantly greater willingness to cheat in an exam. The percentage of willingness to cheat in exams by both Irish and

Australian students was reduced significantly when the risk of being caught was introduced. 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.

In a study by Cree and Baring (1991) a significant proportion of students was 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. 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.

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.

HYPOTHESIS AND RESEARCH DESIGN

Development of Hypothesis

As previously discussed, moral judgement can be made according to consideration of consequences, rights, duties and virtues. Whether or not these theories are used and how they are used by an individual, depends on various factors that influence the decision-making process. When examining group decisions, certain phenomena such as groupthink – discussed above – can become influential.

As noted above, several empirical studies on *general* decision-making have shown groups to make superior decisions when compared to individuals (Holloman and Hendrick, 1972). However, in terms of the effect of groups on *ethical* reasoning and subsequent ethical decisions, limited empirical studies have been conducted and the results have been somewhat inconsistent, as noted previously. The lack of consensus within the findings therefore leads to the research hypothesis (RH) being stated as follows:

RH: There will be no differences in the ethical responses of groups and individuals to ethical vignettes.

Instrument

For the purpose of collecting data, five ethical vignettes are 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 Fritzche, 1985) and are a common tool used in business ethics research (Baumhart, 1968). 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. A total of five ethical vignettes are used in determining whether working in groups affects the ethical decisions of accountancy students.

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*. Consistent with the definition adopted for this study (Jones, 1991 p.367), an *ethical* response represents the response that is both legally and morally acceptable to the larger community. In all five vignettes the *highly ethical* response involved going beyond just doing the right thing and becoming a whistleblower on the perpetrator(s) of the unethical behaviour. The *neutral* response involved ignoring the unethical activity and not getting involved and the *unethical* responses involved participating in unethical behaviour to a varying degree – either on a once off basis (unethical) or permanently (highly unethical).

Participants

Two final year undergraduate accounting classes took part in the experiment. Enrolled numbers for the two classes totalled approximately 380. From these students, 239 individual and 104 group responses were received (groups of 3 students). From the individual responses 65% were females and 35% males. The median age bracket was 19-21 years.

Procedure

The survey instruments (SIs) were distributed as follows. At the first lecture in each of these subjects 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. This yielded the 239 individual responses. A week later, at the first tutorial class for each of these subjects, participants completed the survey instrument in groups of 3. This yielded the 104 group responses. Participants were informed that there were no right or wrong answers and that responses were anonymous. Completion of the survey instrument took approximately 10 minutes. No rewards were offered for participation.

Analyses

The tests conducted in this study are a *t-test* for statistically significant differences in the means of the individual versus group responses. Frequency distributions were then plotted and graphed to further assist in interpretation of the raw data.

RESULTS AND DISCUSSION

Table 1 summarises the responses of individuals and groups to the five scenarios, in raw data form. The numbers represent the frequency of the response to each scenario, while the bracketed numbers represents the proportion of responses (i.e. in percentage %). This raw data was then subject to appropriate analysis as follows, to assist its interpretation.

Insert Table 1 here

Statistical Analysis of Results

Due to the categorical nature of the responses (ordinal scale 1 to, 5), an independent samples *t-test*, comparing the means was deemed as the appropriate method for analysis (Huck *et al.*, 1974). Table 2 lists the *t-test* results of individuals versus groups in relation to the 5 scenarios. The differences between the means were found to be statistically significant in three of the five scenarios, with group responses demonstrating a higher level of ethical behaviour for scenarios 3 to 5. The difference between responses for the first 2 scenarios was insignificant. This would tend to suggest working in groups had a significant impact on individual accountancy students when considering the ethical scenarios. Group responses were more ethical overall in 3 cases and insignificantly different from individuals in the other two. Rather than just accepting that groupwork resulted in the mean answer shifting significantly upwards, a further breakdown and analysis of the raw data was conducted.

Insert Table 2 here

Frequency Distribution

Frequency distribution, a descriptive statistic describing one variable (Neuman, 2003) was therefore conducted. The observations falling into each of the five possible responses, acting *highly unethically*, *unethically*, *neutral*, *ethically* and *highly ethically* for all of the five scenarios were analysed. An analysis of each of the

independent variables' responses, that is individuals versus groups was performed and plotted on bar-graphs for comparison. (Appendix 2 presents the comparative bar-graphs of all five scenarios).

An analysis of the individuals versus group response comparative bar-graphs revealed more interesting results than just a shift in the overall mean, as indicated by the *t-test* analysis. The same pattern did not emerge in all five cases. Firstly, consider the three scenarios for which statistically significant differences were discovered, scenarios 3,4 and 5. Reviewing the differences in the bar graphs as per Appendix 2, or by simply analysing the raw data percentages in Table 1, it can be seen that the excess percentages of unethical (combining *highly unethical* and *unethical*) and neutral responses for individuals, shifted to the right to become ethical responses (combining *highly ethical* and *ethical*) in the group percentages. For example considering responses to scenario 5, individual unethical and neutral responses ($8.4\% + 17.6\% + 13.8\% = 39.8\%$) were greater than group unethical and neutral responses ($6.7\% + 11.5\% + 6.7\% = 24.9\%$) by 14.9%. This 14.9% of individuals "shifted" to a more ethical stance in a group context as evidenced by the fact that group ethical responses ($45.2\% + 29.8\% = 75.0\%$) exceeded individual ethical responses ($41.0 + 19.2\% = 60.2\%$) by that 14.9% (minor difference due to rounding). This would suggest that group work "reined in" individuals who considered the unethical options and succeeded in getting them to agree to a neutral stance or even better, an ethical option. Similarly group work appears to have encouraged neutral individuals to actually do something ethical rather than just not get involved. Generally, the same pattern emerged in scenarios 3 and 4.

However, to reach the conclusion that group work always results in a more ethical decision, because the means were higher, is fallacious, as an examination of the graphs and raw data for scenarios 1 and 2 demonstrates. In both these instances groups again appear to have “reined in” the *highly unethical* individuals (7.1% and 5.4% falling to 1.9% and 4.8% respectively). Unfortunately, groups also appear to have “reined in” the highly ethical individuals. The percentages of individuals willing to become whistleblowers in scenarios 1 and 2 fell significantly when put in a group situation, from 41.4% to 29.8% and from 20.1% to 16.3% respectively. In these two scenarios group responses pulled in extreme individuals and group answers tended to cluster in the neutral and ethical response areas. This would tend to support the concept of *groupthink* discussed previously in the literature review, i.e. groups come to a consensus response rather than the optimal response.

Discussion of Results

For three of five scenarios, there is statistical evidence that group decision making resulted in a more ethical decision than the one chosen by individuals. This does not support the RH proposed above, which was stated in the null and so did not anticipate a difference. However, to state therefore that the RH can be conclusively rejected is not valid, because a consistent pattern of behaviour did not emerge in all five scenarios. In two of the five scenarios groups appeared to reach a more consensus/compromised decision, most probably due to the increasing pressure to agree with others. The results of these two scenarios support the notion that *group* decision results in a compromise decision, with groups opting for the middle or

consensus option. If this stops individuals from becoming whistleblowers, this cannot be described as the best ethical answer.

This pattern supports the results of earlier studies such as Sniezek and Henry (1989) and Rohrbaugh (1979) as covered in the literature review. These studies noted moderate support for the rejection of the RH but certainly no conclusive findings.

Implications of Findings

Analysis of the results allows for a comparison of individual and group responses to ethical vignettes. The results partly support the notion that there is a difference between individuals and groups, in that groups provided a more ethical response in three of five scenarios. However there is also evidence to suggest on occasion group work results in a less than optimal ethical decision being reached. The concept of *groupthink* appears to have exerted a significant effect on group responses in two scenarios. Groups appear to reach a ‘consensus’ decision rather than the ‘best’ decision, in an ethical context. This results support the findings of some previous studies.

The implications of this research study are therefore quite significant. Producing graduates who can contribute effectively as citizens, leaders in the wider community, and competent professionals within the chosen discipline is a stated commitment of most Tertiary Institutions. In achieving this, graduate capabilities (generic skills) have been incorporated within undergraduate courses. The purpose of articulating graduate capabilities within courses is to develop capabilities which both the employers and the University believe essential for graduates entering the work force. As one of the

graduate capabilities developed in most Universities is demonstrating the ability to work collaboratively, most undergraduate accountancy courses incorporate group work. While group work may enhance the ability of graduates to work as a part of a team, the findings of this study tend to suggest group work may not always be an effective means of producing the best decision in an **ethical** context.

This implies the need to reconsider the assessment procedures of subjects with an ethical content. Assessment pieces which require groups to derive an ethical decision may need to be reconsidered. Groups on occasion certainly arrived at a more ethical decision than individuals but on other occasions groups appear to reach a 'neutral' rather than 'best' decision, when it comes to ethical scenarios. Group behaviour does appear to some extent to "rein in" unethical individuals. Unfortunately group behaviour may also "rein in" ethical individuals especially potential whistleblowers.

SUMMARY AND CONCLUSION

The objective of this research study was to examine factors impacting on ethical decisions of accountancy students, especially group work, as current accounting graduates will play an important role in the future of the accounting profession. On three of five occasions, group work was found to result in better ethical decision making than individual work. On two occasions, unethical behaviour was curtailed by groupwork as opposed to individual decision making, but highly ethical behaviour, whistleblowing, was similarly constrained. This may not necessarily be the better ethical decision. Individuals free from the constraints of group pressure appear more

inclined to take a more ethical stance, such as become a whistleblower, when faced with an ethical dilemma.

The findings of this study therefore have significant implications. In most undergraduate accountancy courses in Australian universities, group work forms a significant part of the assessment procedures. But should this continue to be encouraged as regards ethical studies? If the results of this study are to be believed, group study in an ethical context does not always result in the best answers. The concept of 'groupthink' appears to occasionally drive students to reach a compromise answer. Academic instructors may therefore need to reconsider how ethics is taught and assessed at undergraduate accountancy level.

Limitations

There are two main limitations to this research study. Firstly, the sample, drawn from one university, 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 be read in light of these limitations.

Future Research

Firstly, a more focussed research could be conducted into the process of group ethical decision-making. In this research study, it was found that groups occasionally arrived at a consensus decision. However, whether a dominant individual steered the group to a particular decision is unknown. Hence further research may be conducted to address this issue. This could be done by recording the discussions of the groups or by distributing an exit questionnaire following the discussion to ascertain individual views of the group discussion. Certainly, more research into how ethics are taught (individually or in groups) appears justifiable. Second, expansion of the the current experiment to ascertain if the findings remained consistent as students from other Institutions are tested would appear beneficial.

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.

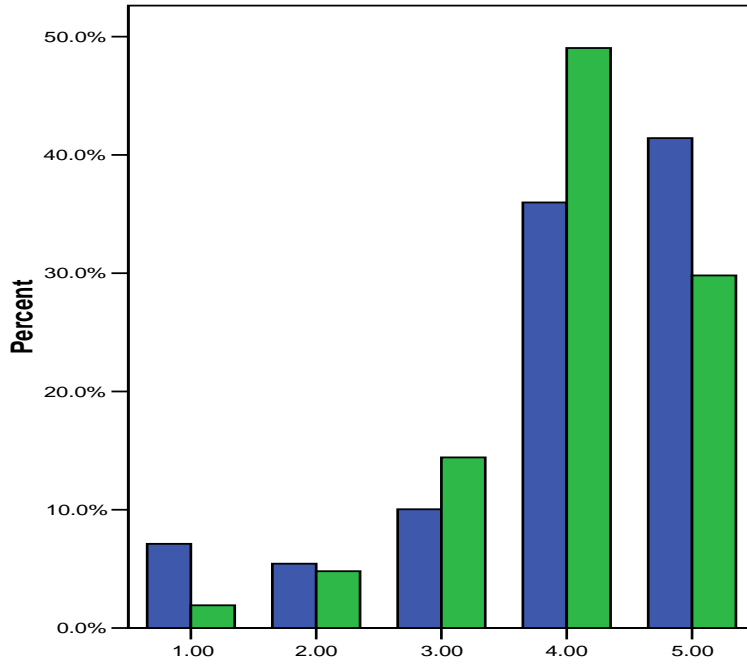
Please circle one option:

Would you:

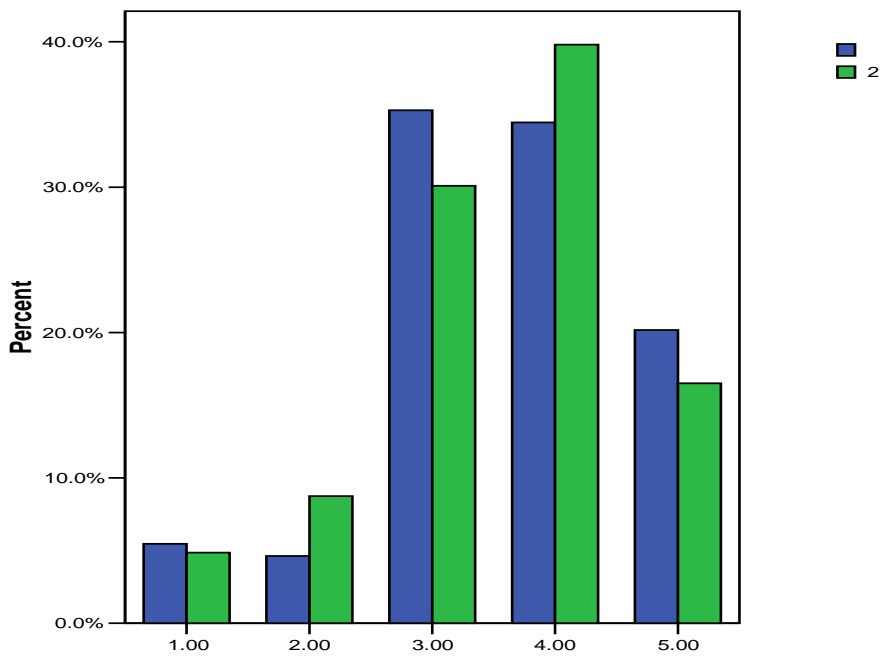
- (1) Accept the offer and keep silent?
- (2) Accept the offer for one year, but insist it finish then?
- (3) Decline the offer and tell no one?
- (4) Decline the offer and encourage your boss to confess to the directors (but inform him you won't pursue the matter if he doesn't)?
- (5) Decline the offer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

Appendix 2 - Frequency Distribution Graphs

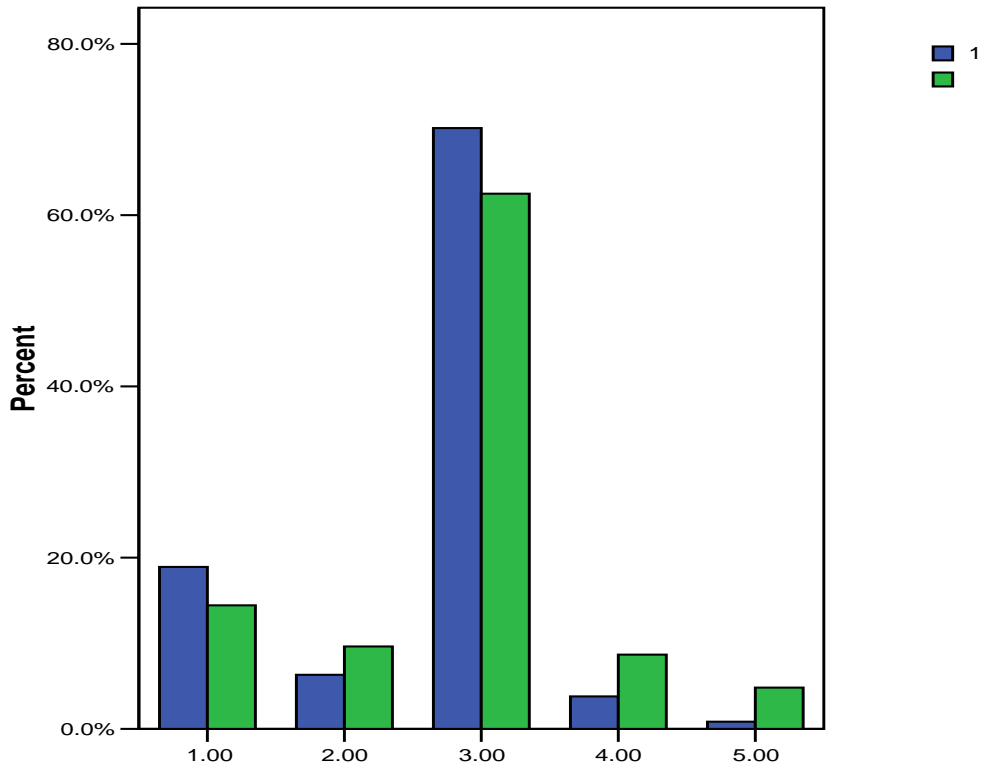
Scenario 1*



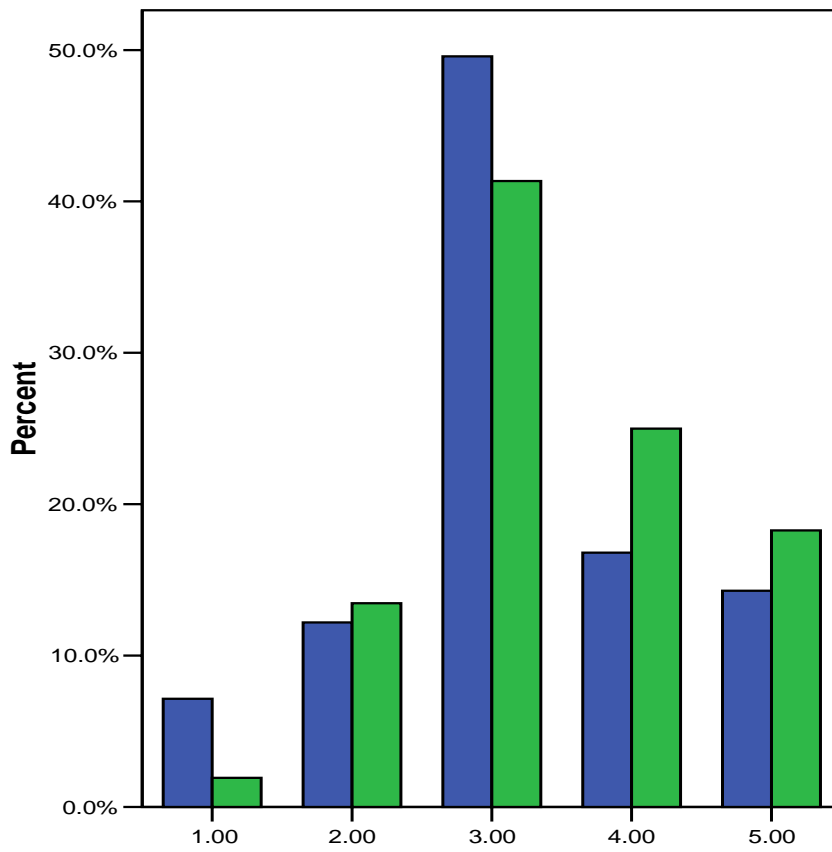
Scenario 2*



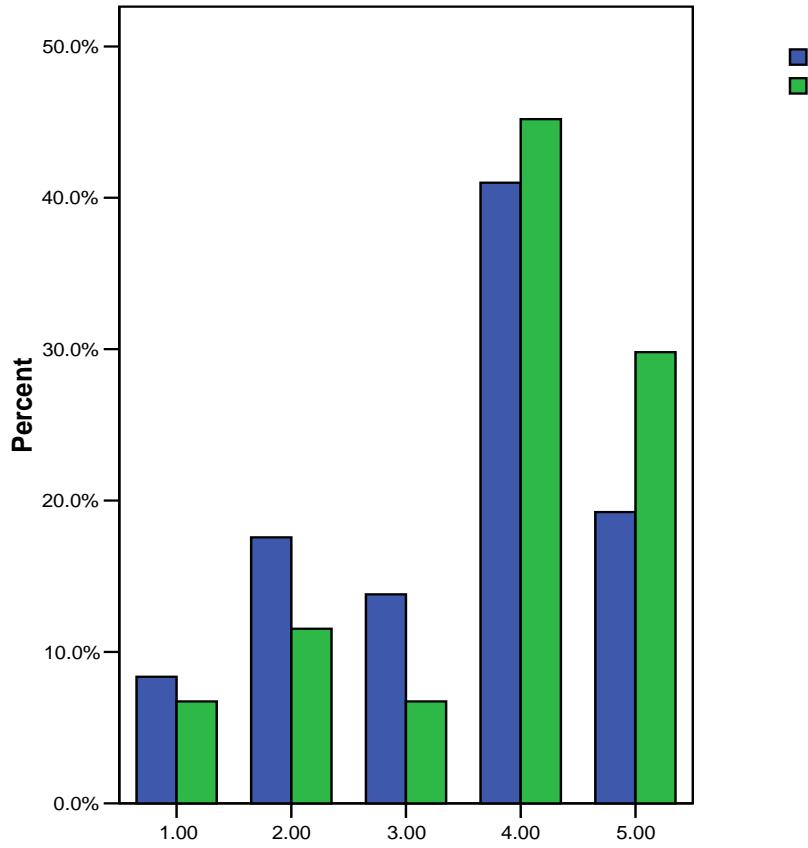
Scenario 3*



Scenario 4*



Scenario 5*



*** Blue = Individual's Response in %, Green = Groups' Response in %.**

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Tables

Table 1. Summary of Responses – Individuals vs. Groups						
	Highly Unethical n (%)	Unethical n (%)	Neutral n (%)	Ethical n (%)	Highly Ethical n (%)	Total n (%)
Scenario 1						
Individual	17(7.1)	13(5.4)	24(10.0)	86(36.0)	99(41.4)	239(100)
Group	2(1.9)	5(4.8)	15(14.4)	51(49.0)	31(29.8)	104(100)
Scenario 2						
Individual	13(5.4)	11(4.6)	84(35.1)	82(34.3)	48(20.1)	238(100)
Group	5(4.8)	9(8.7)	31(29.8)	41(39.4)	17(16.3)	103(100)
Scenario 3						
Individual	45(18.8)	15(6.3)	167(69.9)	9(3.8)	2(0.8)	238(100)
Group	15(14.4)	10(9.6)	65(62.5)	9(8.7)	5(4.8)	104(100)
Scenario 4						
Individual	17(7.1)	29(12.1)	118(49.9)	40(16.7)	34(14.2)	238(100)
Group	2(1.9)	14(13.5)	43(41.3)	26(25.0)	19(18.3)	104(100)
Scenario 5						
Individual	20(8.4)	42(17.6)	33(13.8)	98(41.0)	46(19.2)	239(100)
Group	7(6.7)	12(11.5)	7(6.7)	47(45.2)	31(29.8)	104(100)

Table 2 – Comparison of Means Individual (Ind) v Group (Gr) Responses								
	Category	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
Scenario 1	Ind	239	3.9916	1.17392	.07593	-.065	341	.948 n/s
	Gr	104	4.0000	.90307	.08855	-.072	251.349	.943 n/s
Scenario 2	Ind	238	3.5924	1.03416	.06703	.401	339	.689 n/s
	Gr	103	3.5437	1.02686	.10118	.402	195.025	.688 n/s
Scenario 3	Ind	238	2.6134	.86282	.05593	-1.759	340	.080 *
	Gr	104	2.7981	.95916	.09405	-1.687	178.994	.093 *
Scenario 4	Ind	238	3.1891	1.05641	.06848	-2.070	340	.039 **
	Gr	104	3.4423	1.00317	.09837	-2.113	205.990	.036 **
Scenario 5	Ind	239	3.4519	1.22165	.07902	-2.434	341	.015 **
	Gr	104	3.7981	1.18551	.11625	-2.463	201.556	.015 **

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