

Accounting students' information disclosure decisions: Is there a need for changing the *status quo* on disclosure through accounting education?

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Abstract

The disclosure of minimum information required by law and accounting standards appears to be the *status quo* on corporate disclosure. This brings into question the fairness of corporate financial statements. The paper reports experimental results that indicate when students have reasons to be concerned about what others may think of their decisions, they are willing to support corporate disclosure policies that include only the legally required minimum information and unwilling to support certain additional disclosures. Arguably, a major re-think of what constitutes an adequate level of disclosure is essential for changing the disclosure *status quo*. Accounting education has much potential for initiating such a re-think. To this end, the paper identifies the relevance of two measures. That is, students need to be encouraged (a) to recognise the importance of *relative accuracy* of accounting standards and (b) to recognise the relevance and importance of current debates on corporate disclosure and notions such as *fairness* when evaluating the adequacy of corporate disclosures.

Key words: accountability; accounting education; corporate disclosure; experiment; student decisions; voluntary disclosure.

INTRODUCTION

Research in auditing indicates that reasons for many questionable audit practices may be psychological in that auditors are unconsciously biased towards their clients' preferences, especially when dealing with issues involving audit judgements (Bazerman, Loewenstein, and Moore, 2002, p. 97). Interestingly, research in social psychology suggests that when making decisions under accountability requirements people tend to uphold the interests of known victims more than those of the unknown beneficiaries (Tetlock and Boettger, 1994). With respect to the issue of corporate information disclosures, clients may become the victims of additional disclosures (e.g., additional disclosures may reveal more about management decisions including decision errors) and external users of information may become the beneficiaries of such disclosure. As many accounting decisions are made under accountability requirements including accountability to clients, the auditors' information disclosure decisions may favour the interests of the clients (known victims) more than those of the external users (unknown beneficiaries) of financial statements.

The results of several empirical studies suggest that auditors uphold clients' interest by approving financial statements that do not include important disclosures (Lont, 2002; Milne, Owen, and Tilt, 2001; Epstein and Palepu, 1999; Anderson and Epstein, 1995). It appears through published financial statements that the standard accounting disclosure practices may indicate some 'truths' about the current state of play on corporate disclosures – i.e., that companies are less than forthcoming with important information and the auditors passively approve such statements. Accordingly, the standard accounting practice concerning corporate disclosure, or *status quo* on disclosure, can be identified as a practice of disclosing the minimum information required by law and accounting standards (i.e., minimum disclosure). When decisions are made under accountability, minimum disclosure may appear as more favourable than providing additional disclosures, as the former helps safeguard the interests of clients (i.e., known victims).

Arguably, the *status quo* of corporate information disclosure is dangerous. This is especially so at a time where accounting continues to attract criticisms from those who examine the utility of accounting using ethical (Clarke, Dean, and Oliver, 2003; Simms and Oram, 2002), political (Nelson, 1993), legal (Clarke, Dean, and Houghton, 2002), environmental (Gray, et al., 2001) and religious and educational (Tinker, 2004; Gray, et al., 2001) perspectives. The presence of wide ranging criticisms against the role of accounting, its current practices, and accounting education indicate that accounting is under intense scrutiny and a major re-think of what is considered as the 'standard accounting practice' - including the status quo on disclosure - is of paramount importance. This paper argues that accounting education can be an important avenue for questioning the wisdom of current accounting practices and facilitating new ideas.

In an in-depth inquiry into the provision of accounting education and training in the area of environmental issues in the UK, Gray, et al., (2001, p.94) have indicated that the main resistance to new ideas (such as environmental issues) is possibly: "... not institutional or structural but psychological". The psychological reasons may have a lot to do with accounting education that tends to emulate standard accounting practices through its heavy emphasis on technical training (Gray, et al., 2001). In so doing, the

standard accounting practices will be introduced and reinforced (with little or no challenge to their society-wide acceptability) throughout accounting education. If auditors are unconsciously biased towards the preferences of clients, then the prevailing accounting disclosure practices are likely to favour clients' interests more than the interests of external users of financial reports. Accordingly, when accounting students prepare themselves for careers in accounting, they may inherit the views of their practitioner counterparts that are biased towards preferences of clients.

Consequently, this study attempts to shed light into the issue of information disclosure by examining senior accounting students' disclosure judgements under an accountability requirement. It is hypothesized that students will have greater incentives to search for defensible accounting solutions (thereby encouraging them to think of what is likely to be more acceptable under standard accounting practices or *status quo* on disclosure) when they make decisions under accountability than under guaranteed anonymity. A requirement to defend an answer (i.e., accountability requirement) may heighten the need for students to look for 'acceptable' or 'accurate' justifications. This may elicit students' willingness to draw from accounting standards and dominant views, such as clients' preferred options.

The study experimentally examines the mandatory (i.e., contingent event) and two voluntary (i.e., environmental cost and human resource cost) disclosure decisions of senior undergraduate accounting students enrolled at a New Zealand university. Whilst one group of participants is informed that they are accountable to an Audit Partner whose disclosure views are unknown, a second group is guaranteed with anonymity hence signalling that they are not directly accountable to anyone. Given that the accounting standards are useful when defending disclosure decisions, the impact of accountability on mandatory disclosure is likely to be different from its impact on voluntary disclosure. Also, the students' voluntary disclosure decisions may be influenced by the extent of current public interest and debate over certain disclosure issues (e.g., environmental cost disclosure). Consequently, the presence of strong debates on environmental issues and students familiarity with these may signal the importance of environmental cost disclosures without which the fairness of financial reports may become questionable¹ Therefore, accountability may affect the two voluntary disclosure decisions differently.

The rest of the paper is organised as follows. The next section describes the theory, and develops hypotheses. The experimental method, tasks, subjects and statistical models used for analysing the data are described in the third section. The results of the experiment are presented and discussed in section four. Finally, the conclusions, limitations, and directions for further research are presented in section five.

THEORY

For the purpose of the study, accountability is defined as "pressures to justify one's opinions to others" (Tetlock, 1983, p.74). Research suggests that accountability is pervasive in the accounting environment (DeZoort and Lord, 1997) and the empirical evidence suggests that decisions that are made under accountability are different from those made without a similar requirement (Lerner and Tetlock, 1999). Hence, accountability may influence students' information disclosure decisions.

The Social Contingency Model of judgement and choice (SCM) developed by Tetlock (1992; 1985) provides a framework that is relevant for the study. According to SCM, individual decision behaviour is similar to that of a politician who, when making decisions, seeks the approval of, and avoids criticisms from, significant others to whom he/she feels accountable (Tetlock, 1992). Studies using the framework have found that accountability may influence how and what people think about a given issue (Green, Visser, and Tetlock, 2000; Simonson and Nye, 1992; Tetlock and Boettger, 1994; Tetlock, *et al.*, 1989; Tetlock, 1983). Consequently, the theoretical implication of holding students accountable for decisions is that they may attempt to *avoid criticism* and *gain approval* for their decisions from the evaluative audience.

HYPOTHESES DEVELOPMENT

Accountability and information disclosure policy

The current corporate disclosure practices indicate a tendency to disclose only the minimum information required by law and accounting standards (Lont, 2002; Epstein and Palepu, 1999). Disclosures in addition to these may be difficult to defend (e.g., human resource cost), as these are not specifically required by accounting standards. Accordingly, a company practice that supports the disclosure of legally required information (i.e., a minimum disclosure policy) may be easier to defend than a practice that supports additional disclosures beyond the minimum required by law (i.e., full disclosure policy). Also, the literature suggests that when there is an accountability requirement people attempt to avoid criticism and gain approval for their decisions from the evaluative audience (Tetlock, 1992; Tetlock and Boettger, 1994; Simonson and Nye, 1992). This implies that accountable-participants have greater incentives to look for adequate defences when selecting a disclosure policy than their nonaccountable counterparts. Therefore, accountable-participants are likely to favour a minimum disclosure policy more than a full disclosure policy. This leads to the following hypothesis, which is stated in its null form.

H01: The type of company disclosure policy preferred by a participant who is held accountable is not significantly different from that of a nonaccountable participant.

Accountability and information disclosure decisions

The information disclosure decisions affect a wider audience that consists of the client, the audit firm, shareholders and other external users of financial statements. Therefore, the participants who are held accountable to an Audit Partner whose disclosure views are unknown have incentives to avoid controversy and criticism from all these parties. Although lack of information disclosures may lead to criticism from shareholders and other external users, participants' attempts to recommend more information disclosures may create controversy and attract criticism mainly from clients. Given that people have a tendency to uphold the interests of known victims more than those of the unknown beneficiaries when they are held accountable (Tetlock and Boettger, 1994), accountable-participants have strong incentives to avoid controversy and criticism from their clients. Therefore, the participants who are held accountable for their decisions are more likely to favour clients' positions on the disclosure issues than their counterparts with no accountability requirement. This leads to the following hypothesis, which is stated in its null form.

HO2: The information disclosure decision of a participant who is held accountable is not significantly different from that of a nonaccountable participant.

The relationship between information disclosure decisions and accountability is examined in more detail in the following sections. Specifically, several testable hypotheses are developed for examining the relationship between accountability and participants' mandatory and two types of voluntary disclosure (environmental cost and human resource cost) decisions.

Mandatory disclosure

In New Zealand, the Financial Reporting Standard (FRS) 15 (ICANZ, 1995) governs the disclosure of contingent event related information. According to FRS 15 [section 4.3 (a)], a contingent liability exists when there is a potential obligation that relates to past events, the existence of which is determined by a third party (e.g., court of law). The FRS 15, however, relies on auditors' interpretations with respect to the existence of a contingent event, the likelihood of its future occurrence, and the type (note versus provision) and level of details that should be disclosed relating to such an event. A contingent liability therefore represents a mandatory disclosure. Although in this type of situation different parties are likely to agree that a contingent liability exists, different views are still possible about the level of details to be disclosed in the financial statements. Given that companies are less than forthcoming with additional disclosures (Epstein and Palepu, 1999) and unspecified operating expenses (Lont, 2002), companies are less likely to disclose detailed information about contingent liabilities. However, shareholders and other external users of financial statements of a company are likely to demand information about not only the existence of contingent liabilities, but also sufficient details that will allow them to make decisions about the impact of such liabilities on the financial health of the company. Hackenbrack and Nelson (1996) provide results that if there are sufficient incentives for doing so, auditors tend to interpret standards aggressively in order to justify reporting options preferred by the client. Also, where accounting standards imply, but do not specifically require disclosure of information (e.g., cost of sales, selling, administration and salary expenses) companies tend not to disclose such information (Lont, 2002). Lont (2002) has argued that companies and auditors may have interpreted the lack of specific item disclosures in FRS 9 as reasons for not making such disclosures. These results suggest that accountable-participants' contingent event disclosure decisions may be different from those of their nonaccountable counterparts. This leads to the following hypothesis, which is stated in its null form.

*HO2_A: The contingent event **disclosure** decision of a participant who is held accountable to an audience with unknown views is not significantly different from that of a nonaccountable participant.*

In order to avoid criticism and gain approval, accountable-participants have incentives to identify the client's preferred option as the status quo, provided it can satisfy the requirements of accounting standards. Therefore, accountable-participants are likely to recommend the disclosure of the contingent event with less detailed information disclosures than their nonaccountable counterparts. This leads to the following null hypothesis.

*HO2_B: The contingent event **level of disclosure** decision of a participant who is held accountable to an audience with unknown views is not significantly different from that of a nonaccountable participant.*

Voluntary disclosure

Current accounting standards in New Zealand do not require companies to disclose costs associated with environmental clean-up activities and with human resources. Evidence suggests that many New Zealand companies do not report environmental (Milne, *et al.*, 2001) and human resource related information (Miller, 2004). Auditors therefore appear to agree with company management that information that is not specifically required by accounting standards need not be disclosed. A study that analyzed New Zealand company annual reports has suggested that there are insufficient incentives for auditors to influence clients to disclose more information (Hossain, Perera, and Rahman, 1995). Although accounting standards require sufficient information disclosures (e.g., FRS 9 – ICANZ 1995) and external information users demand more information including voluntary disclosures (Epstein and Palepu, 1999), it appears that companies disclose as little information as possible and their auditors tend to acquiesce.

Given that companies are reluctant to disclose information unless these are required by specific accounting standards, the status quo for voluntary information can be expected to be zero disclosure. Therefore, if accountable-participants rely on accounting standards and the client's preference, they have incentives to recommend zero disclosure for both environmental cost and human resource cost scenarios. This leads to the following four hypotheses, all presented in their null form.

*HO2_C: The **environmental cost disclosure** decision of a participant who is held accountable to an audience with unknown views is not significantly different from that of a nonaccountable participant.*

*HO2_D: The **environmental cost level of disclosure** decision of a participant who is held accountable to an audience with unknown views is not significantly different from that of a nonaccountable participant.*

*HO2_E: The **human resource cost disclosure** decision of a participant who is held accountable to an audience with unknown views is not significantly different from that of a nonaccountable participant.*

*HO2_F: The **human resource cost level of disclosure** decision of a participant who is held accountable to an audience with unknown views is not significantly different from that of a nonaccountable participant.*

METHOD

A laboratory experiment provided data for the purposes of the study. The experimental method is useful, as it allows researchers to examine the three main facets of the behavioural research - actors, behaviour, and context - in a controlled setting. For example, a researcher's ability to control potentially influential variables that are of no interest to the researcher and manipulate the independent variables may

permit the researcher to examine causal relationship(s) between specific constructs without the interference of others (Libby, Bloomfield, and Nelson, 2002, p.4). Another reason for using the experimental method is that it permits comparisons of results between studies that examined experimentally the impact of accountability on various judgements and decisions (see Lerner and Tetlock, 1999; DeZoort and Lord, 1997).

Accountability requirement

The accountability requirement was introduced by informing the participants that they would be held accountable for their disclosure decision to the Audit Partner (Mr. Peter Jones) who was in-charge of Access Ltd.'s audit but whose disclosure views were *unknown*. Nonaccountable participants did not receive the above statement. Instead they were informed that their responses would remain anonymous (i.e., guaranteed anonymity). (A copy of the research instrument is presented in Appendix A.) This manipulation is consistent with the literature (see DeZoort and Lord, 1997; Lerner and Tetlock, 1999).

Task

An information disclosure task was developed around a hypothetical company (i.e., Access Ltd.). The task required participants to make disclosure decisions relating to one mandatory and two voluntary disclosure scenarios. A contingent event scenario was described as an event that met the criteria for disclosure according to FRS 15 and so represented a mandatory disclosure scenario. The other two scenarios were described as disclosures that were not specifically required by accounting standards and so represented voluntary disclosures. Access Ltd.'s decision not to disclose any specific information about the two voluntary disclosures was clearly stated.

Moreover, both voluntary disclosure scenarios were given equal importance by not specifying the dollar amount associated with either of these scenarios. Apart from the significant interest in and debate over the disclosure of environmental information in the public domain, participants had little grounds for distinguishing one voluntary disclosure scenario from the other. These additional clues were considered necessary in order to examine the participants' responses to different voluntary disclosure scenarios reliably. Consequently, when held accountable, if participants consider different views on disclosure, they may develop strong arguments for disclosing environmental cost but not human resource cost. The task therefore allowed sufficient room for potential variation in participants' disclosure decisions. Furthermore, each disclosure scenario required the participants to decide (a) whether disclosure is required or not and (b) if disclosure is required, the level of detail to be disclosed. While data relating to the *disclosure* decision was categorical (e.g., yes/no), the *level of disclosure* decision resulted in ordinal data (i.e., Likert-scale 1-7).

Pilot tests were conducted using a small group of accounting students who had already completed the Advanced Financial Accounting course. These tests indicated that the disclosure scenarios were meaningful, clear, and were within the participants' level of accounting knowledge.

Sample selection

Subjects for the experiment were 77 undergraduate students from a major Australasian university, who were enrolled in the university's "Advanced Financial

Accounting and Reporting” course in 2002. Prior to enrolling for the above course, all students completed at least two basic accounting courses and one intermediate financial accounting course. The experiment was administered toward the end of the advanced course. Considering the knowledge acquired in prior accounting courses and during the advanced financial accounting course, it was considered that these students were highly proficient in theoretical and technical knowledge in accounting and financial reporting.

Procedure

Prior to administering the experiments to students, ethical clearance was obtained from the university’s Ethics Committee. During a class session, the researcher briefly explained the experiment and the general purpose of the research (e.g., to learn more about accountants’ disclosure decisions). Students were then invited to volunteer as research participants. Of the total (i.e., 77) students in the class, only two refused to participate in the study. The researcher randomly distributed the experimental material to the volunteer participants and provided clear instructions that they were expected to complete each section in the order in which it was presented to them. The researcher was present in the room for the entire duration of the experiment.

Measurement of variables

Participants were asked to select one of two disclosure policies, which resulted in categorical data. That is, whether the participants believe that companies should disclose only the information required by law and accounting standards (i.e., minimum disclosure policy) or companies should disclose all important information including the information that is not specifically required by law and accounting standards (i.e., full disclosure policy).

With respect to the mandatory (i.e., contingent event) and voluntary (i.e., environmental cost and human resource cost) disclosure scenarios, participants made *disclosure* (i.e., whether or not to disclose) and *level of disclosure* (i.e., level of detail to be disclosed) decisions. For each scenario, participants indicated ‘yes’ or ‘no’ to the *disclosure* decision, hence this resulted in categorical data. For each scenario, only those participants, who decided that information should be disclosed, indicated the level of disclosure by selecting a number on a 1-7 Likert-scale. On the Likert-scale, 1 and 7 were described as *very little* and *very high* respectively. Accordingly, the measurement of *level of disclosure* decision resulted in ordinal data.

Data analysis

The data for the dependent variable (i.e., disclosure decisions) conforms to either categorical or ordinal scale. Accordingly, the main analysis of data (i.e., hypothesis testing) is carried out using a recently developed regression model for analysing categorical data (i.e., Categorical Regression with optimal scaling or CATREG - Version 1 in SPSS Version 10).

Categorical Regression with optimal scaling (i.e., CATREG)

Categorical Regression is widely used in social sciences when the measurement of variables restricts the use of parametric tests (see Orme and Buehler, 2001 and Dusseldorp and Meulman, 2001 for recent applications of CATREG in social science and medicine respectively). CATREG (Version 1 in SPSS Version 10 see also DTSS, 1999) does not rely on a standard assumption that level of measurement is a fixed

property, rather it treats scaling level of categories as “user-specified option” (SPSS, 1999, p.3). The main advantage is that by adjusting the optimal scaling for some variables, CATREG allows one to identify non-linear relationships that may not be visible under traditional regression analysis. Therefore, CATREG offers an alternative regression model where the dependent variable includes either categorical or limited dependent variables – CLDV - (Orme and Buehler, 2001), which includes “...binary, multicategorical, ordinal, counted, censored, or from truncated populations” (Long, 1997, cited in Orme and Buehler, 2001). According to Orme and Buehler (2001, p. 14):

“...in numerous situations CLDVs are the best available dependent variables, and multiple regression models for CLDVs can provide the best available answers to our research questions. If we limit ourselves to a restricted range of multiple regression models, we might limit unnecessarily the range of dependent variables we model or misestimate the effects of our independent variables”.

The dependent variables involved selecting a company disclosure policy and two disclosure decisions resulting in either categorical data or ordinal data. Therefore, CATREG (with optimal scaling) offers a model that is suitable for analysing the dependent variables.

RESULTS

Hypothesis One (HO1) - Accountability and participants’ disclosure preference

The results show that, overall, participants preferred companies to adopt a full disclosure (64%) than a minimum disclosure policy (36%) (Table 1 – total sample). Of the 47 participants who indicated preference for company full disclosure policy, 30 were nonaccountable and only 17 were accountable participants. Consistent with the policy preference, accountable-participants also indicated their strong preference for less detailed disclosures in the company financial statements than their nonaccountable counterparts. For example, while 60% of accountable-participants indicated preference for a low level of disclosure, only 13% of nonaccountable participants indicated a similar preference (see Table 1).

Table 1: Participants’ disclosure preference – Frequency analysis

	Participants		
	Total sample N=73*	Accountable N=35	Nonaccountable N=38
Disclosure policy preference:			
Full disclosure	47 (64%)	17 (49%)	30 (79%)
Minimum disclosure	26 (36%)	18 (51%)	8 (21%)
General disclosure preference:			
High level of detail **	54 (74%)	14 (40%)	33 (87%)
Low level of detail **	19 (26%)	21 (60%)	5 (13%)

* Two participants failed to indicate a preferred disclosure policy, reducing the responses from 75 to 73.

**Level of disclosure was measured using 1-7 Likert-scale, where 1=very low and 7=very high level of disclosure. Above median disclosure (5-7) is treated as high level of disclosure and median or below (1-4) is treated as low level of disclosure.

The impact of accountability on what participants believed to be the appropriate company disclosure policy and general disclosures were statistically significant at the 0.01 level (see Table 2). Therefore, accountability has had an impact on what participants considered acceptable or standard company disclosure practice. More importantly, under accountability, more participants believed that companies should follow a minimum disclosure policy and a lower level of general disclosure, thereby indicating their preferences to uphold the *status quo* on company disclosure. Based on these results, HO1 can be rejected.

Table 2: Impact of accountability on participants' disclosure preference - CATREG Test Results

	Beta	Adjusted R ²	F	Sig*.
Disclosure policy preference (N=73) **	-0.388***	0.088	7.926	0.006
General disclosure preference (N=73)	-0.307***	0.082	7.402	0.008

* The results were also significant at the 0.01 level when analyzed using a traditional non-parametric test (Kruskal-Wallis).

**Two participants did not respond to disclosure policy preference hence removed from the analysis.

***A negative sign in beta indicates that accountability has a negative impact on company full disclosure policy [full disclosure policy =2 & minimum disclosure policy=1 and the presence (absence) of accountability demand was coded as 2 (1)]. Similarly, a negative beta indicates that accountability has a negative impact on disclosure levels (1=very low & 7=very high disclosure).

Hypothesis Two (HO2_A & HO2_B) - Accountability and mandatory disclosure decisions

Results show that accountability failed to have a significant impact on either the participants' contingent event *disclosure* decision (n=74, F=0.166; p=0.685) or their *level of disclosure* decision (n=61, F=1.433; p=0.236). Therefore, based on these results hypotheses HO1_A and HO1_B cannot be rejected.

Hypothesis Two (HO2_C – HO2_F) - Accountability and voluntary disclosure decisions

CATREG test results of the environmental cost disclosure decisions show that accountability failed to have a significant impact on the participants' *disclosure* decision (n = 75, F 0.137; p= 0.713) and their *level of disclosure* decision (n = 64, F=2.343; p=0.131). Therefore, hypotheses HO2_A & HO2_B cannot be rejected.

As expected, the impact of accountability on participants' human resource cost *disclosure* decision was significant (n = 73, F=5.28; p=0.025; Kruskal-Wallis test result was also significant at 5%; p = 0.026). Therefore, hypothesis HO3_A can be rejected. However, accountability failed to have a significant impact on participants' human resource cost *level of disclosure* decision (n = 44, F=2.122; p=0.153). Therefore, hypothesis HO3_B cannot be rejected.

DISCUSSION

The disclosure decision behaviour of accounting students is interesting though not entirely surprising. That is, in the absence of either the strong arguments or support from accounting standards, there is little ground for participants to influence a client's decision of nondisclosure of any voluntary information. Accountable-participants had a good reason to worry about both the presence and acceptability of potential arguments for disclosure than their non-accountable counterparts, whose thoughts and decisions were guaranteed to remain anonymous.

The results indicate that accountable-participants may have identified the least controversial disclosure position early in their decision process. For example, the results showed a significant impact of accountability on what participants considered as the most appropriate company disclosure policy thereby motivating accountable-participants to select the *status quo* on company disclosure (a preference for a minimum disclosure policy and a low level of general disclosures). Consistent with what they considered as the *status quo* on disclosure, accountable-participants may have interpreted accounting standards strictly to justify non-disclosure of certain voluntary information. For example, more participants in the accountable group recommended zero disclosure of human resource cost than those in the nonaccountable group and this difference in disclosure recommendation was statistically significant. Accordingly, these results are not surprising. Nonetheless the results are interesting, as these suggest that exposing students to public debates and accounting literature on disclosure issues (e.g., environmental and human resource related disclosures) that provide strong arguments for disclosures may be helpful in encouraging accounting students to challenge the status quo on company disclosure.

The results of the experiment indicated that accountability did have a significant impact on what participants considered to be the most appropriate company disclosure policy and participants' human resource cost *disclosure* decision. Consequently, a lack of normative criteria is one characteristic that may amplify the effects of accountability on participants' information disclosure decisions. For example, a significant impact of accountability was noted only in the case of human resource cost disclosure decision. This decision task involves a disclosure issue where there is no specific accounting standard, and hence the decision task does not have a normatively correct answer. Previous studies have found accountability effects in similar decision-tasks that involved little normative support for making decisions (e.g., Buchman, *et al.*, 1996 – audit opinion decision; Tan, *et al.*, 1997 – inventory risk assessment). Arguably, when there is little normative support for decisions, accountable-participants appear to avoid criticisms. What is interesting is that in their attempts to avoid criticisms decision-makers may utilise a variety of tactics. These may include, aligning one's decisions with those of the evaluative audience (Buchman, *et al.*, 1996; Tan, *et al.*, 1997); making conservative decisions (Hoffman and Patton, 1997 – auditors' fraud judgements); and upholding the *status quo* where a change brings about known victims (Tetlock and Boettger, 1994).

The above mentioned decision behaviour seems to be continuing with students' disclosure decisions in the current study. For example, although the human resource cost disclosure is not required by any specific accounting standard, its disclosure is still possible on the grounds of 'materiality' 'decision usefulness', 'accountability to

external users of information’, and ‘good news’. While unaccountable-participants considered these aspects of the human resource cost disclosure and decided affirmatively, a majority of the accountable-participants decided to not disclose any information about the human resource cost. The accountable-participants’ human resource cost disclosure decision appears to have been mainly influenced by the absence of specific accounting requirements for disclosure and the client’s preference towards non-disclosure, indicating that these participants may have attempted to search for easily defensible decisions by maintaining the status quo on disclosure.

Similarly, when selecting a disclosure policy that companies should adopt, accountable-participants favoured a minimum disclosure policy (under which companies must disclose only the legally required minimum information) more than did the non-accountable participants. The most appropriate corporate disclosure policy too does not have a normatively correct answer. The results of the study, especially with respect to the company disclosure policy and human resource cost disclosure decision, therefore add support to the previous findings in accounting literature with respect to the impact of accountability on decisions.

Whilst one of the voluntary disclosure issues involved strong arguments for its disclosure (i.e., environmental cost), the other did not or at least these were not easily accessible to students (i.e., human resource cost). Accountable-participants had a good reason to worry about both the presence and acceptability of potential arguments for disclosure than their non-accountable counterparts, whose explanations and decisions were guaranteed to remain anonymous. Therefore, in the absence of either strong arguments or support from accounting standards, there is little ground for participants to influence a client’s decision of nondisclosure of any voluntary information. The non-significant accountability effects with respect to the environmental cost disclosure may suggest that accountable-participants (like their nonaccountable counterparts) have relied on strong arguments for disclosing this information. For example, an examination of the reasons given by participants for their decisions indicates that both accountable and nonaccountable participants have provided reasons similar in terms of number and level of complexity when they considered the environmental disclosure scenario. Accordingly, the results suggest that exposing students to public debates and accounting literature on disclosure issues (e.g., social disclosures) that provide strong arguments for disclosures may be helpful in encouraging students to develop a case for disclosing more as opposed to less (or zero) voluntary information. This is especially the case where there is a requirement to explain or justify these decisions to important others, an element often found in the real world accounting decision contexts.

Although the meaning of corporate transparency may be contestable, when operating under such a notion, auditors may face more criticisms if they continue to approve corporate information disclosures that meet only the minimum requirements of accounting standards and law. This is because meeting the minimum disclosure requirements of standards and legal provisions may make financial statements legal (in the sense of the letter of law) but not necessarily transparent. The latter may prove to be an illusive notion just as much as the notion of ‘true and fair view’. Accounting standards, therefore, may not be able to accommodate such notions fully and the disclosures required to make financial statements transparent will remain open to interpretations by companies, accountants, auditors and stakeholders. Therefore,

determining the adequacy of disclosures is one of the key areas where professional judgement bestowed on members of the accounting profession may make a significant contribution towards improving the credibility of financial statements.

IMPLICATIONS

An important implication of the results of the experiment is that the search for views that may have the highest chance of being the least controversial is likely to play an important part of what students consider to be appropriate solutions for disclosure issues that do not have normative answers. What students believe to be the standard accounting practice and strict interpretations of accounting standards may influence the identification of the least controversial disclosure positions. One way of challenging this is to encourage students to develop a strong sense of *relative accuracy* (i.e., the need for exercising fair judgment in applying standards) as opposed to the *absolute accuracy* (i.e., strict compliance or compliance with the letter of the standards) of accounting standards. Promoting a sense of relative accuracy of accounting standards is vital because if this is not explicitly recognized (and promoted throughout accounting education), then there is little justification for a need for *professional judgement* in accounting.

For the purpose of developing a sense of *relative accuracy* of accounting standards among students, it may be necessary to introduce students to different points of view on accounting issues. This is especially relevant in the case of information disclosure issues, as there are contrasting views about the adequacy of corporate disclosure. At present, it seems auditors, and to some extent their student counterparts, are willing to err on clients' favour as opposed to that of the external users. The external users however rely mainly on auditors to intervene on their behalf so as to make good for the information asymmetry that exists between them and the corporate management. Unless students are exposed to the fundamental notions such as fairness and corporate social responsibility that underlie debates on corporate disclosure, they may be unable to take difficult stands on disclosure issues. Difficult stands however seem essential if disclosure judgements are to pass the test of fairness in the eyes of many external users of corporate financial statements. As accounting students are preparing for a profession where one's ability to defend a chosen position is of paramount importance, there is always a danger of students consciously and unconsciously looking for acceptable defences for their judgements. Accordingly, accounting students must be provided with sufficient access to and appreciation of contrasting views on information disclosure and the fundamental notions that underlie these contrasting views so that students may appreciate that difficult stands on disclosure issues are neither baseless nor indefensible after all. Consequently, the accounting education can be considered the most appropriate medium for influencing the ideas of future accountants and auditors.

Another implication is that accounting education has the potential to challenge the status quo on corporate disclosure (e.g., environmental cost disclosure decisions showed no significant difference due to accountability). Furthermore, as "unconscious bias cannot be deterred by threats of jail time" (Bazerman, et al., 2002, p. 97), accounting education has an important role to play in recognising and working towards reducing biases, including biases towards approving financial statements that lack important disclosures.

The implications of the results reported in this study also highlight the need for further research in this area. Specifically, there exists a need for future research to examine what is considered to be the standard accounting practice with respect to specific accounting issues by students and the extent to which this can influence students' conception of 'fairness' of corporate annual reports.

CONCLUSION

In the case of information disclosure issues, there exists a need for accounting education to actively promote the importance of additional corporate disclosure in the classroom. To this end, students can be encouraged to recognise the *relative accuracy* of accounting standards, without which there is little room to justify the need for professional judgement in accounting. Furthermore, students can be exposed to contrasting views on information disclosure together with the notions such as fairness and corporate social responsibility that may underlie debates concerning corporate disclosure.

With respect to the additional information disclosures, clients are the known potential victims and the external users of information may remain as the unknown potential beneficiaries. Whilst auditors may risk good relationships with their clients, future audit prospects and financial benefits by insisting on non-mandatory information disclosures, the beneficiaries of such disclosure may not rally behind auditors with lots of praise. The information disclosure issue therefore is likely to present situations where practitioners may be biased towards clients' preferences. What becomes visible as the standard accounting practice (e.g., with respect to the corporate information disclosure) may reflect this bias and, in turn, may find its supporters among prospective accountants (i.e., accounting students). Accordingly, accounting education can be considered as one of the most promising mediums for empowering future accountants to challenge questionable corporate disclosure practices.

Footnotes

1. Human resource accounting has received much attention in the early accounting literature that addressed issues of social disclosures (e.g., Acland, 1976; Hendricks, 1976; Schwan, 1976). At present, the importance of human resource disclosures may also be emphasised with a growing interest on knowledge-based companies, and hence the importance of intellectual capital (Guthrie & Petty, 2000). However, human resource disclosure issues have received a relatively less emphasis than environmental disclosures in public debates and recent accounting literature.

References

- Acland, D., (1976) The effects of behavioral indicators on investor decisions: An exploratory study, *Accounting, Organizations and Society* **1** (2-3), 133-142.
- Anderson, R. and Epstein, M. (1995) The usefulness of annual reports, *Australian Accountant* **April**, 25-28
- Bazerman, M.H., Loewenstein, G. and Moore, D. A. (2002) Why good accountants do bad audits, *Harvard Business Review* **November**, 97-102.
- Buchman, T. A., Tetlock, P. E., and Reed, R. O. (1996) Accountability and auditors' judgments about contingent events, *Journal of Business Finance & Accounting* **23**, 379-398
- Clarke, F., Dean, G., and Houghton, E. (2002) Revitalising group accounting: Improving accountability, *Australian Accounting Review* **12**, 58-72
- Clarke, F., Dean, G., and Oliver, K. (2003) *Corporate Collapse: Accounting, Regulatory and Ethical Failure* (2nd edn). Cambridge University Press: Cambridge, UK.
- Data Theory Scaling System Group (DTSS) (1999) *CATREG (Version 1)*, Faculty of Social and Behavioral Sciences, Leiden University, The Netherlands.
- DeZoort, F.T. and Lord, A.T. (1997) A review and synthesis of pressure effects research in accounting, *Journal of Accounting Literature* **16**, 28-85.
- Duseldorp, E. and Meulman, J.J. (2001) Prediction in medicine by integrating regression trees into regression analysis with optimal scaling, *Methods of Information in Medicine* **40**, 403 – 409.
- Epstein, M.J. and Palepu, K.G. (1999) What financial analysts want? *Strategic Finance*, Institute of Management Accountants, **April**, 48-52.
- Gray, R., Collison, D., French, J., McPhail, K., and Stevenson, L. (2001) *The Professional Accountancy Bodies and the Provision of Education and Training in Relation to Environmental Issues*, The Institute of Chartered Accountants of Scotland, Edinburgh.
- Green, M.C., Visser, P. S., and Tetlock, P.E. (2000) Coping with accountability cross-pressures: Low-effort evasive tactics and high-effort quests for complex compromises, *Personality and Social Psychology Bulletin* **26**, 1380-139.
- Guthrie, J. and Petty, R., (2000) Intellectual capital: Australian annual reporting practices, *Journal of Intellectual Capital* **1**, 241-251
- Hackenbrack, K. and Nelson, M.W. (1996) Auditors' incentives and their application of financial accounting standards, *The Accounting Review* **71**, 43-59.

- Hendricks, J.A. (1976) The impact of human resource accounting information on stock investment decisions: An empirical study, *The Accounting Review* **April**, 292-305.
- Hoffman, V.B., and Patton, J.M. (1997) Accountability, dilution effect, and conservatism in auditors' fraud judgments, *Journal of Accounting Research* **35**, 227-237.
- Hossain, M., Perera, H., and Rahman, A. (1995) Disclosure in annual reports of New Zealand Companies, *Journal of International Financial Management and Accounting*, 69-85.
- Institute of Chartered Accountants of New Zealand (ICANZ) – FRS 15 (1995) *Provisions, Contingent Liabilities and Contingent Assets*.
- Institute of Chartered Accountants of New Zealand (ICANZ) – FRS 9 (1995) *Information to be Disclosed in Financial Statements*.
- Lerner, J. S. and Tetlock, P.E. (1999) Accounting for the effect of accountability, *Psychological Bulletin* **125**, 255-275.
- Libby, R., Bloomfield, R., and Nelson, M.W. (2002) Experimental research in financial accounting, *Accounting, Organizations and Society*, **27**, 775-810.
- Lont, D. (2002) Unspecified Operating Expense Disclosure Requirements in New Zealand. Has FRS 9 made a difference?, *Pacific Accounting Review* **14** (2) 57-95.
- Long, J.S. (1997) *Regression models for categorical and limited dependent variables*, Thousand Oaks, CA: Sage Publications.
- Miller, J.C. (2004) New Zealand companies' annual intellectual capital disclosures, *Unpublished Honours Dissertation*, University of Otago: Dunedin, New Zealand.
- Milne, M.J., Owen, D.L. and Tilt, C.A., (2001) Corporate Environmental Reporting: Are New Zealand Companies Being Left Behind?, *University of Auckland Business Review* **3**, 24-36.
- Nelson, J.S. (1993) Account and acknowledge, or represent and control? On post-modern politics and economics of collective responsibility, *Accounting, Organizations and Society* **18**, 207-229.
- Orme, J.G. and Buehler, C. (2001) Introduction to multiple regression for categorical and limited dependent variables, *Social Work Research* **25**, 49-68
- Schwan, E.S. (1976) The effects of human resource accounting data on financial decisions: An empirical test, *Accounting, Organizations and Society* **1**, 219-237.

- Simms, A. and Oram, J. (2002) *Five Brothers. The rise and nemesis of the big bean counters*, New Economics Foundation: London, United Kingdom [Online] Available, <http://www.neweconomics.org>)
- Simonson, I. and Nye, P. (1992) The effect of accountability on susceptibility to decision errors, *Organizational Behavior and Human Decision Processes* **51**, 416-446.
- SPSS Inc. (1999) *SPSS Categories 8.0*, Chicago: SPSS Inc.
- Tan, C.E.L., Jubb, C.A., and Houghton, K.A. (1997) Auditor judgments: The effects of the partner's views on decision outcomes and cognitive effort, *Behavioral Research in Accounting* **9**, 157 -175.
- Tetlock, P.E. (1983) Accountability and complexity of thought *Journal of Personality and Social Psychology* **45**, 74-83.
- Tetlock, P.E. (1985) Accountability: The neglected social context of judgment and choice. In B.M Staw and L. L Cummings (Eds.), *Research in Organizational Behavior*, 297-332 Greenwich, CT: JAI Press, 1985.
- Tetlock, P.E. (1992) The impact of accountability on judgment and choice: Toward a social contingency model, *Advances in Experimental Social Psychology* **25**, 331-376.
- Tetlock, P.E. and Boettger, R. (1994) Accountability amplifies the status quo effect when change creates victims, *Journal of Behavioral Decision Making* **7**, 1-23.
- Tetlock, P.E., Skitka, L., and Boettger, R. (1989) Social cognitive strategies for coping with accountability: Conformity, complexity, and bolstering, *Journal of Personality and Social Psychology* **57**, 632-640.
- Tinker, T. (2004) The enlightenment and its discontents: Antinomies of Christianity, Islam and the calculative sciences, *Accounting, Auditing & Accountability Journal* **17**, 442-475.

Appendix A – A summarized version of the research instrument.

[Authors' note: Manipulation of accountability:

Accountable group received the following statement as part of the cover letter that described the research exercise.]

Very Important

As part of the quality assurance policy of your firm, audit staff members are held accountable for their decisions to the Audit Partner. Mr. Peter Jones is the Audit Partner in-charge of Access Ltd. After making your disclosure decisions, you will be asked to justify (explain/defend) your information disclosure decisions to Mr. Peter Jones.

You have not worked with Mr. Peter Jones before. Therefore, you have no idea of Mr. Jones' preference toward the level (e.g., minimum vs. full disclosure) of information disclosures in the financial statements.

[Authors' note: In contrast, the nonaccountable group received the following statement as part of the cover letter that described the research exercise.]

Very Important

Your responses will remain strictly confidential. This means you are not answerable to anyone about the responses you make in this research exercise. Please do not write your name. So, no one will be able to ask any further questions about the answers or views you provide in this research exercise.

[Authors' note: The remainder of the exercise was similar for both accountable and nonaccountable groups, except in the way requests for justification/reasons for decisions are worded. These differences are highlighted.]

Section A - "Views on accountability"

The accuracy of the answers to many accounting problems is not clear-cut. Therefore, the accountants rely on their ability to defend an answer, especially for problems where objective and accurate answers are not readily available in the accounting standards. This means that the accountants are expected to explain and justify (defend) their decisions to the parties (e.g., superiors, clients, shareholders, regulatory bodies, etc.) to whom they might be held accountable (answerable).

The aim of this section is to find out your views on the "requirement to be accountable to your superiors" with respect to the important decisions you may have to make at the work place.

(a) In general, with respect to the important decisions you may have to make at the work place, to what extent do you think you feel accountable (i.e., answerable) to your superiors? Please circle only one number.

Very Low			Moderate			Very High
1	2	3	4	5	6	7

(b) In general, with respect to the important decisions you make in your personal life, to what extent do you think you feel accountable to other people you consider important in your life? Please circle only one number.

Very Low			Moderate			Very High
1	2	3	4	5	6	7

Section B

“Attitude toward information disclosures in Company Financial Statements”

The aim of this section is to find out your attitude toward information disclosures in the company financial statements (including explanatory notes). For example, do you think, in general, companies should follow a ‘full disclosure’ policy when disclosing information in their annual reports? This means companies should disclose all potentially material information (i.e., full disclosure) even when there is no legal or accounting requirement to disclose such information.

Or, do you think, in general, companies should follow a ‘minimum disclosure’ policy when disclosing information in their annual reports? This means companies should disclose only the minimum information (minimum disclosure), which is necessary to comply with the prevailing accounting and legal requirements.

(a) Do you think companies should follow a ‘full disclosure’ policy OR ‘minimum disclosure policy’? (Circle one option)

1. Full disclosure policy
2. Minimum disclosure policy

(b) In general, how much information do you think companies should disclose in the financial statements (including explanatory notes)? (Circle the number that corresponds to the level of disclosure you consider as the most appropriate.)

Very Low			Moderate			Very High
1	2	3	4	5	6	7

Section C

Audit task – Information disclosure recommendations

For the purposes of this research exercise you were asked to assume that you are a Chartered Accountant employed at the Wellington office of a large accountancy firm. Now, assume that as part of your work, you are involved in the audit of Access Ltd. This morning, you have received another task relating to the audit of Access Ltd. The audit task requires you to recommend how much information that Access Ltd. should disclose in its current year financial statements (including notes) relating to each of the following situation.

Scenario 1 – Environmental information

Required:

Indicate the information disclosures you recommend for the following scenario.

Access Ltd.’ s operational activities have a significant impact on the environment. As a result, the company incurs significant amounts of money in repairing (e.g., cleaning) the environmental damages caused by its operations. The company includes the above expenses in its total operational costs but does not disclose environmental costs separately. Current accounting standards do not make it compulsory for companies to disclose specific information relating to the environmental impacts of their operations. Therefore, Access Ltd. does not want to provide specific details or explanatory notes about environment-related expenses in its current year financial statements.

Do you think specific details about environmental costs should be disclosed?

- (a) Yes
- (b) No

If you answered yes, indicate below the information disclosures (e.g., details about environmental costs) you recommend in this situation. (Circle the number that corresponds to the level of disclosure you consider as the most appropriate.)

Very Low			Moderate			Very High
1	2	3	4	5	6	7

Briefly explain/defend the disclosure decisions you made above (Scenario 1) to Mr. Peter Jones (Audit-Partner), to whom you are accountable for these decisions. (Authors’ note: Nonaccountable participants were instructed only to explain the reasons for their decisions with a reminder that their responses would remain anonymous.)

Scenario 2 – Human resource development cost

Required:

Indicate the information disclosures you recommend for the following scenario.

Access Ltd. spends substantial amounts of money on training its employees. Current accounting standards do not make it compulsory for companies to disclose specific details of costs incurred in developing knowledge and skills (e.g., training) of company employees in their financial statements. Therefore, Access Ltd. does not want to disclose specific information about its human resource development costs in its current year financial statements.

Do you think specific details about human resource development costs should be disclosed?

- (a) Yes
- (b) No

If you answered yes, indicate below the information disclosures (e.g., details about human resource development costs) you recommend in this situation. (Circle the number that corresponds to the level of disclosure you consider as the most appropriate.)

Very Low			Moderate			Very High
1	2	3	4	5	6	7

Briefly explain/defend the disclosure decisions you made above (Scenario 2) to Mr. Peter Jones (Audit-Partner), to whom you are accountable for these decisions. (Authors' note: Nonaccountable participants were instructed only to explain the reasons for their decisions with a reminder that their responses would remain anonymous.)

Scenario 3 – Contingent event

Required:

Indicate the information disclosures you recommend for the following scenario.

During the current year, a group of former employees of Access Ltd. has filed a legal case against Access Ltd. The ex-employees have claimed that the manufacturing process of Access Ltd. exposed them to serious cancer-causing radiation. The ex-employees also claimed that the company was aware of these health risks but did neither inform employees nor improve the manufacturing process to eliminate the emission of radiation. According to FRS 15 – Contingent events, the information about the pending legal case should be disclosed. However, the standard does not specifically state the level (how much information) of disclosure for specific situations.

Do you think specific details about the legal case should be disclosed?

- (a) Yes
- (b) No

If you answered yes, indicate below the information disclosures (e.g., details about the legal case) you recommend in this situation. (Circle the number that corresponds to the level of disclosure you consider as the most appropriate.)

Very Low			Moderate			Very High
1	2	3	4	5	6	7

Briefly explain/defend the disclosure decisions you made above (Scenario 3) to Mr. Peter Jones (Audit-Partner), to whom you are accountable for these decisions. (Authors' note: Nonaccountable participants were instructed only to explain the reasons for their decisions with a reminder that their responses would remain anonymous.)