RESEARCH ON PROFESSIONAL RESPONSIBILITY AND ETHICS IN ACCOUNTING

VOLUME 13

CYNTHIA JEFFREY

Editor

RESEARCH ON PROFESSIONAL RESPONSIBILITY AND ETHICS IN ACCOUNTING

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ETHICS IN ACCOUNTING VOLUME 13

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AN ETHIC OF ACCOUNTABILITY

Jesse Dillard

INTRODUCTION

As members of the academy, society grants us the right to explore ideas and the implications and implementation thereof. In turn, we accept the responsibility to act as conscience and critic of society. The means by which we exercise these rights and fulfil these responsibilities are enlightened reflection and scholarship, and from these our other tasks follow. Each of us has to envision how we can effectively fulfil this responsibility. My purpose here is to consider a framework that provides a context within which we, as accounting academics, might contemplate our roles as scholars and teachers. There are two reasons for undertaking this project. The first is to communicate ideas and experiences to those who read academic accounting articles. The second is to expand my stock of ideas and experiences that result from attempting to articulate and communicate these ideas and experiences.

I want to consider rights and responsibilities and to convey the idea that such contemplations can lead to understanding the world differently. By understanding the world differently, we can choose to live our lives differently, and teach and research accounting differently. As a result, we can have an enlightening, enabling, and transforming effect on our world. Those who study, practice, or will practice accounting comprise one part of that world; therefore, the possibility exists for changing the understanding and practice of accounting. Our challenge, and that of any member of society, is to act, based on a value set that increases the societal welfare

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rather than the interests of only a subset thereof. The domain of interest here is accounting, primarily because that is where we happen to be involved at this point in our lives and careers.

In the following chapter, I reiterate, maybe even clarify, and extend some of my previous thoughts and ideas as they provide some context for current and future ideas, experiences, and research. I do not propose to survey the literature. Others have done and will do a much better job than I. My intention is to share my thoughts and ideas, and to the extent that they are others, I am sure they could do (or did) a better job as well, but hopefully there may be ways of seeing that are stated in different, more informative ways. I hope to encourage inclusive, enlightened, and ongoing dialogue concerning what constitutes organizational management and the accounting profession's rights and responsibilities associated with acting in the public interest as a basis for academic discussion and debate.

The function of a social organization, be it a society or a work organization, is ultimately social integration, that is, to specify, coordinate, and integrate the efforts of its members in goal-directed behavior. Rights and responsibilities specify the relationships among members and groups within a social system as well as the relationships between members, groups, and organizations. Within a society, rights represent the privileges accruing to a societal member or group, whereas responsibilities entail the obligations accruing from the societal privileges. Accountability is the linchpin of any legitimate and just system of rights and responsibilities. By accountability, I mean the duty to give an account of one's actions. In the following discussion, I use examples primarily related to what is coming to be known as social sustainability, which refers to both the *processes* that create, and the *institutions* that facilitate, social health and wellbeing both now and in the future. Also, implicit in social sustainability is the necessity of both environmental and economic sustainability now and in the future (Dillard, Dujon, & King, 2008). Though the label may not have been used and the terminology may be different, these social sustainability components represent fundamental concerns of ethics research in accounting, and acting in the public interest is the definitive criteria for judging the actions of accounting and business professionals.

The discussion is organized as follows. First, I consider what it means to act in the public interest. Central to this discussion is an ethic of accountability, which generally delineates the rights and responsibilities of organizational management, the accounting profession, and members of society. Next, I specifically consider the rights and responsibilities of the accounting professionals as well as accounting academics. After discussing

the rights and responsibilities related to an ethic of accountability, I present an example that considers the types of decisions confronted by organizational management as these actors confront the issues associated with social sustainability as well as the information requirements of a supportive management and accounting information system. These information requirements provide the basis for designing and implementing reporting systems that provide society or its representatives with the information necessary to hold organizational management accountability for its actions. Brief closing remarks conclude the chapter.

ACTING IN THE PUBLIC INTEREST

One of the hallmarks of a profession is a responsibility to act in the public interest in return for exclusive rights and jurisdictions to a particular domain of knowledge and action (Kultgen, 1988). In this section, I consider the accounting professional and organizational management's responsibility for acting in the public interest as well as the role to be played by the academic accounting community.

Acting in the public interest is acting to enhance the well being of society within the context of sustainable natural, social, and economic systems. The imperative to act in the public interest provides the moral context wherein an action or activity is contemplated and legitimized. Acting in the public interest represents a central component of an individual or a profession's social and professional responsibility and legitimizes the distinguishing characteristic of the social contract by granting rights, privileges, and status (e.g., Donaldson, 2000). The public accounting profession, particularly, is charged with acting in the public interest (Code of Professional Conduct for Public Accountants, AICPA, 2003). The accountant's responsibility is to facilitate organizational management in meeting its public interest responsibilities.

An Ethic of Accountability[1]

Within Western market capitalism, organizational management plays a central role in ensuring the long-term viability of a democratically governed society grounded in justice, equality, and trust and supported by sustainable natural, social, and economic systems. Society grants organizational management the right to use its economic assets (natural, human, financial,

Table 1. An Ethic of Accountability.

	Rights	Responsibilities
Organizational management	Control the economic assets of society	To be held accountable for the use of society's economic assets
Society	Assign control of its economic assets	To hold organizational management accountable for the use of society's economic assets

and technical) in order to provide goods and services for the citizens of the society. Society entrusts organizational management with control over its economic assets. In return, management accepts a fiduciary responsibility with respect to these assets. As a part of this fiduciary responsibility, organizational management accepts an obligation to provide an account of, and to be held accountable for, its actions. Having granted the right to use its assets, society accepts its responsibility for holding organizational management accountable for its actions. I have termed this reciprocal relationship an *ethic of accountability* (Table 1). Both parties are equally responsible for carrying out this ethic of accountability.

Accountability requires relevant and timely information as well as the specification of the necessary set of relevant evaluation criteria. Organizational management is responsible for providing information necessary for rendering its actions transparent and understandable. As the grantors of the rights, society is responsible for establishing the evaluation criteria and processes used in holding organizations accountable. Care must be taken so that the evaluation criteria reflect the norms and values of the society, not those of special interests or those in power. The accounting profession is implicated throughout an ethic of accountability. In fact, the existence of an accounting profession, especially the public component, is predicated on an ethic of accountability.

An ethic of accountability is grounded in the realization that the organization is a member of an ongoing community and has an obligation to act responsibly. Following from earlier work (Niebuhr, 1963; Dillard & Yuthas, 2001), acting responsibly requires that the decision to act recognizes and incorporates four primary components: solidarity, interpreted actions, the contemplated action, and accountability (Fig. 1). Solidarity refers to the organization's recognition of its situated and interrelated status as a responsible member of an ongoing community. Interpreted actions are the observed outcomes associated with past actions that over time reveal the physical and historical interrelatedness of any actions undertaken within

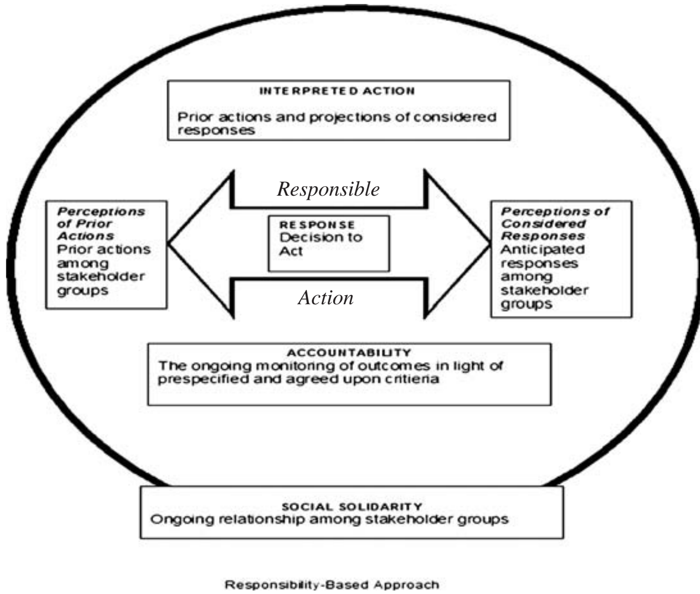

Fig. 1. Acting as a Member of an Ongoing Community.

the context of the community. Contemplated action projects outcomes on to anticipated actions in light of the interpreted past actions. In deciding to act, organizational management is obliged to consider the anticipated act and its propriety in light of its projected effect and to formulate realistic projections with respect to the anticipated implications for community members based on an intentional awareness of the effect of past actions and a sensitivity to circumstances that supplement these observations. Accountability refers to the operationalization of an ethic of accountability.

Conceptually, an ethic of accountability requires an ongoing conversation among all affected parties. Instantiating an ethic of accountability does not seek "the good" in a utilitarian sense or "the right" in a deontological sense, though both are consistent with the ideal. The good and the right are delineated as part of the process of determining the appropriate action within the context of the ongoing community. Fitting action as well as the act of holding, and being held, accountable depends upon open and trustworthy communication between the actor and the community members as well as among the community members themselves.

A preliminary condition in implementing an ethic of accountability requires the stipulation of what constitutes legitimate communal dialogue

whereby the rights and responsibilities of all community members are recognized. Trustworthiness among the actors grows out of the ongoing interactions and is central to establishing a sense of loyalty and responsibility. If the communal discourse is controlled by powerful, self-interested members who exploit the social and physical resources to achieve self-serving objectives, an ethic of accountability becomes impossible, and its pretense becomes a means for manipulation and exploitation with any possibility of solidarity and social sustainability destroyed.

Though utopian,[2] one way to conceive of, implement, and provide criteria for evaluating, the required conversation is proposed by Habermas (1984, pp. 92–104). Legitimate communication provides the basis for responsible action. Following Habermas' ideal speech situation, communication is legitimate if it satisfies the follow three validity claims:

1. Propositional validity – (physical world) concerns the correspondence between the claim and the external or objective evidence. This relates to the extent a claim is true and requires the speaker to provide the grounds upon which the claim is being made.
2. Normative validity – (social world) concerns the correspondence between the claim and the extant social norms and relates to the degree to which the claim is consistent with the prevailing social norms. The speaker is required to provide justification.
3. Subjective authenticity – (personal world) concerns the correspondence between perceived and actual intent of the speaker. This relates to the extent that a claim is genuine, as opposed to strategic/manipulative and requires that the speaker prove her or his trustworthiness.

The extent to which these claims can be attained determines the extent to which an ethic of accountability can be achieved.

Clearly, these conditions are idealistic and difficult to obtain. Nonetheless, they represent criteria for initiating and sustaining meaningful and ongoing conversation among members of a community. The inability to satisfy these validity claims calls into question the veracity of the communal discourse; thus, imposing limiting conditions on the operationalization of an ethic of accountability. Alternatively, those committed to acting in the public interest can use these criteria as guidelines for facilitating open discussion and community dialogue. For example, emerging issues arise from, and relate to, unique contextual circumstances. Legitimate communal dialogue provides the means for selecting and prioritizing interests and outcomes, with alternatives chosen based on the strength of the better argument.[3]

Seriously implementing an ethic of accountability results in an expanded scope of behavior alternatives, a framework for setting priorities, a more widely understood and accepted set of evaluation criteria, and a higher likelihood of successful applications. The process does not prescribe a set of generally applicable rules but emphasizes the importance of context and accountability, nor does it necessarily presume government regulation and oversight, though it might be required. An intermediary such as a non-government organization (NGO) or a not-for-profit organization might fulfil such a role. Alternatively, it might be presumed that if left to its own devices the market will naturally develop mechanisms within the private sector to accomplish the necessary monitoring. In any of these situations, society must ensure that the appropriate context exists to support the specification and maintenance of an ethic of accountability. For example, if the market solution is deemed the appropriate one to pursue, society, through the state or otherwise, must maintain the necessary institutional infrastructure such as the means for writing and enforcing contracts, a compatible system of property rights, and autonomous market mechanisms.

The Accounting Profession's Rights and Responsibilities

To reiterate, organizational management and the accounting profession have a central role in the long-term viability of a democratically governed society grounded in justice, equality, and trust and supported by a sustainable economic system. While all members of society have a moral obligation to act in the public interest, organizational management is specifically granted fiduciary responsibility over society's economic resources. The accounting profession facilitates and monitors organizational management in carrying out this fiduciary responsibility. As such, those engaged in the practice of accounting are concerned with the integrity and accountability of financial and administrative systems and those who design, implement, and utilize them. In order to adequately fulfil this charge, the practicing accounting community itself must maintain high standards of integrity, responsibility, and accountability.

Here, we find what might be called a nested ethic of accountability. The accounting profession has been granted the right to attest to the veracity of organizational management's claims with respect to their fiduciary responsibilities to society. As a result, the profession agrees to be held accountable for their actions. Society grants the right to act in its stead and accepts the responsibility for holding the accounting profession responsible

for their actions, which include specifying, evaluating, and enforcing appropriate evaluation criteria.

In both its role as a member of the accounting profession, in that it shares its expert knowledge, and as a member of the academy, the academic accounting community has a responsibility to facilitate, and engage in, an ongoing conversation among stakeholders regarding accounting's (the profession, the professionals, the systems) and organizational management's public interest responsibilities. Further, the accounting profession, the business community, members of the academy, and representatives of the community have a responsibility to engage in and sustain this conversation. Failure to do so on the part of any of the participants would constitute a violation of the ethic of accountability.

An Agenda for the Academy

In light of the dramatic and continuing failures in living up to organizational management's responsibilities as responsible stewards of its economic assets, society is seriously questioning organizational management's motives and the accounting profession's ability to safeguard the public interest. In the United States, the Sarbanes–Oxley Act, the Federal Sentencing Guidelines, Public Companies Accounting Oversight Board, NYSE Corporate Governance Rules, and the follow-on legislation and regulations begin to codify society's expectations but cannot serve as a substitute for professional commitment to uphold the responsibilities for acting in the public interest. Accounting professionals employed as public accountants, particularly external auditors, have a clear responsibility to the public and their audit clients for providing relevant, reliable, and transparent information to external and internal stakeholders.

The responsibilities of professionals employed in capacities other than public accounting are less clearly delineated. However, they also have responsibilities in facilitating an ethic of accountability, especially as they act as a professional member of the organizational management team. The accounting function within an organization is central in: developing, implementing, and using information systems that render the organizational activities understandable; providing the information that can be used both strategically and operationally by the organization in carrying its objective of provided goods and services for the citizens of society; and providing the means by which society can evaluate whether organizational management is fulfilling is fiduciary responsibility to society. For example, the accounting

function prepares communications used by creditors, owners, sponsors, contributors, employees, unions, managers, politicians, regulators, and society. These stakeholders have a right to expect objective, independent, honest reporting.

As collectors and conveyors of organizational information, accountants have a unique opportunity and responsibility to identify and communicate activities and behaviors that jeopardize or enhance the organization's ability to carry out its responsibilities. Unless the accounting system incorporates both natural and social systems, it cannot adequately incorporate the risks, opportunities, and responsibilities faced by individuals, organizations, and society. Internal auditors and managerial accountants are directly involved with recognizing and addressing organizational risks resulting from activities of the organization. The controllership function ensures that the organization does not violate its implicit license to operate – a license that derives directly from shared rights and responsibilities. The responsibilities are clearly broader than a legal privilege granted by a corporate charter, and processes must be designed in conjunction with the rights and responsibilities arising from an ethic of accountability. These processes include safeguards that address the integrity and transparency of the financial and administrative systems and those who design, implement, and utilize them. If the systems do not meet these requirements, serious questions arise within society regarding the foundational purpose of accounting as a profession.

Academic accounting carries out its responsibilities through scholarly investigation, educational innovation, and community interaction. One of its primary means of influence is scholarly research. A crucial focus is to bring together the expertise of faculty, students, and the community to identify and consider the critical issues facing accounting and organizational management. For example, we have and must continue to be involved in the scholarly investigation of accounting, the accounting profession, accounting professionals, and accounting systems within their economic, political, social, ecological, and organizational context, recognizing the advantages of exploring a wide range of research topics using various methods.

Examples of research areas associated with an ethic of accountability in financial accounting include non-GAAP disclosures (e.g., social or environmental) and the effects of reporting practices on market fluctuations. In managerial accounting, related research topics include the interplay between autonomy and internal control devices, the impact of corporate governance issues, the evaluation of environmental risk, and the roles of budgeting and accountability in a transparent business environment. In auditing, cogent questions concern corporate governance, the effects of

enacting and pending legislation, and providing assurance for a variety of stakeholder groups. Important research issues in the accounting information systems area include the social consequences of information access, relating creativity and business knowledge to system characteristics, and the interrelationship between system capabilities and the moral implications of accounting technologies.

Another primary focus for academic accounting is education and educational innovation. Efforts in these areas should provide the appropriate tools for constructively addressing critical issues facing accounting and organizational management as they strive to exercise their rights and fulfil their responsibilities. These tools should include both an appreciation for the historical and current role of organizational management, accounting, and the accounting profession as well as an ability to envision opportunities for socially responsible, and responsive, development, especially in the areas of integrity and accountability. Educational innovation ranges from pedagogy and program development to educational research. Much work has been, and is being, done in these areas, but it might be constrictive to more directly focus on the rights and responsibilities surrounding an ethic of accountability.

A critique of accounting programs follows concerns about the accounting profession and its social responsibilities. Most programs have inadequately addressed the need for students and faculty to understand the depth and complexities of the profession. Curriculum/course design does not respond in any meaningful way to responding to an ethic of accountability and the associated issues. The curriculum generally consists of a broad range of technical material, geared to knowledge of rules and conventions of practice, which are designed, at least implicitly, to facilitate passing professional exams. However, the public expects universities to transcend the production of accounting technicians by exploring the societal role of accounting, integrating, and enhancing technical competence with an understanding of the complex responsibilities of accounting to organizations, society, and the environment. Salient curricular issues include the philosophical and moral grounding of accounting and the ethical and social dilemmas likely to be faced in the practice of accounting. The development of the profession, its relationship to the public, and its role in society associated with an accountability ethic should be an integral part of accounting education at all levels. Innovative programs should provide students with an appreciation of the situated societal roles of the profession as well as their own rights and responsibilities as accounting professionals. The rights and responsibilities of organizational management as well as

other stakeholders should also be articulated and debated along with the interrelationships between social and natural systems.

The third action domain concerns community interaction such that its members understand an ethic of accountability including the rights and responsibilities of organizational management and accountants, as well as the rights and responsibilities of society. The objective is to engage the "community," as a facilitator and participant in an ongoing conversation exploring public interest responsibilities of all constituencies with the purpose being to articulate roles consistent with the core values of society. As a result, opportunities for socially responsible, and responsive, action should be formulated and put into practice. The resulting action could take the form of providing expert and enlightened commentary, facilitating discussion forums addressing the issues surrounding an ethic of accountability, and conducting continuing education that highlights rights and responsibilities. Generally, community involvement includes enabling an open and enlightened conversation among the members of the relevant ongoing community, which includes students, faculty, the accounting profession, organizational management, the public sector, and civil society. In the next section, I consider some of the social sustainability reporting issues that might be included in these conversations.

SOCIAL SUSTAINABILITY

In order for society to fulfil its obligations under an ethic of accountability, organizational management must provide timely and understandable information reflecting its activities. In addition to the traditional economic activity, information concerning the organization's activities in both the environmental and social arenas is requisite if organizational management is to give an adequate account to society. I draw on the Sustainability Reporting Guidelines (2006) as a template to illustrate relevant social sustainability performance indicators that might be considered as society and the accounting profession develop appropriate evaluation criteria. While the GRI guidelines address the three major performance indicator groups (economic, environmental, social), I consider only the performance indicators associated with the social dimensions. These dimensions are the least developed, representing the greatest challenge in developing meaningful measures and in need of research.

Key social performance indicators include: labor practices, human rights, community, and product responsibility. The social sustainability indicators discussed later are summarized in Table 2 and follow from such

Table 2. Examples of Social Sustainability Indicators.

Examples of Social Sustainability Indicators	
Labor practices • Employment • Labor/management relationships • Occupational health and safety • Training and education • Diversity and equal opportunity	Community • Nature, scope, and effectiveness of programs and practices that assess and manage strategic and operational impacts on the community • Corruption • Lobbying and contributions • Anti-compliance, anti-trust, and monopoly • Fins and sanctions for noncompliance
Human rights • Investment practices • Procurement practices • Discriminatory practices • Freedom of association and collective bargaining • Child and compulsory labor • Security practices • Protection of indigenous people's rights	Product responsibilities • Health and safety impact of products and services throughout the product life cycle • Non-compliance with codes and regulations • Labeling requirements • Customer privacy

internationally recognized standards as the United Nations Universal Declaration of Human Rights (1948) and its Protocols; United Nations Convention: International Covenant on Economic, Social, and Cultural Rights (1996); United Nations Convention: International Covenant on Civil and Political Rights (1996); International Labor Organization's Declaration on Fundamental Principles and Rights at Work of 1998; and the Vienna Declaration and Programme of Action (1993). Next, I discuss examples of information content associated for each of the social performance indicator groups. Each needs to be debated and refined as we develop expanded accounting and reporting requirements in considering how best to design and implement information systems that can provide the necessary decision inputs to both organizational management and society.

Labor Practices

One of the most obvious and direct social sustainable dimensions concerns labor practices. At a minimum, organizational management should provide information on the following aspects: employment; labor/management relationships; occupational health and safety; training and education; and

diversity and equal opportunity. Following the GRI guidelines, relevant demographic dimensions include: total workforce by employment type, employment contract, and region; total number and rate of employee turnover by age group, gender, and region; and benefits provided to full-time employees that are not provided to temporary/part-time employees by major operation. Key measures associated with labor/management relations include the percentage of employees covered by collective bargaining agreements as well as the minimum notice periods regarding operational changes. Occupational health and safety measures include: percentage of total workforce represented in formal joint management–worker health and safety committees that advise related programs; rates of injury, occupational diseases, lost days, absenteeism, and work related fatalities by region; education, training, counseling, prevention, and risk control programs in place to assist workforce members, their families, or community members regarding serious diseases; and health and safety topics covered in formal agreements with trade unions. Training and education indicators include: average hours of training per year per employee by employee category; programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings; and percentage of employees receiving regular performance and career development reviews. Diversity measures include the composition of governance bodies and breakdown of employees per category according to gender, age, group, minority group membership, and other indicators of diversity as well as ratio of basic salary of men to women by employee category.

Human Rights

A second social sustainability indicator is the organization's commitment to honoring and advancing human rights both within the organization and throughout the supply chain. One primary indicator is the organization's investment practices reflected in the percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening. Indicative of organizational management's commitment to honoring and advocating human rights of those associated with manufacturing their products is the percentage of significant suppliers and contractors that have undergone screening of human rights and actions taken and total (and percentage) hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations. Indicators of discriminatory practices are the total

incidents of discrimination and the actions taken. The information system should also identify operations in which the right to exercise freedom of association and collective bargaining may be at risk as well as indicate what actions have been taken to support these rights. Operations having significant child labor or compulsory labor risks must be identified and the measures taken to eliminate these risks specified. Another aspect of human rights concerns security practices and the extent to which security personal are trained with respect to policies and practices concerning aspects of human rights that are relevant to the organization's operations. As an indication of the organization's commitment to protecting indigenous rights, the information system should provide the total number of violations involving their rights and the actions taken with regard to these violations.

Community

What the GRI guidelines refer to as society, I have labeled community and refer to the effect of organizational actions on the communities within which they operate. The organization should be held accountable for the nature, scope, and effectiveness of any programs and practices that assess and manage strategic and operational impacts on that community. Organizational management must address corruption by analyzing the related risk associated with corruption in its business units and the information system should report the total and percentages of those units so analyzed in addition to actions taken in response to incidents of corruption. The information system should make transparent any activities in which the organization participates with the purpose of influencing policy development such as lobbying and contributions. The total value of contributions, be they financial or in-kind, to political parties, politicians, and related institutions should be reported by legal jurisdiction. An indication of the extent to which management has engaged in anti-competitive behavior is the number of legal actions for anti-compliance behavior, anti-trust, and monopoly practices that have been filed and their outcome. Finally, the total value, monetary or otherwise, of significant fines and sanctions for non-compliance with laws and regulations should be reported.

Product Responsibility

The product responsibility dimension of the social sustainability concerns the characteristics of the products or services provided to customers.

A socially responsible organization is concerned with the health and safety impacts of products and services throughout their life cycle. The information system should report the extent to which life cycle assessments are undertaken and report the number and percentages of products and services that are subjected to the assessment. In addition, the total number of health and safety regulatory and voluntary code of non-compliance incidents should be collected and reported by the type of outcome. In addition, associated practices designed to elicit life-cycle-related customer satisfaction, and the results should be reported. Labeling is another area that provides insights into an organization's commitment to product responsibility. The information system should make available the type of labeling information required and the percentage of products and services subject to these requirements. Following this, the total number of related non-compliance incidences should be reported by type of outcome. Marketing communications such as advertising, promotion, and sponsorship should be subjected to processes designed to determine their adherence to laws, standards, and voluntary codes. The information system should report the total number of violations of these requirements, and guidelines should be reported by type of outcomes. The total number substantiated complaints concerning breaches of customer privacy and loss of data should be collected and reported as well as the monetary value of significant fines for non-compliance with laws and regulations concerning the provisions and use of products and services.

Rights and Responsibilities

Relating this discussion of social sustainability back to an ethic of accountability, these dimensions of social sustainability illustrate the rights and responsibilities associated with organizational management's social obligations. With respect to labor practices, the organization has the right to employ society's human assets and accepts the responsibility for treating them honestly and fairly with dignity and respect and consciously recognizing their employees as more than a means to an economic end. Broadening the horizon of social responsibility with respect to human labor, the organization claims the right to utilize the result of human work and accepts the responsibility to respect and advance human rights generally and specifically to protect the rights of their stakeholders. As a member of an ongoing community, organizational management accepts the right to operate as a respected member of the community. In doing so, it accepts

the responsibility to respect and abide by the laws of that community and not to impose its will on the community or its members. Organizational management claims the right to produce and sell its products and services to members of the community. As a result, the organization accepts the responsibility to provide a safe, reliable product accompanied by honest and complete information about the products and services as well as to safe guard customer privacy.

CONCLUSION

To be moral, an act must be preceded by a serious and conscious consideration of the physical and historical context within which the action is to be carried out. The agent acts as a responsible member of an ongoing community, accepting the right of the community to require an account of both process and outcome. In turn, the community accepts its responsibility to hold the actor accountable. A part of this process includes establishing and implementing evaluation criteria, as well as effective monitoring mechanisms and reporting requirements. Both are to be established and carried out through enlightened, democratic processes.

I have proposed an ethic of accountability as establishing the conceptual parameters for the rights enjoyed and the responsibilities incurred within a democratically governed society. Recognizing accountability as the linchpin of any legitimate and just economic system places accounting at the critical interface between those who control the economic assets (organizational management) and the society that they benefit. An ethic of accountability can also provide a contextual framework wherein we as academic accountants can carryout our responsibilities as conscience and critic of society and its institutions. The ideas presented herein have emerged from my scholarship and reflection, and I anticipate that they will be modified, expanded, or rejected as we facilitate and engage in an ongoing dialogue among the various constituencies within this ongoing community.

Social sustainability is a key component in implementing an ethic of accountability. As such, accounting systems must incorporate the requisite information if they are to adequately satisfy the needs of both organizational management and society. From a process perspective, a relevant and complete reporting system would include the organizational-wide goals as well as the related organizational governance structures. In conjunction with the organizational goals and governance structures,

organizational information systems should provide information concerning key successes and short comings; major organizational risks and opportunities; major changes in systems, structures, or reporting practices; and the strategic and procedural responses contemplated and implemented. These performance measures represent examples of the information necessary for organizational management to satisfy its obligation as a responsible member of an ongoing community as well as for society to fulfil its responsibility for holding management accountable for their actions. In order to develop our understanding of the rights and responsibilities associated with an ethic of accountability, each of the groups involved with, and affected by, the organization's actions must actively and energetically engage in the dialogue of developing models and measures of economic, environmental, and social responsibility. It is our responsibility as members of the accounting academy to both facilitate and criticize this dialogue.

NOTES

1. These ideas have evolved from Yuthas and Dillard (1999), Dillard and Yuthas (2001), Dillard (2007), and Niebuhr (1963).
2. See Broadbent (1998).
3. As Broadbent (1998) points out, the specification of the better argument is not a static state but will be continually renegotiated throughout the life of the community.

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ETHICALITY AND MORAL INTENSITY OF EARNINGS MANAGEMENT: DOES THE METHOD MATTER?

Keith G. Stanga and Andrea S. Kelton

ABSTRACT

Although an important objective of the Sarbanes-Oxley Act of 2002 is to improve the quality of corporate financial reporting, recent research shows that firms continue to manage their earnings by using both accounting and operating methods of earnings management. Moreover, a comprehensive survey of CFOs recently reported in the Journal of Accounting and Economics *indicates that firms today are making greater use of operating methods. In fact, these CFOs acknowledge that they are willing to sacrifice real economic value to meet predetermined earnings targets. In light of this important finding about the increased use of operating methods in today's business environment, the present study investigates and compares investors' ethicality judgments of operating and accounting methods of earnings management.*

The study is based on an experiment and finds that investors judge earnings management as unethical. But unlike previous research, the study finds that this judgment about the ethicality of earnings management is not affected by whether a manager uses operating or accounting methods to manage earnings. The study also finds that ethicality

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judgments of earnings management are positively associated with subsequent investment decisions. Finally, the study presents empirical evidence showing that certain conceptual components of Jones' moral intensity construct help to explain investors' ethicality judgments about earnings management.

An important objective of the Sarbanes-Oxley Act of 2002 (SOX) is to improve the quality of corporate financial reporting. Yet recent research indicates that firms continue to manage their earnings (Cohen, Dey, & Lys, 2008; Graham, Harvey, & Rajgopal, 2005), which negatively affects financial reporting quality. Companies manage their earnings by using accounting or operating methods. Accounting methods use the judgment inherent in generally accepted accounting principles (GAAP) to achieve a predetermined earnings target; operating methods alter the timing of certain business decisions to meet a predetermined earnings target.

Most prior research has focused on accounting methods of earnings management. However, a recent survey of business executives suggests that in the current post-SOX environment, companies are more likely to use operating methods of earnings management (Graham et al., 2005). Results presented by Graham et al. (2005) indicate that managers are willing to sacrifice real economic value (via operating methods of earnings management) to meet a predetermined earnings target, which ''suggests a flaw in corporate governance practices'' that deserves attention by academic researchers (p. 67). In response, this study investigates investors' ethical judgments of operating and accounting methods of earnings management.

The appropriateness of earnings management[1] remains a debated topic among practitioners, standard setters, and academics. Research examining earnings management from an ethical perspective reports that investors perceive accounting methods of earnings management as unethical (Stanga & Kelton, 2008a, 2008b). However, research has not compared ethical judgments of operating and accounting methods of earnings management in the post-SOX environment. Managers today may be less willing to use accounting methods of earnings management due to the recent, highly publicized accounting frauds (Graham et al., 2005). Moreover, operating methods of earnings management are more difficult for auditors and stockholders to detect. Graham et al. (2005, p. 36) note that ''while auditors can second-guess the firm's accounting policies, they cannot readily challenge real economic actions to meet earnings targets that are taken in

the ordinary course of business.'' It is unclear whether investors' ethicality judgments about earnings management differ between accounting and operating methods. Given recent evidence that earnings management still persists post-SOX (Cohen et al., 2008; Graham et al., 2005) and that managers are more likely to use operating methods of earnings management (Graham et al., 2005), understanding ethical judgments of operating methods of earnings management is an important and timely area of research.

This study examines investors' ethicality judgments of earnings management and, specifically, whether those judgments differ between accounting methods and operating methods of earnings management. We also investigate the potential economic consequences of ethicality judgments by determining whether these judgments are associated with investment decisions. To gain further conceptual insight into ethical judgments of earnings management, we use Jones' (1991) model of ethical decision making to empirically examine whether the components of perceived moral intensity are related to ethicality judgments of earnings management.

Briefly, we find no significant difference in ethicality judgments between accounting methods and operating methods of earnings management. Regardless of the method, participants perceive earnings management as unethical. Additionally, we find that ethicality judgments are positively associated with investment decisions. We also provide evidence that certain components of Jones' (1991) moral intensity construct are associated with ethicality judgments about earnings management.

Results of this study have important implications for research and practice. We extend prior research by using Jones' (1991) model to gain conceptual insight into ethicality judgments of earnings management. Results support Jones' (1991) contention that the characteristics of a moral situation are important considerations in ethics research. Although prior research has emphasized accounting methods of earnings management, we provide evidence that both operating and accounting methods of earnings management are considered unethical by investors. By providing empirical evidence that ethical judgments of earnings management are positively associated with subsequent investment decisions, our results inform corporate managers of the potential adverse economic consequences of ethical breaches in financial reporting.

Ethics is a critical topic to accountants and the business community. Accountants must follow professional standards of conduct that relate to integrity and ethical issues and should also help guide the ethical tone of an organization (Smith, 2003). Some argue that ethics should be an integral

component of the accounting curriculum (Bean & Bernardi, 2007), and others have developed special ethics presentations for accounting and business classes (Smith, Smith, & Mulig, 2005). Thus, we believe that our results should be of interest to those who seek to improve the quality of corporate financial reporting (e.g., SEC and FASB) and corporate governance (e.g., corporate boards of directors and those who write corporate codes of ethics), as well as accountants, auditors, and accounting educators.

The remainder of this article is organized as follows. The next section presents the background and motivation for the study. The study's theory and hypotheses are then explained. This is followed by sections that describe the study's research methods and results. The final section discusses the results, explains the limitations, and suggests opportunities for additional research.

BACKGROUND

Earnings management has long been a hotly debated topic among corporate managers, standard setters, and academics. According to Healy and Wahlen (1999, p. 368):

> Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers.

A survey of corporate managers shows several reasons that companies manage earnings, such as meeting or exceeding analysts' consensus earnings forecasts, maximizing earnings-based compensation, and reducing earnings volatility (Mulford & Comiskey, 2002, pp. 83–84). In fact, "most CFOs feel that their inability to hit the earnings target is seen by the executive labor market as a 'managerial failure,'" which could negatively impact the CFO's *career* (Graham et al., 2005, p. 28).

Numerous studies confirm that earnings management is a widespread practice (see Healy and Wahlen, 1999 for a review of earnings management research). Although the purpose of the SOX was to improve the quality of corporate financial reporting, research indicates that earnings management still persists in the post-SOX environment (Cohen et al., 2008; Graham et al., 2005). Thus, earnings management remains an important area for academic research.

Earnings management is achieved using accounting methods or operating methods (Merchant & Rockness, 1994, p. 83). *Accounting methods* of managing earnings involve the use of GAAP's flexibility when making assumptions and/or formulating estimates to produce a predetermined earnings amount. For example, as long as the accounting estimate is reasonable and defendable within GAAP, a manager may select a lower rather than a higher estimate of bad debts expense in a given year to increase the current year's net income. *Operating methods* of managing earnings refer to a manager making business operating decisions designed to produce a predetermined earnings number. For example, a manager may defer engaging in research and development activities from the current year to a future year to improve the current year's net income.

Recent research conducted post-SOX shows that corporate managers use both accounting and operating methods of earnings management (Cohen et al., 2008; Graham et al., 2005). Although both methods are widely used, a survey of CFOs (Graham et al., 2005) indicates that firms are more likely to use operating methods than accounting methods of earnings management, perhaps because operating methods are more difficult to detect. Specifically, Graham et al. (2005, pp. 32–33) report the following: "we find strong evidence that managers take real economic actions to maintain accounting appearances. In particular, 80% of survey participants report that they would decrease discretionary spending on R&D, advertising, and maintenance to meet an earnings target." Surprisingly, managers in the study (Graham et al., 2005, p. 66) candidly admitted that they *"would even give up positive NPV projects to meet short-term earnings benchmarks"* (emphasis added). This finding points to a major limitation in corporate governance because boards of directors usually do not see the positive NPV projects that corporate managers fail to bring forward. Moreover, management reward systems tend to emphasize short-term, rather than long-term, earnings results (Graham et al., 2005).

Similarly, Cohen et al. (2008) report that many firms switched from using accounting methods to using operating methods of earnings management after the passage of SOX. While most research on earnings management has focused on accounting methods, findings from these studies suggest that more attention should be focused on real operating decisions that managers make with the primary aim of managing their companies' reported net earnings. This study examines and compares operating and accounting methods of earnings management from an *ethical* standpoint.

THEORY AND HYPOTHESES DEVELOPMENT

Ethics of Earnings Management

The issue of whether earnings management is appropriate managerial behavior has not been fully resolved (e.g., Arya, Glover, & Sunder, 2003; Mulford & Comiskey, 2002, p. 82). Some argue that ''there is a 'good' kind of earnings management – reasonable and proper practices that are part of operating a well-managed business and delivering value to stockholders'' (Parfet, 2000, p. 485). Similarly, survey results indicate that auditors do not require adjustment of all attempts at earnings management (Nelson, Elliott, & Tarpley, 2002), suggesting that auditors may not consider all earnings management activities harmful to users of financial information. Alternatively, others argue that any type of earnings management is detrimental to the financial community and should not be allowed (Levitt, 1998).

To provide insight on the appropriateness of earnings management, accounting research has examined the issue from an ethical perspective. Studies show several factors that affect ethical judgments of earnings management, including management's intent for managing earnings (Stanga & Kelton, 2008; Kaplan, 2001a; Merchant & Rockness, 1994) and the role of the individual making the ethical judgment (Kaplan, 2001b). Recent evidence suggests that investors judge earnings management achieved via use of accounting methods as unethical (Stanga & Kelton, 2008a, 2008b).

Earnings management is a fundamental issue that negatively affects the credibility and reliability of accounting information. The FASB's Conceptual Framework states that to be reliable, accounting information must be *neutral* (FASB, 1980). Information is biased, and therefore is not neutral, when it systematically produces results that favor one group of financial statement users over others. Earnings management involves the ''purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain'' (Schipper, 1989, p. 92). Thus, managed earnings are not neutral. An important implication of earnings management, whether achieved via operating or accounting methods, is that the predetermined earnings result always favors one group over another. For example, when earnings are managed higher to enhance the company's stock price, *existing* stockholders (one group of users) benefit economically – at least in the short term – from the higher stock price, but *potential* stockholders (another group of users) are harmed because they must pay the higher share price to invest. The concept of reliability requires that

managers be unbiased in their accounting and reporting decisions, and this is where earnings management is flawed from an ethical perspective.

Although there are ethical implications to earnings management, corporate managers report benefits to earnings management, such as maintaining credibility with the capital market, protecting stock prices, and improving the firm's reputation with stakeholders (Graham et al., 2005). Analytical research suggests that a firm's *current* stockholders may actually have a demand for earnings management that positively affects the firm's stock value (Dye, 1988). Given these benefits, investors may perceive earnings management as appropriate and ethical behavior.

The potential economic benefits of earnings management and the negative effect of earnings management on the reliability of accounting information provide empirical tension for examining the ethicality of earnings management. Consistent with prior research that reports investor perceptions of earnings management achieved via use of accounting methods as unethical (Stanga & Kelton, 2008a, 2008b) and the current emphasis on business ethics and financial reporting quality post-SOX, we expect the negative aspects of earnings management to dominate and propose the following hypothesis:

H1a. Potential stockholders judge earnings management as unethical.

Operating versus Accounting Methods of Earnings Management

Given findings from recent research that firms are more likely to use operating methods of earnings management (Cohen et al., 2008; Graham et al., 2005), it is interesting and important to empirically investigate the ethicality of both types of earnings management. The few studies that have examined the ethicality of both operating and accounting methods of earnings management report that accounting methods of earnings management are judged as less ethical than operating methods (Fischer & Rosenzweig, 1995; Merchant & Rockness, 1994). However, these studies were conducted pre-SOX. Recent changes in the regulatory environment and evidence that firms are more likely to use operating methods warrant a more current examination of this issue.

As previously discussed, earnings management reduces the neutrality and reliability of accounting information, which is potentially harmful to investors (FASB, 1980). Both accounting and operating methods of earnings management have ethical implications since both methods involve making biased decisions in financial reporting. Accounting methods involve

purposeful manipulation of GAAP to meet a predetermined earnings amount, and operating methods involve making ''real economic sacrifices to hit an earnings target'' (Graham et al., 2005, p. 40). Although some pre-SOX research suggests differences in the ethicality of the two methods (Fischer & Rosenzweig, 1995; Merchant & Rockness, 1994), we know of no theory which suggests that ethical judgments of earnings management should depend on whether a manager uses accounting methods or operating methods.[2] Therefore, no difference should exist between potential stockholders' ethical judgments of operating and accounting methods of earnings management. Formally stated:

H1b. No difference exists between potential stockholders' ethical judgments of accounting methods of earnings management and operating methods of earnings management.

Effect of Ethicality Judgments on Investment Decisions

Jones' (1991) model of ethical decision making predicts that ethical judgments will influence subsequent behavior. Archival research suggests that corporate ethics and governance have economic implications. Verschoor (1998) shows an association between a firm's stated commitment to ethics and favorable financial performance. Results from Picou and Rubach (2006) indicate that firms that issue corporate governance guidelines experience increased stock prices. We test this notion experimentally and predict that investors' ethicality judgments will influence subsequent investment decisions.

The U.S. Treasury Secretary recently noted that the capital markets rely on trust and that ''trust is based on financial information presumed to be accurate and to reflect economic reality'' (Paulson, 2007). According to Hosmer (1995, p. 379), trust is based on the assumption of an implicit moral duty and is required for the success of economic transactions. Managers must develop a reputation for trustworthy behavior or suffer a loss in reputation, and therefore, a loss in contracting opportunities (Hosmer, 1995, p. 386).

As explained earlier, one obligation of corporate managers is to report *neutral* information, that is, information that is not biased with the intent to attain a predetermined result (FASB, 1980). If information is not neutral, it will lack reliability and earnings *quality* will be diminished.[3] In a principal/agent relationship, an agent (manager) must continually build trust to

ensure stakeholders that the agent does not make decisions primarily to benefit his/her own self-interest. Earnings management has the potential to reduce the trust that investors have in management, and as a result, reduce their willingness to purchase the company's stock. Supporting empirical evidence would help answer the question, "why be moral?" which is "the most critical issue in normative philosophy" (Hosmer, 1995, p. 400). The following hypothesis is proposed:

H2. Ethicality judgments about earnings management are positively associated with investment decisions.

Moral Intensity in Ethical Decision Making

Jones (1991) provides a theoretical framework of ethical decision making that is useful for gaining insight into investors' ethicality judgments of earnings management. Jones (1991, p. 378) asserts that because the intent of his theoretical framework "is to identify some possible components of ethical decision making and behavior for future research, it is impossible to precisely specify (a) the relationships between the moral intensity construct and its components, including their relative importance and (b) the relationships among the components. Such determinations must be *made empirically* at a future date" (emphasis added).

Jones' (1991) model is issue contingent, such that ethical decision making depends on the characteristics of the ethical issue and, specifically, on the moral intensity of the issue. Jones (1991, p. 372) defines moral intensity as "a construct that captures the extent of issue-related moral imperative in a situation." Issues with higher moral intensity are associated with more extreme ethicality judgments than issues with lower moral intensity. According to Jones (1991), moral intensity is comprised of the following six components:

1. *Magnitude of consequences* – The sum of the harms done to victims of the action.
2. *Social consensus* – The extent of social agreement that a proposed action is wrong.
3. *Probability of effect* – A joint function of the likelihood that the action will occur and that the action will cause the harm predicted.
4. *Temporal immediacy* – The length of time between the present and the beginning of consequences of the action. A shorter length of time implies greater immediacy.

5. *Proximity* – The feeling of nearness that the ethical decision maker has for the victims of the action.
6. *Concentration of effect* – An inverse function of the number of people affected by an action of a given magnitude.[4]

Consistent with the predictions of Jones' (1991) model, research shows an association between perceived moral intensity and ethical judgments (e.g., McMahon & Harvey, 2007; O'Fallon & Butterfield, 2005). However, the relevance of each component of moral intensity to an ethical decision depends on the specific decision-making scenario; not all components are relevant to each ethical decision-making context (Jones, 1991; Shafer, 2002; O'Fallon & Butterfield, 2005; Cohen & Bennie, 2006). Although we expect moral intensity to influence ethical judgments, research has not yet shown which component(s) of moral intensity are relevant to investors assessing the ethicality of earnings management actions. The following hypothesis is proposed:

H3. Components of moral intensity, as perceived by potential stockholders, are related to ethicality judgments about earnings management.

RESEARCH METHODS

Task

The experimental task involved a brief case scenario describing actions taken by the CEO of a large, publicly traded U.S. company. The CEO in the case was reviewing the company's *preliminary*, year-end financial statements to get an early feel for what would likely be the company's reported annual net income at year end. The company's preliminary financial statements indicated that net income would be *below* financial analysts' forecasted earnings by a material amount. Participants were then informed which action the CEO takes, depending on the experimental condition. Participants then made several judgments regarding the case scenario and management's actions.[5]

Participants' ethical judgments were measured using a seven-point scale anchored by (1) Very Ethical and (7) Very Unethical. Participants assessed how the CEO's action affects their willingness to purchase stock in the company using a seven-point scale anchored by (1) More Willing to Purchase Stock and (7) Less Willing to Purchase Stock. The six components

of perceived moral intensity were also measured using items adapted from Singhapakdi, Vitell, and Kraft (1996) and presented in the appendix.

The experimental materials included an informed consent form, a set of instructions, the one-page case, an experimental questionnaire, and a request for demographic information. The case instructed all participants to assume they are *potential stockholders* in the company. Thus, judgments made in this study are from the perspective of the investing public.

Design

The study design has one independent variable, MANAGERIAL ACTION, with the following three levels:

1. *Control (No Earnings Management)* – The CEO in the case makes no changes to current plans, and the company's final reported net earnings are materially lower than financial analysts had forecasted.
2. *Accounting Method* – The CEO in the case lowers the company's estimate of depreciation expense for the year, and the company's final reported net earnings equal the amount that financial analysts had forecasted.
3. *Operating Method* – The CEO in the case postpones needed repairs and maintenance, and the company's final reported net earnings equal the amount that financial analysts had forecasted.

Participants were randomly assigned to one of the three treatment conditions.

Participants

The experiment was conducted in a controlled classroom environment with 118 full-time, Master of Accountancy students at a major state university in the United States. Participants responded from the perspective of *potential stockholders*, a major group of users of financial statements (FASB, 1978). The Financial Accounting Standards Board (FASB, 1978) describes individual investors as those who have "a reasonable understanding of business and economic activities and are willing to study the information with reasonable diligence." The FASB (1978) also notes that individual investors' "understanding of financial information and the way and extent to which they use and rely on it also may vary greatly." Graduate business students are frequently used to proxy for nonprofessional investors (Elliott,

Hodge, Kennedy, & Pronk, 2007), and students are also often used in research on accounting ethics (e.g., Wright, Cullinan, & Bline, 1997, 1998; Shafer, 2004). Libby, Bloomfield, and Nelson (2002) argue that research examining the judgments of nonprofessional investors only requires participants who possess basic accounting and investing knowledge. Thus, the use of students in this study to proxy for nonprofessional investors is reasonable.

Pilot Test

The instrument was pilot tested in two sections of junior-level, intermediate accounting classes. The pilot test indicated that participants understood the task and did not reveal any difficulties in completing the task in a timely manner.

RESULTS

Manipulation Checks

Participants responded to two manipulation check questions. Participants were asked (1) what accounting action the CEO took and (2) whether the company's reported net earnings met the amount that financial analysts had forecasted. Thirteen participants responded incorrectly to one, or both, manipulation check questions, and those participants' responses are excluded from the following analysis. The study's findings are therefore based on the responses of 105 participants.

Participant Demographics

As Table 1 shows, the study's participants are, on average, 23 years old and about evenly divided between males and females. On average, each participant had completed 11 accounting courses and one ethics course. The vast majority has had previous accounting experience, plans to invest in common stock in the future, has read an annual report to shareholders, and has conducted a financial analysis of a real company. Thus, our participant group appears capable of understanding the task and responding from the viewpoint of a prospective investor.[6]

Table 1. Participant Demographics.

	Mean	Standard Deviation
Panel A: Continuous Variables		
Age	23.11	1.37
Number of accounting courses completed	11.14	3.30
Number of ethics courses completed	1.35	0.68

	n	%
Panel B: Dichotomous Variables		
Gender		
Female	55	52.4
Male	50	47.6
Have you had an internship or other professional experience in accounting?		
Yes	94	89.5
No	11	10.5
Have you invested in common stock in the past?		
Yes	31	29.5
No	74	70.5
Do you plan to invest in common stock in the future?		
Yes	100	95.2
No	4	3.8
Have you previously read an annual report to shareholders?		
Yes	100	95.2
No	5	4.8
Have you previously conducted a financial analysis of a real company?		
Yes	99	94.3
No	6	5.7

Descriptive Statistics

Descriptive statistics for the ethicality and investment decision variables are presented in Table 2. The mean responses for participants' ethicality judgments are in the expected direction, with earnings management achieved through accounting methods and operating methods each perceived as *less ethical* than the control condition (i.e., no earnings management). Interestingly, ethicality judgments of accounting and operating methods of earnings management lean toward the *unethical* side of the response scale. Additionally, participants in the control condition are more willing to purchase stock in the company than participants in both the accounting method and operating method conditions.

Table 2. Descriptive Statistics Means (Standard Deviations).

	Managerial Action		
	Control	Accounting method	Operating method
Ethical judgment[a]	2.21	4.83	4.23
	(1.67)	(1.36)	(1.04)
Investment decision[b]	3.49	5.58	5.27
	(1.60)	(1.08)	(1.20)

[a]Participants assessed the ethical acceptibility of the manager's actions using a seven-point scale anchored by (1) Very ethical and (7) Very unethical.
[b]Participants assessed the effect of the manager's decision on their willingness to purchase stock in the company using a seven-point scale anchored by (1) More willing to purchase stock and (7) Less willing to purchase stock.

Hypotheses Tests

H1a posits that potential stockholders will judge earnings management as unethical and H1b predicts no difference in ethical judgments of accounting methods of earnings management and operating methods of earnings management. We tested H1 using a one-way ANOVA with ethicality judgments as the dependent variable and MANAGERIAL ACTION as the independent variable. As shown in Panel A of Table 3, MANAGERIAL ACTION was significant ($p < .001$).

H1a predicts that participants in the control condition will provide more positive ethicality judgments than participants in the accounting method and operating method conditions. Pairwise comparisons (Panel B of Table 3) show that earnings management, whether accomplished via accounting methods or operating methods, is significantly less ethical than the control condition. H1a is supported.

H1b predicts no difference in investors' ethical judgments of accounting methods of earnings management and operating methods of earnings management. As shown in Panel B of Table 3, ethicality judgments of accounting methods (mean = 4.83) are not statistically different ($p = .265$) from ethicality judgments of operating methods of earnings management (mean = 4.23). Thus, we cannot reject H1b.

H2 asserts that ethicality judgments about earnings management are positively associated with investment decisions. Untabulated results indicate that participants' ethicality judgments are significantly correlated with their willingness to purchase stock in the company ($r = .602$, $p < .001$), which

Table 3. Tests of Hypothesis One.

Source	Sum of Squares	d*f*	MS	*F*	Significance
Panel A: ANOVA Analysis					
MANAGERIAL ACTION	141.90	2	70.95	35.70	$<.001$
Error	202.73	102	1.99		
Corrected total	344.63	104			

Comparison	Mean difference	Significance[a]
Panel B: Pairwise Comparisons		
H1a: Accounting vs. Control	2.63	$<.001$
H1a: Operating vs. Control	2.03	$<.001$
H1b: Accounting vs. Operating	0.60	0.265

[a]Reported *p*-values Bonferroni adjusted for multiple comparisons.

Table 4. Effect of Perceived Moral Intensity on Ethical Judgments.

Variable	Coefficient	*t*-statistic	Significance
Intercept	3.200	3.283	0.001
Magnitude of consequences	0.261	1.813	0.073
Probability of effect	0.102	0.710	0.480
Temporal immediacy	−0.263	−2.444	0.016
Proximity	0.265	3.164	0.002
Concentration of effect	0.181	2.037	0.044
Social consensus	−0.360	−3.085	0.003

Note: $R^2 = 0.363$.

supports H2. In other words, the less (more) ethically acceptable the manager's action, the less (more) likely the investor is to purchase the company's stock.

H3 posits that components of Jones' moral intensity construct are related to ethicality judgments of earnings management. To test H3, we conducted a multiple regression analysis with ethicality judgments as the dependent variable and the six components of the moral intensity construct as independent variables. The overall model is significant ($F = 9.310$, $p < .001$), indicating that perceived moral intensity is significantly associated with ethical judgments of earnings management and providing support for H3. As shown in Table 4, four components of perceived moral intensity are significantly associated with ethicality judgments: temporal immediacy,

proximity, concentration of effect, and social consensus. In addition, the association between magnitude of consequences and ethicality judgments is marginally significant.

DISCUSSION

Recent financial scandals have made ethics one of the most crucial topics to the accounting profession. A recently retired CEO of Deloitte & Touche noted the importance of accounting ethics: "To regain the trust and respect it previously enjoyed, the [accounting] profession must rebuild its reputation on its historical foundation of ethics and integrity" (Copeland, 2005, p. 35). This study examines potential stockholders' ethical judgments of earnings management and whether these judgments depend on whether a manager uses accounting methods or operating methods to manage earnings. We investigate potential economic consequences of investors' ethical judgments by examining the association between ethical judgments and investment decisions. To provide greater conceptual insight into ethical judgments of earnings management, we also investigate whether components of moral intensity affect ethical judgments.

Consistent with prior research (Stanga & Kelton, 2008a, 2008b), we find that potential investors regard earnings management as unethical. In addition, our findings also reveal a new and important insight – that *no differences exist* between ethicality judgments of accounting methods and operating methods of earnings management. This finding differs from previous research, which found that earnings management accomplished via accounting methods was perceived to be significantly less ethical than earnings management achieved via operating methods (Fischer & Rosenzweig, 1995; Merchant & Rockness, 1994).

Although we cannot be certain, the differences in results may be attributable to the different timing of the various studies. Recent and significant changes in the business environment, such as the numerous financial scandals and the SOX, have placed a renewed emphasis on business ethics and financial reporting quality. Our results suggest that these changes may have also changed perceptions about the ethicality of different methods of earnings management.

The results are timely and important in light of recent research which shows that companies are *more likely to use operating methods* of earnings management in the current, post-SOX environment. Graham et al. (2005, p. 66) report the following: "most earnings management is achieved via real

[operating] actions as opposed to accounting manipulations. Managers candidly admit that they would take real economic actions such as delaying maintenance or advertising expenditures, and would even give up positive NPV projects, to meet short-term earnings benchmarks.'' Additionally, a common belief among the executives surveyed and interviewed in Graham et al. (2005, p. 29) is that ''a well-run and stable firm should be able to 'produce the dollars' necessary to hit the earnings target, even in a year that is otherwise somewhat down.'' A noteworthy finding of our study is that *from an ethical perspective*, potential stockholders view this belief as relatively unethical. Participants' ethical judgments are consistent with the idea that corporate managers should focus more on long-term profitability and less on meeting short-term earnings targets.

Additionally, results show that five of the six components of moral intensity are significantly associated with participants' ethicality judgments: magnitude of consequences, temporal immediacy, proximity, concentration of effect, and social consensus. These results provide conceptual insights into investors' ethicality judgments of earnings management and show that moral intensity is an important factor in explaining these judgments. The importance of magnitude of consequences evinces participants' concern about the overall harm to investors that earnings management causes. The results for temporal immediacy suggest that for the ethical issue of earnings management, it may not be the immediate consequences, but rather the longer-term unfavorable consequences, that helps determine potential stockholders' ethicality judgments. Results for proximity suggest participants' concern about management's responsibility to the investing public to report reliable financial information. The influence of concentration of effect suggests that participants' ethicality judgments were affected by a belief that earnings management is particularly harmful to the concentrated subset of users who actually rely on managed earnings.

In our study, social consensus is negatively associated with ethicality judgments, suggesting that a perceived lack of consensus on the appropriateness of earnings management leads to negative ethicality judgments. As noted by Ketchand, Morris, and Shafer (1999, p. 253), social consensus is not likely ''unless the practice in question involves a clear violation of known professional or legal standards, for example, generally accepted accounting principles.'' Neither laws nor GAAP specifically proscribe earnings management, and the overall desirability of earnings management has long been controversial and debated in the financial

community (Arya et al., 2003; Parfet, 2000) and academics. Our findings support this notion. Overall, our results suggest that moral intensity is an important factor when considering ethical judgments of earnings management. We view these results as preliminary and believe that additional research is justified regarding the importance of each component of moral intensity to ethical judgments of earnings management. For example, future research could examine whether social consensus and proximity vary based on the role of the individual making the moral judgment (e.g., auditor, accountant). Additionally, future research could examine potential relationships between magnitude of consequences, concentration of effect and the materiality of the amount of earnings management (Shafer, 2002) and the effect of these items on ethicality judgments.

Our study has several limitations, which provide avenues for future research. We used graduate accounting students to proxy for potential stockholders. Although our participants possess similar characteristics to nonprofessional investors, we do not know whether results are generalizable to a different sample of potential stockholders. Future research could examine ethical judgments of earnings management using a different group of investors.

Additionally, our study was limited to one accounting method and one operating method of earnings management in a case involving accounting for plant assets. We do not know whether our results are generalizable to other methods of earnings management. Future research could consider ethical judgments of other types of accounting and operating methods of earnings management.[7]

Despite these limitations, this study provides evidence that in the current, post-SOX business environment, potential stockholders associate both accounting methods and operating methods of earnings management with a significant decline in ethicality. We further find that ethical judgments have potential economic consequences; specifically, the less (more) ethically acceptable the manager's decision, the less (more) willing potential stockholders are to purchase the company's stock.

Graham et al. (2005) find that corporate managers frequently forego positive NPV projects, and thereby make poor *economic* decisions, when they manage their companies' earnings through use of operating methods. Our results show that from the standpoint of the investing public, these managers are making poor *ethical* decisions as well. We believe these results deserve attention in the financial community by those who seek to improve financial reporting and corporate governance.

NOTES

1. Earnings management, as we use the term in this article differs from fraud. Fraudulent financial reporting, such as recording fictitious sales or fictitious inventory, violates GAAP and is clearly unethical and illegal (Dechow and Skinner, 2000, p. 239). The ethicality of using fraud to achieve desired accounting results is uncontroversial and is not studied further in this article.

2. Accounting methods of earnings management may be perceived as more harmful than operating methods, and therefore less ethical, since they involve actual manipulation of the accounting numbers as opposed to making operating business decisions. However, operating methods of earnings management involve making business decisions that may "sacrifice real economic value to manage financial reporting perceptions" (Graham et al., 2005, p. 6) and, thus, may actually be more harmful to shareholders in the long-term than accounting methods (Cohen et al., 2008).

3. Following Hodge (2003, p. 41), we use the term *earnings quality* to mean the extent to which a company's net income reported on the income statement differs from the company's earnings that are unbiased and accurate according to GAAP.

4. Jones (1991, pp. 377–378) uses the following examples to clarify the meaning of concentration of effect: "(1) A change in a warranty policy denying coverage to 10 people with claims of $10,000 has a more concentrated effect than a change denying coverage to 10,000 people with claims of $10.00. (2) Cheating an individual or small group of individuals out of a given sum has a more concentrated effect than cheating an institutional entity, such as a corporation or governmental agency, out of the same sum."

5. Other measures not directly related to this study's hypotheses were also collected.

6. Demographic data were analyzed to ensure randomization between groups. No significant differences ($p > .05$) between experimental groups were observed for each of the demographic variables noted in Table 1, except for whether participants planned to invest in common stock in the future (INVEST). To examine the potential impact of this variable, INVEST was included as a covariate in the hypotheses testing. Results including INVEST are not significantly different; therefore, the variable is not included in the analyses or in results as reported in this article.

7. Of course investors face a challenge to determine conclusively that a firm is managing its earnings. For the type of earnings management discussed in this article achieved via accounting methods, SFAS 154 (FASB, 2005, para 22) requires companies to publicly disclose the effects of material changes in accounting estimates, such as changes in estimates for depreciation. Investors may also learn about this type of information by analyzing relationships between certain accounts over time. Detecting earnings management achieved via operating methods is aided by such works as Roychowdhury (2006), Bushee (1998), Dechow and Sloan (1991), and Baber, Fairfield, and Haggard (1991).

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APPENDIX

The following items were used to assess perceived moral intensity using a seven-point scale anchored by (1) Strongly Disagree and (7) Strongly Agree.

- *Magnitude of consequences*: *The overall harm (if any)* done as a result of Mr. Boyd's action will be very small.[a]
- *Probability of effect*: There is a *very small likelihood* that Mr. Boyd's action will actually cause any harm.[a]
- *Temporal immediacy*: Mr. Boyd's action will not cause any harm in the *immediate future*.[a]
- *Proximity*: If Mr. Boyd has a close association with anyone who is harmed by his action, the action is wrong.
- *Concentration of effect*: If any harm is done as a result of Mr. Boyd's action, *the harm done to any one individual* would probably be small because the harm would be spread among a large group of people.[a]
- *Social consensus*: *Most people would agree* about the appropriateness of Mr. Boyd's action.

[a] Items were reversed scored consistent with Singhapakdi et al. (1996).

MORAL IDENTITY AS A MODERATOR OF PERCEIVED WHISTLE BLOWING UNDER THREAT OF RETALIATION, NO PROTECTION, AND NO REWARD

Deborah L. Seifert and William W. Stammerjohan

ABSTRACT

This study examines moral identity as a moderator of perceived whistle blowing. It is important to better understand whistle blowing because it has come to the forefront as an internal control mechanism to detect and deter fraud with the passage of the Sarbanes-Oxley Act of 2002.

A $2 \times 2 \times 2$ factorial research design is used to test the hypotheses with scenario factor levels of retaliation/no retaliation, no protection/protection, and no monetary reward/monetary reward. The results of this study are that moral identity significantly moderates the perceived likelihood of whistle blowing under the following circumstances: when the threat of retaliation is present; when the combination of the three conditions make the environment for whistle blowing more unfavorable; and in the extreme case where the environment is most unfavorable (i.e., threat of retaliation, no protection, and no reward).

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This study examines moral identity as a moderator of perceived whistle blowing behavior under threat of retaliation, no protection, and no reward. From a practical perspective, it is important to understand the predictors of whistle blowing actions under varying circumstances for several reasons. Prior accounting literature recommends whistle blowing as a means of deterring fraud (Hooks, Kaplan, & Schultz, 1994). Secondly, the Federal Government has used whistle blowing to deter fraud for over 100 years (Helmer, 2000). Lastly, the passage of the Sarbanes-Oxley Act of 2002 (hereafter Sarbanes-Oxley) brings whistle blowing to the forefront as an internal control for publicly traded companies. An understanding of what may or may not prompt employees to report wrongdoing should be of great value to companies relying on whistle blowing as a component of internal control.

From a theoretical standpoint, this study contributes to the accounting ethics literature by proposing moral identity as a moderating variable in the ethical decision-making process. Moral identity is defined as "self-conception organized around a set of moral traits" (Aquino & Reed, 2002, p. 1424; Reed & Aquino, 2003; Weaver, 2006). Moral identity is assessed as a moderator of moral action within the context of whistle blowing. Therefore, this study uses a $2 \times 2 \times 2$ factorial design with hypothetical whistle blowing vignettes that include factor levels representing the following: (1) threat of retaliation/no threat of retaliation; (2) no protection from retaliation/protection from retaliation; and, (3) no monetary reward/monetary reward.

Consistent with prior literature, e.g., Arnold and Ponemon, 1991, this study employs projective third-person scenarios to assess the likelihood that the person in the scenario would whistle blow. Presenting a task in the third person minimizes the potential self-reporting bias that often occurs in the study of ethical issues (Ponemon & Gabhart, 1990). Individuals may feel less threatened and report more truthfully when ethical questions are asked indirectly (Arnold & Ponemon, 1991; Ponemon & Gabhart, 1990; Rest, 1986).

Three samples of junior-level cost accounting students are used as subjects for this study and are combined for analysis. The final combined sample contains 199 responses. Students are used as respondents because no special knowledge is needed to interpret the hypothetical scenarios (Peecher & Solomon, 2001). These undergraduate students represent the next generation of public company entry-level workers who should have more access to whistle blowing mechanisms than their predecessors due to the impact of Sarbanes-Oxley. These undergraduate students are more likely to face

"whistle blowing" decisions in the business environment promoted by Sarbanes-Oxley.

After controlling for self-monitoring, this study finds moral identity significantly moderates the perceived likelihood of whistle blowing under the following circumstances: when the threat of retaliation is present; when the combination of the three conditions make the environment for whistle blowing more unfavorable; and in the extreme case where the environment is most unfavorable (i.e., threat of retaliation, no protection, and no reward).

A possible explanation for these results is that the moral course of action may be more salient to those with higher moral identity when external circumstances are adverse. In other words, the individuals with the higher moral identity may see their morality as central to their self image but this self image may only emerge when needed to address a moral dilemma (Aquino & Reed, 2002).

The remainder of the chapter proceeds as follows. Next section provides the theoretical development and hypotheses. Third section discusses the research design, and fourth section presents the empirical results. Final section discusses and concludes.

THEORETICAL DEVELOPMENT AND HYPOTHESES

Whistle Blowing Definition and Motivation

Near and Miceli (1985, p. 4) define whistle blowing as: "the disclosure by organization members of illegal, immoral, or illegitimate practices under the control of their employers, to persons or organizations that may be able to effect action." They define an illegal act as any crime which is punishable under law, an immoral act as one that is perceived by the whistle blower to be wrong, and an illegitimate practice as an action that is interpreted by the whistle blower to be beyond the organization's authority.

A disclosure can be made to others within or outside the organization (Miceli & Near, 1992). However, internal whistle blowing is preferred because the employee is able to achieve resolution, and the organization has an opportunity to privately correct ethical violations (Miceli & Near, 1985, 1992). Furthermore, the Sarbanes-Oxley Act of 2002 creates a strong impetus for internally reporting wrongdoing by mandating that publicly held companies develop anonymous, internal whistle blowing channels (Sarbanes-Oxley Act, 2002).

Most internal whistle blowers are prosocial, loyal, long-term employees who do not wish to report wrongdoing outside the organization (Miceli & Near, 1985, 1992; Dworkin & Baucus, 1998). Usually, these employees are only motivated to blow the whistle externally if they are unable to resolve the ethical violation within their organization (Miceli & Near, 1985, 1992). These employees care about the viability of the organization and do not want to publicly harm the reputation of their employers (Miceli & Near, 1985, 1992).

Although Dozier and Miceli (1985) and Fritzsche and Becker (1984) document that utilitarian theory is not used by those at the higher levels of moral development, utilitarian theory remains the most widely modeled theory of whistle blowing motivation in both the accounting ethics literature and management literature. Finn (1995), Hooks et al. (1994), and Dozier and Miceli (1985) all discuss utilitarian theory in their whistle blowing models. Utilitarian theory explains how whistle blowers weigh the costs and benefits of reporting wrongdoing.

One cost that whistle blowers must weigh is the threat of retaliation. Retaliation can be in the form of being fired, transferred, or ostracized by co-workers and management. Near and Miceli (1986) refer to retaliation as "scapegoating" that is more likely to happen when the organizational norm is against whistle blowing and when supervisors are not supportive.

A benefit of reporting wrongdoing is that the wrongdoing will hopefully cease. The curtailment of wrongdoing is a prosocial objective. However, another benefit of whistle blowing may be personal gain. For example, in the accounting literature, Ponemon (1994) discusses motivated whistle blowing vs. unmotivated whistle blowing. He describes motivated whistle blowing as reporting for personal gain, economic, or otherwise. Ponemon (1994) describes unmotivated whistle blowing as being related to ethical concerns of the whistle blower. Ponemon (1994) goes on to explain that the integrity of a report of wrongdoing should be analyzed within the context of the possible motivations of the whistle blower.

Whistle Blowing as an Internal Control

Although companies were not encouraged to facilitate whistle blowing through legislation until Sarbanes-Oxley, Hooks et al. (1994) were the first to recommend whistle blowing as a means of "upstream" communication within an organization that could deter fraud. Conversely, the federal government has used whistle blowing, with monetary incentives, for over

one hundred years as an internal control mechanism with mixed results. The original False Claims Act (hereafter the Act) was enacted in 1863 by President Abraham Lincoln and allowed private citizens to receive compensation for prosecuting those who defrauded the government. Over the first 80 years of the Act's existence, private citizens prosecuted many fraud cases (Helmer, 2000).

However, there were no upheld successful prosecutions under the Act following the 1943 revision that significantly changed the procedure and significantly reduced compensation to the whistle blowers until the Act was once again revised in the mid-1980s by increasing possible compensation to whistle blowers and offering whistle blowers protection from retaliation. By 1999, more than 3,000 suits had been brought by private citizens against those defrauding the government and the government recovered over $3.5 billion from those suits. The Federal Government has paid whistle blowers over $500 million since 1986 (Helmer, 2000).

Despite the significant amounts recovered by the federal government and paid to whistle blowers under the False Claims Act, Miceli, Rehg, Near, and Ryan (1999) report that legislation passed to protect federal whistle blowers from retaliation has been successful in two areas and unsuccessful in two other areas. Miceli et al. (1999) find that the Civil Service Reform Act of 1978 and the Whistle Blower Protection Act of 1989, both put into place to forbid retaliation against federal employees who reported wrongdoing, are associated with federal employees perceiving that wrongdoing has declined and that whistle blowing has increased. However, these two acts are also associated with more identified whistle blowers perceiving that they are being retaliated against and more whistle blowers choosing to report wrongdoing anonymously. Thus, the Whistle Blower Protection Act of 1989 appears to have increased whistle blowing to the federal government but may not have controlled certain aspects of retaliation.

With the passage of the Sarbanes-Oxley Act in 2002 whistle blowing has come to the forefront as an internal control mechanism for public companies. Under Sarbanes-Oxley, audit committees of public companies are now responsible for making sure mechanisms are in place for confidential and anonymous reporting of corporate wrongdoing. Retaliation for the reporting of wrongdoing is prohibited. Retaliation against a whistle blowing employee can result in civil remedies for that employee and fines and/or imprisonment for those retaliating against the whistle blower. Thus, Sarbanes-Oxley attempts to increase the reporting of fraud but is mindful of the threat of retaliation by employers and the need to protect whistle blowers from such retaliation. Recent whistle blowers seeking protection

under the Sarbanes-Oxley Act have met with mixed results. Some individuals have settled with their former employers outside of court for retaliation and the loss of their job. A few other whistle blowers have been reinstated and paid for lost compensation. However, the process for resolving a retaliation complaint under Sarbanes-Oxley has been frustrating and stressful for whistle blowers, regardless of the outcome (O'Donnell, 2005).

Bame-Aldred, Sweeney, and Seifert (2007) found that threatened retaliation reduced the perceived likelihood of employee whistle blowing. However, when an employee was aware of the protection provided under Sarbanes-Oxley, the likelihood of whistle blowing significantly increased. In the presence of protection, the influence of retaliation disappeared, as whistle blowing was perceived equally likely whether retaliation was threatened or not. These results indicate that the protection provided by the Sarbanes-Oxley Act may achieve its intended effect of mitigating the negative impact of potential retaliation on whistle blowing behavior.

For employees with a highly developed sense of morality, legal protection from retaliation may not be needed. These employees may place greater weight on the benefit to society and less weight on the cost of retaliation and/or the benefit of monetary incentives. Near and Miceli (1996) posit that the moral development of the employee predicts whistle blowing behavior. Moral identity is one such facet of moral development that could be predictive of whistle blowing behavior. Miceli and Near (1992) also discuss whistle blowing as a complex decision based on both individual and situational factors. In this study, moral identity is examined as an individual factor interacting with (i.e., moderating) the situational factors of retaliation/no retaliation, no protection/protection, and no reward/reward.[1] Bame-Aldred et al. (2007) found that the threat of retaliation reduced the perceived likelihood of whistle blowing while protection increased the likelihood of whistle blowing. Bame-Aldred et al. (2007) also tested but did not find results between reward and the likelihood of whistle blowing. This study extends the work of Bame-Aldred et al. (2007) by introducing the individual variable of moral identity as a moderator of the situational factors of retaliation/no retaliation, no protection/protection, and no reward/reward within the whistle blowing context.

Moral Identity and Whistle Blowing

Moral identity can be defined as "self-conception organized around a set of moral traits" (Aquino & Reed, 2002, p. 1424). Moral identity is developed

out of the ego development (i.e., self-identity) and social identity literature (Aquino & Reed, 2002). Moral identity can be thought of as the depth of internalized moral values and how central those values are to how individuals see themselves and identify with others.

Aquino and Reed (2002) discuss internalization of moral traits or internalization of moral exemplars as part of moral identity. They explain that moral identity can be used for social identification and to construct a self-definition. Aquino and Reed (2002) go on to build the case that moral identity is a good predictor of moral action. They refer to moral identity as a prime motivator of moral conduct. Damon and Hart (1992) go so far as to say that moral identity (i.e., centrality of morality to self) may be the single most important determinant in bridging moral reasoning and moral action. Reynolds and Ceranic (2007) follow Trevino, Weaver, and Reynolds (2006) in defining moral action as behavior that is subject to generally accepted moral norms of behavior. Thus, moral behavior is determined within the larger social setting. Reynolds and Ceranic (2007) specifically list whistle blowing as being a moral action.

However, situations within organizations may not be supportive of moral identity and moral action. Weaver (2006) discusses that moral identity may be difficult to maintain and nurture in amoral organizations but that even amoral organizations can have "pockets" of moral agents who have strong moral identities. He states that those with strong moral identities may be able to create psychological distance between themselves and their organization and be able to act as moral agents. He refers to moral identity as being the key to moral agency and moral agency as being responsible for transcending organizational situations.

Miceli and Near (1992) identify several critical characteristics in the whistle blowing process. These characteristics include those of the individual, the situation, the organization, and the relative power of the parties over one another. The current study focuses primarily on moral identity as a characteristic of the individual and retaliation/no retaliation, protection/no protection, and reward/no reward as the characteristic responses of the organization. Because moral identity is the key to moral agency and moral agency can transcend organizational situations (Weaver, 2006), we posit that moral identity will positively influence perceived whistle blowing, even when organizational factors are adverse.

Therefore, the following hypotheses are proffered to test the interactions between the moral identity of the individual and the organizational patterns of retaliation/no retaliation, protection/no protection, and reward/no reward. A control variable for self-monitoring is included

because Aquino and Reed (2002) found moral identity to be sensitive to impression management and self-presentation. Intense self-monitors will diligently manage their self-presentation to positively impress others.

H1. High moral identity, after controlling for self-monitoring, will positively moderate the perceived likelihood of whistle blowing when the threat of retaliation is present.

H2. High moral identity, after controlling for self-monitoring, will positively moderate the perceived likelihood of whistle blowing when no protection from retaliation is present.

H3. High moral identity, after controlling for self-monitoring, will positively moderate the perceived likelihood of whistle blowing when no reward is present.

H4. High moral identity, after controlling for self-monitoring, will positively moderate the perceived likelihood of whistle blowing when the combination of environmental conditions are more unfavorable to whistle blowing, i.e., threat of retaliation, no protection, and no reward as opposed to no threat of retaliation, protection, and a reward.

H5. High moral identity, after controlling for self-monitoring, will positively moderate the perceived likelihood of whistle blowing in the extreme conditions when the environmental conditions are most unfavorable to whistle blowing, i.e., threat of retaliation, no protection, and no reward as opposed to the most favorable, no threat of retaliation, protection, and a reward.

RESEARCH DESIGN

The hypotheses in this study are tested using a $2 \times 2 \times 2$ factorial design with hypothetical scenario factor levels that assign each subject to one of eight potential combinations of environmental conditions: a threat of retaliation vs. no threat of retaliation, no protection from retaliation vs. protection from retaliation, no monetary reward vs. a monetary reward. The design is between subject with each subject assigned only one scenario and then asked to estimate the likelihood that a fictitious coworker would whistle blow. The undergraduate business student subjects in this study were drawn from three junior-level cost accounting classes. The final sample includes 199 useable responses

from a total of 252 participants. The excluded responses occurred due to incomplete data and manipulation check failures. The hypothetical situations used in this study are the same as those utilized in Bame-Aldred et al. (2007).

Measured Variables

The four measured variables of interest in this study are defined as follows:

LIKELI is the perceived likelihood that Chris (a fictitious coworker) would whistle blow measured on a Likert 9 point scale, where higher values indicate a higher likelihood of Chris whistle blowing.
LIKESELF is the likelihood that the subject would whistle blow measured on the same Likert 9 point scale as *LIKELI*. *LIKESELF* is measured over groups 2 and 3 to provide validation for *LIKELI*.
Moral Identity (MI) – The instrument used to measure moral identity was developed by Aquino and Reed (2002, pp. 1425–1427). The instrument includes 10 items, two of which are reverse-coded. Moral identity, as computed by this instrument, is comprised of two factors, internalization and symbolization. Internalization is the degree to which moral traits are central to the self-concept and symbolization is the degree to which moral traits are reflected in the respondent's actions in the world.

Aquino and Reed performed six studies in the development of their instrument. All six studies are presented in Aquino and Reed (2002). Their first study developed the underlying factor structure of traits thought to activate one's moral identity. They performed both exploratory and confirmatory factor analyses and found the internal reliability to be adequate with a Cronbach's alpha of 0.73 and 0.82 for internalization and symbolization, respectively (Aquino & Reed, 2002, p. 1428).

Their second study documents convergent validity between their moral identity scale and the implicit association test (Aquino & Reed, 2002, p. 1430). Their third study tests nomological and discriminant validity. Their moral identity scale was compared to scales for normlessness, religiosity, sympathy, negative reciprocity, and moral reasoning, all of which are theoretically related constructs. The internalization factor of their scale was negatively associated with normlessness, negatively associated with reciprocity, and positively associated with sympathy. The symbolization factor of their scale was positively associated with religiosity, negatively associated with reciprocity, and positively associated with sympathy. Their scale was also compared to impression management and to the theoretically

unrelated constructs of self-esteem, locus of control, and social anxiety. The internalization factor of their scale was positively associated with impression management and the symbolization factor of their scale was positively associated with self-esteem and impression management. From these tests they concluded that their measure of moral identity might be somewhat sensitive to self-presentation (Aquino & Reed, 2002, pp. 1431–1432).

Their fourth study provides evidence that moral identity can be part of the self-schema. Those that posses high internalized or symbolized moral identity should spontaneously describe themselves in moral self-definitions. Their fifth study evaluates moral identity as a predictor of self-reported volunteerism, and their sixth examines moral identity as a predictor of actual donation behavior. These studies find that moral identity is a significant predictor of both self-reported volunteerism and actual donation behavior. However, symbolization is more related to self-reported volunteerism than internalization even when a control is used for impression management. Their sixth study finds that donation behavior is positively related to internalization but not significantly related to symbolization. They conclude that the internalization dimension is the stronger predictor of moral behavior (Aquino & Reed, 2002, pp. 1433–1436).

Self-Monitoring (SM) – Self-presentation and impression management is captured by the self-monitoring instrument developed by Snyder (1974, pp. 530–535). Self-monitoring is used as a control variable in this study. The instrument includes 25 True/False items. The higher the score, the more the individual manages their self-presentation and expressions. The scale has 12 items for which false indicates self-monitoring and 13 items for which true indicates self-monitoring.

The scale has acceptable internal consistency with a Kuder Richardson 20 reliability of 0.7 and a test–retest reliability of 0.83. Discriminant validity for the scale is adequate as it is slightly negatively correlated with the Marlowe-Crowne Social Desirability Scale and the Minnesota Multiphasic Personality Inventory. The instrument is unrelated to Machiavellianism and Achievement Anxiety.

Snyder validated his scale across different samples including college students, stage actors, and psychiatric hospital patients (Snyder, 1974). The stage actors scored higher than the college students and the psychiatric patients scored lower. The average self-monitoring scores were 18.41 and 10.19 for the stage actors and psychiatric patients, respectively. The average score for the college students was unstated. Snyder states that a high self-monitor would produce a score in excess of 15 and a low self-monitor would produce a score below nine.

Contrast-Coded Variables

The individual environmental factors are contrasted coded to facilitate the regression analysis that is described in the next section. Individual factors are coded with a +0.5 if the environmental condition is expected to be unfavorable to potential whistle blowing, i.e., threat of retaliation, no protection, or no reward; and coded with a −0.5 if the environment condition is expected to be favorable to potential whistle blowing, i.e., no threat of retaliation, protection, or reward.[2] The contrast coding of the eight cases is reported in Fig. 1.

The relative environmental conditions are captured over all eight cases by the variable *UFVFL* and over the most extreme cases by the contrast-coded variable *UFVEX*.

UFVFL is a contrast-coded indicator variable that adds 0.5 for each unfavorable condition, retaliation, no protection, and no reward; and subtracts 0.5 for each favorable condition, no retaliation, protection, and reward over all eight cases.

Case 1 Retaliation No Protection No Reward UFVFL = 1.5 UFVEX = 0.5	**Case 2** Retaliation No Protection Reward UFVFL = 0.5 UFVEX = na	**Case 3** Retaliation Protection No Reward UFVFL = 0.5 UFVEX = na	**Case 4** No Retaliation No Protection No Reward UFVFL = 0.5 UFVEX = na
Case 5 No Retaliation No Protection Reward UFVFL = -0.5 UFVEX = na	**Case 6** No Retaliation Protection No Reward UFVFL = -0.5 UFVEX = na	**Case 7** Retaliation Protection Reward UFVFL = -0.5 UFVEX = na	**Case 8** No Retaliation Protection Reward UFVFL = -1.5 UFVEX = -0.5

Fig. 1. Whistle Blowing Case Matrix by Manipulations. *UFVFL*, *UFVFL* is a Contrast-Coded Indicator Variable that Adds 0.5 for Each Unfavorable Condition, Retaliation, No Protection, and No Reward; and Subtracts 0.5 for Each Favorable Condition, No Retaliation, Protection, and Reward Over All Eight Cases; *UFVEX*, *UFVEX* is a Contrast-Coded Indicator Variable that is 0.5 for the Most Unfavorable Condition, Case 1, and −0.5 for the Most Favorable Condition, Case 8. The Other Cases are Not Included in This Extreme Sample.

UFVEX is a contrast-coded indicator variable that is coded $+0.5$ for the most unfavorable condition, Case 1, and coded -0.5 for the most favorable condition, Case 8. The other mixed condition cases are not included in the extreme sample, Cases 2–7.

Environmental Conditions

The environmental conditions were operationalized by randomly assigning each subject to one of the eight cases.[3] Each subject completed the task in order: the case question, the manipulation checks, the demographic information, and the scales that measure moral identity and self-monitoring. The responses are anonymous. The cell sizes per case ranged from 22 to 30.

The case depicts a hypothesized scenario where an accounts receivable clerk works in a hospital that has recently enacted a new bonus system based on revenue. The situation unfolds as the physicians start billing Medicare for services that were not rendered or necessary. The accounts receivable clerk discovers what is happening and must decide whether to whistle blow or not.

In the threat of retaliation scenario, the accounts receivable clerk discusses his concerns with his supervisor and is strongly encouraged to drop the issue. The clerk is described as being fearful of losing his job if he reports the wrongdoing. In the non-retaliation scenario, the clerk does not have the conversation with the supervisor. The combined cells with the threat of retaliation scenario include 92 subjects and the combined cells with no threat of retaliation scenario include 107 subjects.

Many subjects read retaliation into the no threat of retaliation scenario when none was stated. The subjects that failed the no retaliation manipulation check were left in the sample because they bias against finding significant results when comparing whistle blowing in the retaliation/no retaliation scenarios. The subjects were not thought to be inattentive to the case but were thought of as realistically representing how deeply most individuals fear retaliation for reporting wrongdoing, even when the retaliation is unstated.

In the no protection scenario, protection from retaliation for whistle blowing under the Sarbanes-Oxley Act is not discussed. In the protection scenario, the protection against retaliation for whistle blowing in Sarbanes-Oxley is discussed. The combined cells for the no protection scenario include 98 subjects and the combined cells for the protection scenario include 101 subjects. The information on Sarbanes-Oxley was clearly stated in the

protection scenario or left out in the no protection scenario. The subjects that failed this manipulation check were deleted because they were determined to be inattentive.

In the no reward scenario, a reward for whistle blowing under the False Claims Act is not discussed. In the reward scenario, a reward for whistle blowing under the False Claims Act is discussed. The combined cells for the no reward scenario include 103 subjects and the combined cells for the reward scenario include 96 subjects. The information on the False Claims Act was clearly stated in the reward scenario and left out in the no reward scenario. There was no reason to believe that subjects would read this specific legislation into the case and as a result the subjects that failed this manipulation check were deleted because they were determined to be inattentive.

Regression Models

The $2 \times 2 \times 2$ factorial design is operationalized with three regression models. These models are used to test the hypotheses. The robustness of the full models and the incremental impact of specific independent variables are assessed by estimating various reduced forms of each model. The perceived likelihood of whistle blowing (*LIKELI*) is the dependent variable in all three models.

Model (1) measures the individual impact of the three environmental variables. The main effect of moral identity is estimated by including the *MI* in the model. The self-monitoring variable *SM* is included in the model to control for social desirability response bias. The main effects of the three environmental factors are estimated by including the three contrast-coded variables *CRET*, *CPRO*, and *CREW*. The moderating effect of moral identity is estimated by including the three variables that interact the moral identity score with the three contrast-coded environmental condition variables *MIRET*, *MIPRO*, and *MIREW*.[4]

The effect of the combined environmental conditions is estimated by Model (2) and the effect of the extreme environmental conditions is estimated by Model (3). The main effect of the combined environmental conditions is estimated by including the sum of the three contrast-coded variables, *UFVFL*, in Model (2) and the main effect of the extreme environmental condition is estimated by including the contrast-coded variable, *UFVEX*, in Model (3). The moderating effect of moral identity is estimating by including the interaction variables *MIUFVFL* and

MIUFVEX in Models (2) and (3), respectively. The regression models are as follows:

$$LIKELI = \beta_0 + \beta_1 MI + \beta_2 SM + \beta_3 CRET + \beta_4 CPRO + \beta_5 CREW + \beta_6 MIRET + \beta_7 MIPRO + \beta_8 MIREW + \varepsilon \quad (1)$$

$$LIKELI = \beta_0 + \beta_1 MI + \beta_2 SM + \beta_3 UFVFL + \beta_4 MIUFVFL + \beta_5 SMUFVFL + \varepsilon \quad (2)$$

$$LIKELI = \beta_0 + \beta_1 MI + \beta_2 SM + \beta_3 UFVEX + \beta_4 MIUFVEX + \beta_5 SMUFVEX + \varepsilon \quad (3)$$

where, *LIKELI* is the standardized likelihood of whistle blowing originally measured on a Likert 9 point scale, where a higher value indicates an increased likelihood of whistle blowing; *MI* the standardized moral identity originally measured over 10 questions on a Likert 7 point scale where higher values indicate higher moral identity; *SM* the standardized self-monitoring originally measured over 25 statements where higher values indicate higher self-monitoring; *CRET* the retaliation contrast variable, 0.5 if threat of retaliation is present and −0.5 if threat of retaliation is absent; *CPRO* the no protection contrast variable, 0.5 if protection is not included and −0.5 protection is included; *CREW* the no reward contrast variable, 0.5 if a reward is not included and −0.5 if a reward is included; *MIRET* the moral identity–retaliation interaction, $MI \times CRET$; *MIPRO* the moral identity–no protection interaction, $MI \times CPRO$; *MIREW* the moral identity–no reward interaction, $MI \times CREW$; *UFVFL* the combined environmental condition variable, $CRET + CPRO + CREW$; *UFVEX* the extreme environmental condition variable, 0.5 if Case 1, threat of retaliation, no protection, and no reward, and −0.5 if Case 8, no threat of retaliation, protection, and reward; *MIUFVFL* the moral identity–combined environmental condition interaction, $MI \times UFVFL$; *SMUFVFL* the self-monitoring–combined environmental condition interaction, $SM \times UFVFL$; *MIUFVEX* the moral identity–extreme environmental condition interaction, $MI \times UFVEX$; and, *SMUFVEX* the self-monitoring–extreme environmental condition interaction, $SM \times UFVEX$.

RESULTS

Descriptive Statistics

Table 1 provides basic statistics for the three sub-samples. Panel A reports both the pre- and post-manipulation check sample sizes for each group. Panel B reports sub-sample means by group and *F*-tests of differences in between group means.

The variable means over the three groups of student subjects are presented in Table 1. Although the variable means for self-monitoring (*SM*) and grade point average (*GPA*) are statistically different ($p = 0.016$, 0.002, respectively), both sets of differences seem fairly small in a practical sense.

Table 1. Descriptive Statistics for Subsamples.

Group	Pre-Manipulation Check Sample *N*	Post-Manipulation Check Sample *N*
Panel A: Sample sizes before and after manipulation checks		
1	84	70
2	75	61
3	93	68
Total	252	199

Variable	Means			*F*-test of Differences in Means	*p*-Value
	Group 1	Group 2	Group 3		
Panel B: Subsample means – Groups 1–3					
LIKELI	6.66	6.31	6.43	0.92	0.401
LIKESELF	na	7.07	7.32	0.82	0.368
MI	55.31	52.77	55.32	2.44	0.090
SM	12.83	11.03	11.32	4.23**	0.016
AGE	20.93	20.41	20.54	1.85	0.160
GPA	2.99	3.15	3.26	6.56**	0.002
FAMILY	4.76	4.84	4.59	0.37	0.693

Note: LIKELI, the likelihood of whistle blowing on a Likert 9 point scale where a higher value indicates a higher likelihood of whistle blowing; *LIKESELF*, the likelihood of whistle blowing (yourself) on a Likert 9 point scale where a higher value indicates a higher likelihood of whistle blowing; *MI*, moral identity measured over 10 questions on a Likert 7 point scale where a higher value indicates a higher moral identity; *SM*, self-monitoring measured over 25 statements where a higher value indicates a higher self-monitor; *AGE*, age of subjects; *GPA*, grade point average of subjects; and *FAMILY*, family size of subjects.

*, ** indicate significance at the $\alpha = .05$ and .01 levels, respectively.

Table 2. Descriptive Statistics for the Combined Sample.

Variable	*N*	Mean	Std. Dev.	Median
LIKELI	199	6.47	1.50	7.00
LIKESELF	129	7.20	1.62	8.00
MI	199	54.54	7.56	56.00
SM	199	11.76	3.91	11.00
AGE	199	20.64	1.62	20.00
GPA	196	3.13	0.46	3.20
FAMILY	199	4.72	1.68	4.00

Note: LIKELI, the likelihood of whistle blowing on a Likert 9 point scale where a higher value indicates a higher likelihood of whistle blowing; *LIKESELF*, the likelihood of whistle blowing (yourself) on a Likert 9 point scale where a higher value indicates a higher likelihood of whistle blowing; *MI*, moral identity measured over 10 questions on a Likert 7 point scale where a higher value indicates a higher moral identity; *SM*, self-monitoring measured over 25 statements where a higher value indicates a higher self-monitor; *AGE*, age of subjects; *GPA*, grade point average of subjects; and *FAMILY*, family size of subjects.

The difference in the self-monitoring scores is less than two points on a 25 question scale (12.83; 11.03; 11.32). The range in grade point average is less than three-tenths of a grade point (2.99; 3.15; 3.26). Thus, the groups appear qualitatively similar and are combined for analysis purposes. Table 2 presents descriptive statistics for the combined sample.

Table 2 indicates that the likelihood of self whistle blowing (*LIKESELF*) appears slightly higher that the perceived likelihood of whistle blowing by the fictitious coworker (*LIKELI*). Table 2 also indicates that the student subjects average almost 21 years of age and have a GPA just above a B average. Although, they are not tabulated because they are not continuous, most subjects indicated Christianity as their religion, summer jobs as their work experience, and the Western United States as where they grew up. The demographic data is used for description only.

Simple Correlations

Table 3 presents the simple correlations between our variable of interest. As expected *LIKELI* and *LIKESELF* are significantly correlated with each other and significantly correlated with a reward being present, $p \leq 0.05$. Interestingly, while the *LIKELI* is significantly correlated with protection being present, the correlation between *LIKESELF* and protection is not

Table 3. Simple Correlations.

	LIKELI	*LIKESELF*	Retaliation	Protection	Reward	*MI*
LIKELI	1					
LIKESELF	**0.6535**	1				
Retaliation	−0.0436	0.0965	1			
Reward	**0.2738**	**0.2329**	0.0326	1		
Protection	**0.1703**	0.1261	−0.0341	−0.0146	1	
MI	0.0841	0.1534	0.1331	0.0543	0.1339	1
SM	0.1246	−0.0343	−0.0473	0.0125	−0.0189	−0.1361

Note: LIKELI, the likelihood of whistle blowing measured on a Likert 9 point scale where a higher value indicates a higher likelihood of whistle blowing; *LIKESEFL*, the likelihood of whistle blowing (yourself) measured on a Likert 9 point scale where a higher value indicates a higher likelihood of whistle blowing; Retaliation, the case includes a threat of retaliation, Cases 1, 2, 3, and 7; Protection, the case includes a promise of protection for whistle blowing, Cases 3, 6, 7 and 8; Reward, the case includes a reward for whistle blowing, Cases 2, 5, 7 and 8; *MI*, moral identity measured over 10 questions on a Likert 7 point scale where a higher value indicates a higher moral identity; and *SM*, self-monitoring measured over 25 statements where a higher value indicates a higher self-monitor.
p-values ≤ 0.05 are reported in bold font.

significant. Surprisingly, the threat of retaliation is not significantly correlated with either *LIKELI* or *LIKESELF*.

LIKELI *Pair-Wise and ANOVA Results by Case*

Table 4 reports pair-wise differences and ANOVA results for the dependent variable, *LIKELI*, by case. Panel A reports the mean value of *LIKELI* for each case and also reports significant pair-wise differences ($p \leq 0.05$) in means using the Bonferroni and Tukey tests. Panel B reports the ANOVA results.

As expected, the least likelihood of whistle blowing occurs in the case with the most unfavorable environmental conditions, threat of retaliation, no protection, and no reward, Case 1. Although not significant, the only unexpected result is between Cases 7 and 8. When protection and reward are both present, the mean score for *LIKELI* is higher when the threat of retaliation is present, Case 7, than when it is absent, Case 8. The significant pair-wise differences, Case 1 vs. Cases 5, 7, and 8, and Case 6 vs. Case 7, all include a difference in whether the reward is present or absent. The ANOVA results reported in Panel B indicate that Case explains a significant portion of the variance in *LIKELI* scores, $p < 0.0001$.

Table 4. *LIKILI* Pair-Wise and ANOVA Results by Case.

Case	Retaliation	Reward	Protection	*UFVFL*	*N*	*LIKELI*	Different from Case # (Bonferroni)	Different from Case # (Tukey)
Panel A: Means and significant pair-wise differences in *LIKELI*								
1	Yes	No	No	1.5	23	5.348	5,7,8	5,7,8
2	Yes	Yes	No	0.5	24	6.375		
3	Yes	No	Yes	0.5	23	6.478		
4	No	No	No	0.5	27	6.259		
5	No	Yes	No	–0.5	24	6.833	1	1
6	No	No	Yes	–0.5	30	6.167	7	7
7	Yes	Yes	Yes	–0.5	22	7.455	1,6	1,6
8	No	Yes	Yes	–1.5	26	6.962	1	1

Dep. Variable	d*f*	Class	*F*-Statistic	*p*-Value
Panel B: ANOVA Results				
LIKELI	198	Case	4.59	<0.0001

Note: LIKELI, the likelihood of whistle blowing measured on a Likert 9 point scale where a higher value indicates a higher likelihood of whistle blowing; Retaliation, the case includes a threat of retaliation, Cases 1, 2, 3, and 7; Protection, the case includes a promise of protection for whistle blowing, Cases 3, 6, 7 and 8; Reward, the case includes a reward for whistle blowing, Cases 2, 5, 7 and 8; and *UFVFL*, is the sum of the three contrast-coded condition variables where the three unfavorable conditions are each coded as $+0.5$ and each of the favorable conditions are coded as -0.5, i.e., *UFVFL* has a value of 1.5 when there is retaliation, no protection, and no reward; and a value of -1.5 when there is no retaliation, protection, and a reward.
The ANOVA results reported in Panel B are for *LIKELI* modeled on Case. The ''Different from Case Number'' columns reported in Panel A represent significant pair-wise differences ($p \leq 0.05$) in the means of *LIKELI* using the Bonferroni and Tukey tests.

Hypothesis Testing Regression Results

Table 5 reports the results from the estimations of the full and reduced forms of regression Models (1)–(3). The results from estimations of Model (1) are reported in Panel A. The results from estimations of Models (2) and (3) are reported in Panel B.

The Model (1) results reported in Panel A indicate that main effects of moral identity (*MI*) are all in the expected direction but not significant at conventional levels, $p \geq 0.0549$. The main effects of the self-monitoring control variable (*SM*) are also all in the expected direction with mixed significance levels. While the main effects of including a threat of retaliation (*CRET*) are not significant, $p \geq 0.2249$, the main effects of not including protection (*CPRO*) and not including a reward (*CREW*) are all significant at conventional levels, $p \leq 0.0103$. Hypothesis H1, the interaction between moral identity and the threat of retaliation, is supported by the significant *MIRET* coefficients, $p \leq 0.0460$. Hypothesis H2, the interaction between moral identity and no protection from retaliation is not supported by the *MIPRO* coefficients, $p \geq 0.2037$. Hypothesis H3, the interaction between moral identity and no reward produces *MIREW* coefficients in the expected direction that come close to marginal significance, $p \leq 1018$.[5]

The estimations of Model (2) reported in the first three columns of Panel B indicate a significant impact of more unfavorable combined environmental conditions. The coefficients on *UFVFL* are all highly significant, $p \leq 0.0001$. The estimations of Model (3) reported in the last three columns of Panel B also indicate a significant impact of moving from the most unfavorable environmental condition to the most favorable environmental condition. The coefficients on *UFVEX* are highly significant, $p \leq 0.0002$. Hypotheses H4, the interaction between moral identity and unfavorable environmental conditions, and H5, the interaction between moral identity and extreme differences in environmental conditions, are both fully supported. The coefficients on both *MIUFVFL* and *MIUFVEX* are all significant, $p \leq 0.0371$ and $p \leq 0.0047$, respectively.

Graphical Interaction Presentations

As a final way of understanding the role of moral identity in facilitating whistle blowing under environmental conditions that are unfavorable to this practice, we present the three significant interaction terms graphically in

Table 5. Standardized Regression Results.

N			199	199	199	199	199	199	199
Panel A: Individual conditions – Model (1)									
MI	Coef.	+	0.08414	0.10300	0.00334	0.04065	0.11488	0.07067	0.03192
	t-stat.		1.19	1.45	0.05	0.56	1.61	1.38	0.44
	p-val.		0.1187	0.0747	0.4802	0.2895	0.0549	0.0850	0.3305
SM	Coef.	+		**0.13857**	0.06337	**0.13089**	**0.13713**	**0.13473**	**0.13465**
	t-stat.			1.95	0.92	1.93	1.93	1.91	1.97
	p-val.			0.0265	0.1804	0.0273	0.0273	0.0286	0.0254
CRET	Coef.	−			−0.09774	−0.08433	−0.10738		
	t-stat.				−0.72	−0.62	−0.76		
	p-val.				0.2365	0.2682	0.2249		
CPRO	Coef.	−			**−0.33408**	**−0.32142**		**−0.32572**	
	t-stat.				−2.48	−2.39		−2.34	
	p-val.				0.0070	0.0090		0.0103	
CREW	Coef.	−			**−0.54277**	**−0.53421**			**−0.54422**
	t-stat.				−4.01	−3.92			−3.98
	p-val.				<0.0001	0.0001			<0.0001
MIRET	Coef.	+				**0.22952**	**0.25419**		
	t-stat.					1.69	1.79		
	p-val.					0.0460	0.0373		
MIPRO	Coef.	+				0.03115		0.11626	
	t-stat.					0.23		0.83	
	p-val.					0.4099		0.2037	
MIREW	Coef.	+				0.18459			0.22616
	t-stat.					1.28			1.57
	p-val.					0.1018			0.0589
R^2			0.0071	0.0259	0.1271	0.1479	0.0444	0.0559	0.1075
Adjusted R^2			0.0020	0.0160	0.1045	0.1120	0.0247	0.0365	0.0891
F-statistic			1.40	2.61	5.62	4.12	2.25	2.87	5.84
p-value			0.2374	0.0762	<0.0001	0.0001	0.0649	0.0242	0.0002

N			199	199	199	49	49	49
Panel B: Combined conditions – Models (2) and (3)								
MI	Coef.	+	0.09302	0.06054	0.07987	0.12818	0.06322	0.07427
	t-stat.		1.36	0.89	1.16	0.99	0.52	0.61
	p-val.		0.0881	0.1881	0.1232	0.1641	0.3024	0.2742
SM	Coef.	+	**0.13066**		**0.13171**	0.07280	0.04309	0.05799
	t-stat.		1.91		1.92	0.56	0.36	0.48
	p-val.		0.0290		0.0284	0.2884	0.3602	0.3182
UFVFL	Coef.	−	**−0.32068**	**−0.31169**	**−0.30914**			
	t-stat.		−4.08	−3.95	−3.98			
	p-val.		<0.0001	0.0001	0.0001			

Table 5. (*Continued*)

N			199	199	199	49	49	49
MIUFVFL	Coef.	−		**0.15098**	**0.14500**			
	t-stat.			1.96	1.80			
	p-val.			0.0257	0.0371			
SMUFVFL	Coef.	−			−0.03604			
	t-stat.				−0.46			
	p-val.				0.6783			
UFVEX	Coef.	+				**−1.00995**	**−1.01344**	**−1.01273**
	t-stat.					−4.09	−4.39	−4.37
	p-val.					0.0002	<0.0001	<0.0001
MIUFVEX	Coef.	+					**0.71421**	**0.66831**
	t-stat.						3.02	2.72
	p-val.						0.0021	0.0047
SMUFVEX	Coef.	+						−0.01852
	t-stat.							−0.76
	p-val.							0.7744
R^2			0.1024	0.1034	0.1203	0.2825	0.4054	0.4133
Adjusted R^2			0.0886	0.0896	0.0976	0.2347	0.3514	0.3451
F-statistic			7.42	7.49	5.28	5.91	7.50	6.06
p-value			<0.0001	<0.0001	0.0001	0.0017	0.0001	0.0002

Note: LIKELI, the standardized likelihood of whistle blowing measured on a Likert 9 point scale where a higher value indicates a higher likelihood of whistle blowing; *MI*, the standardized moral identity originally measured over 10 questions on a Likert 7 point scale where a higher value indicates a higher moral identity; *SM*, the standardized self-monitoring originally measured over 25 statements where a higher value indicates a higher self-monitor; *CRET*, retaliation contrast variable, 0.5 if retaliation is present and −0.5 if retaliation is absent; *CPRO*, no protection contrast variable, 0.5 if protection is not mentioned and −0.5 if protection is mentioned; *CREW*, no reward contrast variable, 0.5 if an reward is not mentioned and −0.5 if a reward is mentioned; *UFVFL*, *CRET + CPRO + CREW*, *UFVFL* is made up of the environmental conditions most likely to inhibit whistle blowing, retaliation, no protection, and no reward, ranging from 1.5 to −1.5 depending on the combinations of conditions in the various cases; *UFVEX*, the extreme condition contrast variable, 0.5 if Case 1, retaliation, no reward and no protection, and −0.5 if Case 8, no retaliation, reward, and protection. Cases 2–7 are not included in this analysis; *MIRET*, *MI*CRET*; *MIPRO*, *MI*CPRO*; *MIREW*, *MI*CREW*; *MIUFVFL*, *MI*UFVFL*; *MIUFVEX*, *MI*UFVEX*; *SMUFVFL*, *SM*UFVFL*; and *SMUFVEX*, *SM*UFVEX*.
p-values ≤ 0.05 are reported in bold font.

Figs. 2A, 2B, and 2C. High and low moral identity is represented in these figures as above or below the median *MI* score of 56. Fig. 2A presents the interaction between moral identity and retaliation *MIRET*, Fig. 2B presents the interaction between moral identity and the combined environmental

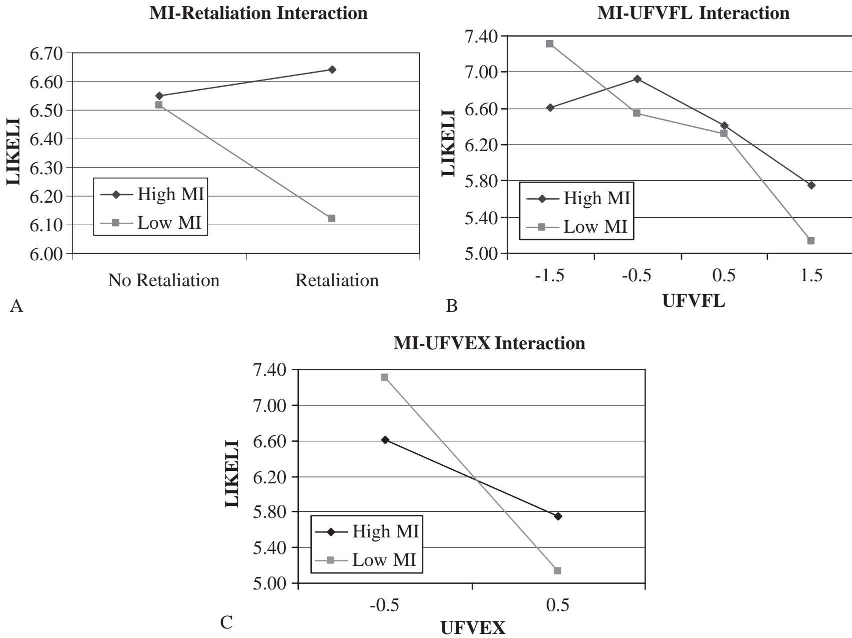

Fig. 2. *LIKELI*, the Likelihood of Whistle Blowing Measured on a Likert 9 Point Scale Where a Higher Value Indicates a Higher Likelihood of Whistle Blowing; *MI*, Moral Identity Measured Over Ten Questions on a Likert 7 Point Scale Where Higher Values Indicates Higher Moral Identity, Where High *MI* is Indicated by $MI \geq$ the Median Value of 56, and Low *MI* is Indicated by $MI <$ the Median Value of 56; *UFVFL*, *UFVFL* is a Contrast-Coded Indicator Variable that Adds 0.5 for Each Unfavorable Condition, Retaliation, No Protection, and No Reward; and Subtracts 0.5 for Each Favorable Condition, No Retaliation, Protection, and Reward Over All Eight Cases; *UFVEX*, *UFVEX* is a Contrast-Coded Indicator Variable that is 0.5 for the Most Unfavorable Condition, Case 1; and −0.5 for the Most Favorable Condition, Case 8. The Other Cases are not Included in This Extreme Sample.

conditions, *MIUNFVFL*, and Fig. 2C presents the interaction between moral identity and the extreme environmental conditions, *MIUNFVEX*.

While using only two-levels of moral identity, above or below the median, is statistically less powerful than the continuous interaction terms used in the regression models, the three graphical presentations all clearly indicate that moral identity positively moderates the effects of certain individual and combined environmental condition unfavorable to whistle blowing.

DISCUSSION AND CONCLUSIONS

The results of this study are that moral identity significantly moderates the perceived likelihood of whistle blowing under the following circumstances: when the threat of retaliation is present; when the combination of the three conditions make the environment for whistle blowing more unfavorable; and in the extreme case where the environment is most unfavorable (i.e., threat of retaliation, no protection, and no reward).

These results are consistent with the assertion by Weaver (2006) that moral identity promotes moral agency and that moral agency can overcome adverse organizational situations. Another possible explanation for the results of this study is that the moral course of action may be more salient to those with higher moral identity when external circumstances are most adverse. Perhaps those with higher moral identity become ''incensed'' by adverse circumstances and choose to assert their moral agency. For example, the most adverse circumstances presented in the hypothetical scenarios are when retaliation is present and when the joint instances of retaliation, no protection from retaliation, and no reward are present. As expected, based on the results of these scenarios utilizing student subjects, moral identity is an influential moderator, quite possibly because of the salience of the adversity.

Moral identity was less influential in the no reward and no protection scenarios possibly because those scenarios were not as adverse, and thus not as salient, to those possessing higher moral identity. In other words, the individuals with the higher moral identity should see their morality as central to their self image but this self image may only emerge as needed to address a moral dilemma (Aquino & Reed, 2002). The presence/absence of a reward and the presence/absence of protection from retaliation do not present the same intensity of moral dilemmas.

The results of this study are also consistent with the findings of Reynolds and Ceranic (2007). Reynolds and Ceranic found that moral identity has a strong relationship with moral behavior if the social consensus about the behavior is high. If retaliation, no protection, and no reward are present in an organizational situation, it would be more apparent that an unethical situation exists in the organization and more social support for the whistle blower could be expected, especially since the whistle blower would be putting themselves at great personal risk without a monetary incentive.

A practical implication of this study is that although those with higher moral identity indicate a higher perceived likelihood of whistle blowing in

adverse circumstances, most organizations do not screen for this characteristic when hiring employees. We are not advocating that employers screen for moral identity but rather that they promote an ethical environment and provide an anonymous method for reporting suspected wrongdoing within the organization. Organizations would be well-served by listening to employees and correcting any wrongdoing internally, rather than waiting for the wrongdoing to become a public scandal.

Despite our findings in support of moral identity as a whistle blowing moderator, there are limitations to this study. One limitation is that the results are not generalizable to employees above entry level because undergraduate students were used as subjects. Another limitation is that the results are from hypothetical scenarios. The actual whistle blowing behavior of the subjects was not observed. Similar to prior accounting research on whistle blowing (e.g., Arnold & Ponemon, 1991), the whistle blowing question in this study was asked indirectly. This indirectness is a third potential imitation because the subjects may have reacted differently to an indirect question than they would have reacted to a similar direct question.

Future research can address the limitations in this study. Other subjects such as working adults could be given the hypothetical cases and the results compared to that of the undergraduate subjects. It is also possible to observe whistle blowing behavior directly in a laboratory environment or to gather actual whistle blowing information from field studies of companies. Moreover, the current study results should be compared to those obtained when asking about the likelihood of whistle blowing in a more direct manner. Furthermore, future researchers, expanding upon Reynolds and Ceranic (2007), could choose to examine the relationship between moral identity, moral cognition, and whistle blowing behavior or the relationship between moral identity and other types of moral action. Despite the limitations, the construct of moral identity appears to have promise for explaining whistle blowing behavior and possibly other moral actions.

NOTES

1. For a more complete discussion of moderating variables, please refer to Sharma, Durand, and Gurarie (1981).
2. For a more complete discussion of contrast coding, please refer to Hardy (1993, pp. 71–75).
3. Case materials are available upon request from the authors.
4. To reduce multicollinearity and size effects, the continuous variables *LIKELI*, *MI*, and *SM* are standardized. The interaction variables are the result of multiplying the standardized values of *MI* and *SM* with the contrast-coded variables.

5. Estimations were also performed on an expanded version of Model (1) that included interaction terms between the self-monitoring variable, *SM*, and the contrast-coded environmental variables, *CRET*, *CPRO*, and *CREW*. None of the interaction term coefficients were significant.

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ETHICAL CLIMATE AND ORGANIZATIONAL COMMITMENT AMONG MANAGEMENT ACCOUNTANTS

Dennis M. Bline, Charles P. Cullinan and Robert Farrar

ABSTRACT

The relationship between the components of ethical climate and organizational commitment has been examined among non-professional employees in non-professional companies (e.g., general workers in a telephone company) and professional employees in professional firms (e.g., public accountants working in CPA firms). For both of these groups, organizational commitment is positively associated with the employees' perceptions of the extent to which their organization's climate is "benevolent" and negatively related to their perceptions of the extent to which the organization's climate is "egoist." The difference between these two groups is that the organizational commitment of professional employees in professional firms is positively associated with these employees' perceptions of the extent to which the organization's climate refers to externally derived rules and norms (called the "principled" component of ethical climate by Cullen et al. (2003)).

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Management accountants fall somewhere between these two extremes, being professional employees working in non-professional companies. This research examines how the organizational commitment of management accountants responds to ethical climate. Our results indicate that, like other employees, the organizational commitment of management accountants responds positively to a benevolent climate, and negatively to an egoistic climate. Unlike that of public accountants in a professional services firm, the organizational commitment of management accountants is not influenced by the extent to which the organization's climate refers to externally derived rules and norms. These results suggest that the status of an accountant's employing organization may exert a greater influence on how they respond to the employing organization's climate than the professional status of the accountant.

INTRODUCTION

Organizational commitment has been a subject of interest for decades. Researchers have investigated the relationship between organizational commitment and numerous antecedents and outcomes. Recently, researchers have become interested in the relationships between organizational commitment and ethics. Several studies have investigated the impact of organizational commitment on ethical outcome variables. Organizational commitment has been found to be positively associated with ethical intentions and conduct (Oz, 2001; Cullinan, Bline, Farrar, & Lowe, 2008). With respect to antecedents of organizational commitment, there have been fewer studies investigating ethical constructs. Cullen et al. (2003) studied the effect of ethical climate on organizational commitment among public accountants and telephone company employees. Cullen et al. (2003, p. 27) note that "we know relatively little about the effects of ethics on organizational commitment."

The current study examines the relationship between ethical climate and organizational commitment for professional employees working in non-professional companies. A *professional employee* is one who makes reference to external norms when making decisions, and these norms have been determined by a group of their fellow professionals. Examples of professional employees include (1) CPAs making reference to Generally Accepted Auditing Standards (GAAS) during an audit, and (2) management accountants making reference to Generally Accepted Accounting Principles (GAAP)

during the preparation of financial statements. A *non-professional employee* is one who does not typically make reference to professionally derived principles and norms in decision making. Within the bounds of generally societal-derived ethical norms, the individual can focus primarily on promoting the welfare of their employing organization.

With regard to work environment, a *professional firm* is one that is designed to provide professional services, and in which professionals are the dominant source of authority in the organization. An example of a professional firm (examined in Cullen et al., 2003) is a public accounting firm. A *non-professional company* is one that is not designed to provide professional services, and in which a group of professionals does not dominate the company. In the current study, these firms include an insurance company, a military contractor, and a conglomerate manufacturer. These firms employ some professionals (e.g., management accountants), but these professionals do not dominate the organization, determine how the organization is structured, or set the goals of the organization.

Studies investigating the relationship between ethical climate and organizational commitment of professional employees (e.g., Cullen et al., 2003) have focused on professionals working in organizations consisting of professional employees and defining themselves as professional firms (CPAs working in public accounting firms). Generalizing these findings to the accounting professionals working in non-professional companies, such as management accountants working in corporations, may not be warranted. Bline, Meixner, and Aranya (1992), in a study of accountants employed in three different work settings,[1] found that there are differences in the relationship among behavioral constructs by work setting. Researchers have not investigated how the organizational commitment of accountants employed in non-professional work settings relates to the workplace ethical climate. It is unclear whether the management accountant's attachment to the organization or to the profession will dominate their perception when confronted with ethical issues, i.e., will they respond more like their professional colleagues employed in professional organizations (CPA firms) or more like non-professional employees (telephone employees) in non-professional companies.

This study examines the relationship between a non-professional company's ethical climate and the organizational commitment of professionals (management accountants) employed in that company. The next section of the chapter presents the relevant literature and research question. Subsequent sections present the research methods and results. This is followed by the discussion and conclusions.

LITERATURE REVIEW

Defining Ethical Climate

Victor and Cullen (1988, p. 101) define ethical climate as "... prevailing perceptions of typical organizational practices and procedures that have ethical content ..." These authors developed a theoretical framework for the consideration, and measurement, of ethical climate based on three ethical criteria (i.e., egoism, benevolence, and principle)[2] and three loci of analysis (i.e., individual, local, and cosmopolitan). A benevolent climate emphasizes looking after the interests of the broadest group of people. An egoist ethical climate focuses on maximizing an individual's self interest. A principled ethical climate focuses on externally derived norms and rules.[3] When these three criteria and three loci are combined, there are nine theoretical types of ethical climate. Ethical climate has also been found to vary within organizations based on the nature of the work performed by organizational sub-divisions (e.g., Wimbush, Shepard, & Markham, 1997; Weber & Seger, 2002).

Defining and Measuring Organizational Commitment

Organizational commitment was originally defined (by Porter, Steers, Mowday, & Boulian, 1974, p. 604) as: "the strength of an individual's identification with and involvement in a particular organization." These authors also presented the 15-item unidimensional measure of organizational commitment that has been used in many studies. This scale was designed to measure the respondent's psychological attachment to the employing organization.

Researchers have historically linked an overall measure of organizational commitment, as defined by Porter et al. (1974), to a variety of antecedents and consequences such as role conflict, role ambiguity, job satisfaction, professional commitment, employee performance, and organizational turnover intentions (e.g., Mowday, Porter, & Dubin, 1974; Harrell, Chewning, & Taylor, 1986; Rahim & Afza, 1993). In addition, organizational commitment has been found to be associated with ethical climate (Kelley & Dorsch, 1991).

Effects of Ethical Climate

The association between ethical climate and organizational commitment has been investigated in a few studies. Kelley and Dorsch (1991) examined

whether ethical climate is related to organizational commitment and feelings arising from the receipt of gifts (indebtedness) among purchasing executives. Their results support the hypotheses that the caring climate dimension was positively associated with organizational commitment, and the instrumentality dimension was negatively associated with organization commitment. Contrary to their expectations, they also found that the rules aspect of ethical climate, which they expected to be unrelated to organization commitment, was positively associated with organizational commitment.

Schwepker (2001) investigated the relationship between ethical climate and organizational commitment of business-to-business salespeople. He concluded that creating an ethical climate by enforcing existing ethical codes and policies results in increased job satisfaction and organizational commitment of respondents. The author emphasized the importance of this finding among salespeople, who are separated from the organization physically, socially, and possibly psychologically.

Cullen et al. (2003) examined the effects of ethical climate on organizational commitment among two separate groups: workers in a telephone company, and accountants working for four public accounting firms. They focus on the three-component model of ethical climate based on benevolent, egoist, and principle-based climates. They find that for both professionals and non-professionals, organizational commitment is positively related to the benevolent, and negatively related to the egoistic ethical climate dimensions. For non-professionals, they find no relationship between principles-based ethical climates and organizational commitment. In contrast, when examining the public accounting (professional group), they found that a principled ethical climate was positively associated with organization commitment.

Work Settings of Professional Employees

Accountants have historically been employed in all aspects of the economy. While public accounting firms are sometimes viewed as the dominant part of the accounting profession, there are many accountants employed in businesses and government at all levels. Researchers in sociology have investigated the work setting of professionals for over 40 years.

The investigation of professional employee work settings originated with Scott (1965). Scott distinguished between two work settings of professionals, autonomous and heteronomous. An autonomous work setting is one where the professionals determine the organizational structure because they are the

Table 1. Work Setting Comparisons and Research on the Relationship Between Ethical Climate and Organizational Commitment.

	Professional Work Settings		Non-Professional Work Settings
	Autonomous	Heteronomous	Department
Professionals	Accountants employed in public accounting firms (Cullen, Parboteeah, & Victor, 2003)	Accountants employed in government	Accountants employed in non-professional companies (*the current study*)
Non-professionals	Administrative/support staff employed in public accounting firms	Administrative/ support staff employed in government	Non-professional workers employed in a telephone company (Cullen et al., 2003)

dominant source of authority in the organization. A later study (Hall, 1968) places public accounting firms in this category (Table 1).

The heteronomous organization is identified by Scott (1965) as one in which ‘‘professional employees are clearly subordinated to an administrative framework, and the amount of autonomy granted professional employees is relatively small’’ (p. 67). While Scott did not include accountants employed in the heteronomous work setting in the study, libraries, secondary schools, and social welfare agencies were identified as professional organizations included in the heteronomous work setting.

A third work setting for professional employees (i.e., departmental) was identified by Hall (1968). The departmental work setting is one in which the professional employees are part of a larger organization and they may not be able to control the manner in which their work is structured. Hall included management accountants in the departmental setting.

In a study including CPA firm accountants, governmental accountants, and accountants employed in corporations, Bline et al. (1992) found indications that the three distinct work settings proposed by Scott (1965) and Hall (1968) exist among professional accountants. Bline et al. investigated the organizational and professional commitment and organizational–professional conflict of accountants in each of the three work settings. They observed differences among the work settings with regards to organizational and professional commitment but not organizational–professional conflict. In particular, they observed that the accountants' organizational commitment was highest for accountants employed in public accounting firms

followed by accountants employed in corporations and the governmental accountants had the lowest level of organizational commitment.

Cullen et al. (2003) suggest that their results may reflect the differences among professional and non-professional employees in different work settings. They assert that professionals in an autonomous work setting are more likely to have a sense of commitment to something larger than their employer (i.e., their profession) based on their socialization and training. Because a principled-based ethical climates focus on external rules and obligations, professional employees, who already feel an affinity for their profession, will respond favorably to organizations that also look to norms and values larger than the organization. In contrast, they note that "To the degree that principled climates are based on external rules and standards … they seem less relevant to a work group that has no unique professional codes" (p. 131).

Research Question

Studies investigating the relationship between an organization's ethical climate and employees' organizational commitment have been based on studies of non-professional employees in non-professional organizations and professional employees in professional organizations (e.g., Cullen et al., 2003). The findings in these studies may be different when investigating the ethical climate–organizational commitment relationship of professional employees in a non-professional organization.

Management accountants occupy a unique role in business organizations. While they are there to assist the organization in achieving its goals, they also have broader responsibilities encompassing accurate information flow.[4] As a result, it is unclear whether the relationship between ethical climate and organizational commitment of management accountants will be similar to the relationship observed for non-professional employees (i.e., principled ethical climate would not affect organizational commitment), or like professional employees working for a professional organization (principled ethical climate would positively affect organizational commitment). How management accountants will respond to ethical climate is an empirical question, which leads to the main question of this study:

RQ. What is the association between organizational commitment and ethical climate among professional accountants in non-professional companies?

Specifically, we seek to examine whether the organizational commitment of management accountants is associated with the organization's principled component of ethical climate, as it is with professional working in a professional work environment.

RESEARCH METHOD

Overview of Study

A survey instrument containing a number of scales, including measures of ethical climate and organizational commitment, was assimilated and pre-tested. The participants in the pre-test were employed by a company not part of the study. There were no material modifications to the survey instrument as a result of feedback from this group. A copy of the relevant portions of the survey instrument are included in the Appendix.

Measures Utilized

The concept of organizational commitment was originally conceived by Porter et al. (1974). Organizational commitment was viewed as a unidimensional construct pertaining to an "individual's identification with and involvement in a particular organization" (p. 604). Other researchers have theorized that organizational commitment is a multidimensional construct (e.g., O'Reilly & Chatman, 1986; Meyer & Allen, 1991). Most recently, Meyer and Allen (1997) propose that organizational commitment is comprised of three different dimensions: affective component pertaining to emotional attachment, identification with, and involvement in the organization; continuance component which assesses the respondent's awareness of the cost associated with leaving the organization; and normative component that pertains to the respondent's feeling of obligation to continue employment.

In the context of the current study, the affective commitment component is used because this study does not address the cost of leaving the organization or the employee's feeling of obligation to continue employment. The Porter et al. (1974) measure was used to operationalize the organizational commitment construct because it is the most widely used measure and it has been found to have strong construct validity.

For the measure of ethical climate, Victor and Cullen's (1988) 26-item measure was used. This scale has been used in a number of studies on ethical

climate (e.g., Kelley & Dorsch, 1991; Wimbush et al., 1997; Cullen et al., 2003). To assess the effects of ethical climate on organizational commitment, we utilized both the Cullen et al. (2003) classification of the items in the scale, and the Victor and Cullen (1988) classification. Note that the Cullen et al. (2003) classification utilizes the theoretical construct names, while the Victor and Cullen (1988) scheme is titled based on the empirical measures. These classifications are presented in Table 2.[5]

We also included two control variables gathered from the survey in our analyses. First, the number of years the employee has worked for the company was included because this variable has been found to be associated with organizational commitment in other studies. Second, we included in the analyses a dummy variable indicating whether the respondents possessed an accounting certification.

Sample Characteristics

Participation was requested from professional accountants employed at three companies in the Northeast region of the United States. One company was in the insurance industry, another company was a military contractor, and the third company was a conglomerate, with businesses in many industries. A contact at the each company delivered the research instruments via the company's internal mail system. A letter from a senior executive encouraging participation was also included. The completed surveys were mailed directly to the researchers in a postage paid envelope. Given that surveys were distributed by the participating companies, it is not possible to calculate an exact response rate because some surveys may have not reached the potential participants. However, it is possible to make a conservative response rate estimate based on the number of surveys sent to the participating companies (168) and the number of surveys returned to the authors (81). Because some of the data required for our regression analyses were missing for some respondents, 74 respondents were used in the analysis. Thus our minimum response rate is 44% (74 usable responses/168 surveys provided to the companies).

The descriptive statistics for the sample are presented in Table 3. As can be seen from the table, the average respondent was just over 40 years old, with an average of 13 years of accounting experience. The respondents' undergraduate majors were accounting (40.5%), finance (10.8%) other business (21.6%), and non-business (17.6%). Thirty-three respondents reported having a Masters degree (44.6% of the 74 usable responses).

Table 2. Classifications of Ethical Climate Scale (Cullen et al., 2003).

Number	Item	2003 Sample	1988 Sample
21	Our major consideration is what is best for everyone in the company	Benevolent	Caring
5	In this company, people look out for each other's good	Benevolent	Caring
16	In this company, our major concern is always what is best for the other person	Benevolent	Caring
12	The most important concern is the good of all the people in the company	Benevolent	Caring
25	In this company, each person is expected, above all, to work efficiently	Factor loading on theoretical factor < .40	Caring
19	The most efficient way is always the right way in this company	Factor loading on theoretical factor < .40	Caring
26	It is expected that you will always do what is right for the customer and the public	Factor loading on theoretical factor < .40	Caring
10	In this company, people protect their own interest above other considerations	Egoistic	Instrumental
4	People are expected to do anything to further the company's interests	Egoistic	Instrumental
8	Work is considered sub-standard only when it hurts the company's interests	Egoistic	Instrumental
1	In this company, people are mostly out for themselves	Egoistic	Instrumental
6	There is no room for one's own personal morals or ethics in this company	Egoistic	Instrumental
2	The major responsibility for people in this company is to consider efficiency first	Factor loading on theoretical factor < .40	Instrumental
17	People are concerned about the company's interests – to the exclusion of everything else	Factor loading on theoretical factor < .40	Instrumental
3	In this company, people are expected to follow their personal and moral beliefs	Principled-Individual	Independence
9	Each person in this company decides for himself what is right and wrong	Principled-Individual	Independence
22	In this company, people are guided by their own personal ethics	Principled-Individual	Independence
11	The most important consideration in this company is each person's sense of right and wrong	Factor loading on theoretical factor < .40	Independence
20	In this company, people are expected to strictly follow legal or professional standards	Principled-Cosmopolitan	Law & Code

Table 2. (*Continued*)

Number	Item	2003 Sample	1988 Sample
13	The first consideration is whether a decision violates any law	Principled-Cosmopolitan	Law & Code
14	People are expected to comply with the law and professional standards over and above other considerations	Principled-Cosmopolitan	Law & Code
24	In this company, the law or ethical code of their profession is the major consideration	Principled-Cosmopolitan	Law & Code
18	Successful people in this company go by the book	Principled-Local	Rules
23	Successful people in this company strictly obey the company policies	Principled-Local	Rules
15	Everyone is expected to stick by company rules and procedures	Factor loading on theoretical factor < .40	Rules
7	It is very important to strictly follow the company's rules and procedures here	Factor loading on theoretical factor < .40	Rules

Sixty-five percent of the respondents were in a first or second-level managerial type positions, and 60.8% of the respondents were male. Ten of the 74 respondents were CPAs, while one respondent was a CMA, and one was a CIA. The respondents' most common area of responsibility was internal management reporting and analysis, with the mean respondent devoting 37.7% of his or her time to these activities. The next most frequent areas of responsibility are external financial reporting, and internal audit.

RESULTS

Descriptive information for the primary independent variables is presented in Table 4. With regard to the caring/benevolent and instrumental/egoistic dimensions, the results indicate that respondents in the current study generally viewed their employing organizations as having ethical climates that were more caring/benevolent than instrumental/egoistic. In the principled aspects of ethical climate, independence (Individual) was viewed as being the least common ethical climate dimension, while Law & Code (Cosmopolitan) was the highest ethical climate dimension. The rules (Local) dimension fell in the middle.

Table 3. Demographic Information on Respondents (Total Respondents = 74).

	Mean Years	Standard Deviation
Age	40.2	8.88
Years of accounting experience	13.0	8.94
Years of service to company	12.4	9.26

	Number of Respondents	Percentage of Respondents
Undergraduate major		
Accounting	30	40.5
Finance	8	10.8
Other business	16	21.6
Non-business	13	17.6
No response	7	9.5
Total	74	100
Graduate degree		
Respondent has a graduate degree	33	44.6
Respondent does not have a graduate degree	41	55.4
Total	74	100
Position		
Entry level	10	13.4
First-level managerial	38	51.4
Mid-level managerial	24	32.4
Top-level managerial	1	1.4
No response	1	1.4
Total	74	100
Gender		
Male	45	60.8
Female	28	37.8
No response	1	1.4
Total	74	100
Certification		
CPA	10	13.5
CMA	1	1.4
CIA	1	1.4
No certification	62	83.7
Total	74	100

Table 3. (*Continued*)

Respondents Responsibilities (Mean Percentage of Time in Each Activity)	Mean Percentage of Time in Each Responsibility
External financial reporting	20.6
Internal audit	13.5
Tax	8.2
Internal management reporting and analysis	37.7
Treasury activities	10.3
Other (mainly financial information systems)	11.5

Table 4. Descriptive Statistics.

Variable	Mean	Standard Deviation	Minimum	Maximum	α
Organizational commitment	76.41	14.91	30	101	0.911
Ethical climate dimensions (Cullen, Parboteeah, & Victor, 2003)					
Benevolent	3.41	0.98	1.25	5.25	0.837
Egoistic	3.04	0.90	1.40	5.40	0.794
Principled	4.06	0.62	2.22	5.17	0.796
Principled-individual	3.31	0.82	1.00	5.00	0.529
Principled-cosmopolitan	4.87	0.84	2.00	6.00	0.869
Principled-local	4.02	0.93	2.00	6.00	0.856
Ethical climate dimensions (Victor & Cullen, 1988)					
Caring	4.27	0.99	1.71	6.43	0.855
Instrumental	3.06	0.63	1.86	4.43	0.736
Independence	3.23	0.76	1.00	4.75	0.635
Law & code	4.87	0.84	2.00	6.00	0.869
Rules	4.45	0.66	3.25	6.25	0.685

The Cronbach's α measures for the scales were mixed. Most of the α's were near or above 0.70, which is traditionally considered the cutoff level for a good scale (Nunnally, 1978). The Independence, Principled-Individual, and Rules scales were below this level, suggesting that results from these sub-scales should be interpreted with caution.[6,7]

The regression results with organizational commitment as the dependent variable are presented in Table 5. The first column of results are based on Cullen et al.'s (2003) classification of ethical climate dimensions, while the second column utilizes Victor and Cullen's (1988) classification of the climate dimensions. In both models, the overall model is significant at 0.0001, and the R^2s are both 0.39. This indicates that 39% of the variation in

Table 5. Regression Analysis Dependent Variable: Organizational Commitment Estimate ($p > t$).

Variable	Cullen et al. (2003) Classification	Victor and Cullen (1988) Classification
Intercept	76.60	73.96
	(0.001)	(0.0001)
Ethical climate dimensions		
Benevolence	4.21	
	(0.040)	
Egoistic	−6.39	
	(0.002)	
Principled	1.75	
	(0.510)	
Caring		6.00
		(0.004)
Instrumental		−7.55
		(0.005)
Independence		−0.52
		(0.809)
Law & code		1.46
		(0.497)
Rules		−0.51
		(0.851)
Control variables		
Years of service to company	−0.23	−0.28
	(0.143)	(0.085)
Certification (yes/no)	1.98	1.93
	(0.618)	(0.636)
Model statistics		
F	10.51	7.73
$P > F$	0.0001	0.0001
Adjusted R^2	0.3945	0.3923
n	74	74

organizational commitment is explained by variation in ethical climate of the employee's work place.

The results based on Cullen et al.'s (2003) classification indicate that a benevolent ethical climate is associated with higher organizational commitment, and that an egoistic ethical climate is related to lower levels of organizational commitment. A principled ethical climate is not significantly associated with organizational commitment.[8] Using the Victor and Cullen (1988) classification similar results were obtained. Specifically, a caring ethical climate is found to be positively related to organizational

commitment, while an instrumental climate is negatively associated with organizational commitment. Independence, Law/Code and Rules-based ethical climates are not significantly related to organizational commitment among management accountants.

DISCUSSION AND CONCLUSIONS

Overall, the results are consistent with the results found in Cullen et al.'s (2003) sample of non-professional employees, and in Kelley and Dorsch's (1991) study of purchasing executives. In both of these cases, the researchers found that the principled dimensions of ethical climate did not affect organizational commitment among non-professional employees working in a non-professional environment. The results are in contrast to those of Cullen et al.'s (2003) sample of public accountants working in a public accounting firm. In their study of professionals working in a professional environment, they found that a principled ethical climate was associated with professionals' organizational commitment.

The current study endeavored to determine whether the association between and ethical climate among management accountants is more similar to this relationship among public accountants (professionals working in a professional firm) or more like that of telephone workers (non-professionals working in a non-professional company). Because management accountants are professional employees working in a non-professional environment, it was unclear what the relationship between organizational commitment and ethical climate would be for this group. We find that, with respect to the relationship between organizational commitment and ethical climate, the non-professional work environment of management accountants appears to be more important than the professional status of the management accountants. This might also suggest that the work environment (i.e., professional vs. non-professional) may be more important than the professional status of the individuals being examined.

Overall, the current study suggests that a principled ethical climate may be less important in non-professional companies than professional firms. These findings may be related to the professional socialization process, which Cullen et al. (2003) suggest would lead professionals "to internalize the values of principled reasoning" (p. 138). The results indicate that the socialization process of professionals in non-professional companies may not occur to the same degree as professionals in professional firms, as a

principled ethical climate does not affect the organizational commitment of management accountants.

These findings have practice implications because the ethical issues that occur in the accounting profession start as a breakdown at the corporate level. If the management accountants do not have a high level of ethics resulting from something external to the employing organization (i.e., the accounting profession), then management in the organization may be able to influence the accountants to take unethical actions.

These results also have implications for accounting educators. Examples of ethical issues and approaches to address these issues cannot be focused only on financial accounting and auditing. Researchers have observed that accountants associated with CPA (professional) firms have a close association with the accounting profession and they can use the accounting profession to help when faced with ethical dilemmas. It may also be important that accounting educators help students who will be management accountants understand the types of ethical issues they could encounter and assist the students develop skills that will enable them to make ethical choices.

The results of this study should be interpreted in light of research limitations. While organizational commitment and ethical climate are important variables in understanding decisions made by management accountants, there are undoubtedly equally important variables that are not investigated in this study. Future research should pursue other variables that have been found to be related to the decision process. Another limitation of the study is that all of the data were gathered in one area of the US (New England). While there is no reason to believe that the results would be different if the data were gathered in another area of the country, it is possible that accountants in areas of the country where publicized ethical lapses have occurred (e.g., Houston/Enron) may have a different perspective on ethical issues.

NOTES

1. Bline et al. (1992) data were gathered from professional accountants employed in public accounting firms, governmental agencies (municipal finance officers association), and corporate accountants.

2. Some older literature refers to benevolent as "caring"; egoistic as "instrumental"; and principled as "rules." For consistency in this chapter, we will use the terms benevolent, egoistic, and principled based on their prevalent use in more recent literature (e.g., Cullen et al., 2003; Peterson, 2002).

3. Note that the term "principled ethical climate," as defined in the ethical climate literature, refers to the extent to which firms rely on external professional guidance.

While there has been recent discussion in accounting about "principles" vs. "rules" based accounting, in the ethical climate literature "rules" is considered to be one example of principles, rather than a concept distinct from "principles." For consistency with the existing literature, we have chosen to use the term "principled" ethical climate when referring to this concept, even though the term may have a different connotation when referring to GAAP or other accounting norms.

4. The Institute of Management Accountant's Code of Ethics includes the responsibility to "communicate information fairly and objectively" (IMA, 2000).

5. While our sample size was not sufficient for a reliable factor analysis of the 26-item scale, the factor structure was materially consistent with Victor and Cullen's (1988) and Cullen et al.'s (2003) results.

6. Cullen et al. (2003) also report a low α level (0.60) for the Principled-Individual scale.

7. Also note that Thorne's (2000) results suggest that alphas may be lower for accountants answering general ethics scales.

8. In unreported analyses, regressing organizational commitment with benevolence, egoistic, and the three dimensions of principled: individual, cosmopolitan, and local, yielded similar results: a positive association with benevolent, a negative association with egoistic, and no significant association with individual, cosmopolitan, or local.

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APPENDIX. SURVEY INSTRUMENT

Organizational Commitment

Strongly agree = 1
Neither agree nor disagree = 4
Strongly disagree = 7

1. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.
2. I talk up the organization to my friends as a great organization to work for.
3. I feel very little loyalty to this organization.

4. I would accept almost any type of job assignment in order to keep working for this organization.
5. I find that my values and the organization's values are very similar.
6. I am proud to tell others that I am part of this organization.
7. I could just as well be working for a different organization as long as the type of work were similar.
8. This organization really inspires the very best in me in the way of job performance.
9. It would take very little change in my present circumstances to cause me to leave this organization.
10. I am extremely glad that I chose this organization to work for, over others I was considering at the time I joined.
11. There's not too much to be gained by sticking with this organization indefinitely.
12. Often, I find it difficult to agree with this organization's policies on important matters relating to its employees.
13. I really care about the fate of this organization.
14. For me this is the best of all possible organizations for which to work.
15. Deciding to work for this organization was a definite mistake on my part.

Ethical Climate

To what extent are the following statements true about your company?
Completely false = 1
Mostly false = 2
Somewhat false = 3
Somewhat true = 4
Mostly true = 5
Completely true = 6

1. In this company, people are mostly out for themselves.
2. The major responsibility for people in this company is to consider efficiency first.
3. In this company, people are expected to follow their own personal and moral beliefs.
4. People are expected to do anything to further this company's interests
5. In this company, people look out for each other's good.
6. There is no room for one's own personal morals or ethics in this company.

7. It is very important to follow strictly the company's rules and procedures here.
8. Work is considered sub-standard only when it hurts the company's interests.
9. Each person in this company decides for himself what is right and wrong.
10. In this company, people protect their own interest above other considerations.
11. The most important consideration in this company is each person's sense of right and wrong.
12. The most important concern is the good of all the people in the company.
13. The first consideration is whether a decision violates any law.
14. People are expected to comply with the law and professional standards over and above other considerations.
15. Everyone is expected to stick by company rules and procedures.
16. In this company, our major concern is always what is best for the other person.
17. People are concerned with the company's interests – to the exclusion of all else.
18. Successful people in this company go by the book.
19. The most efficient way is always the right way, in this company.
20. In this company, people are expected to strictly follow legal or professional standards.
21. Our major consideration is what is best for everyone in the company.
22. In this company, people are guided by their own personal ethics.
23. Successful people in this company strictly obey the company policies.
24. In this company, the law or ethical code of their profession is the major consideration.
25. In this company, each person is expected, above all, to work efficiently.
26. It is expected that you will always do what is right for the customer and public.

AN ATTRIBUTIONAL ANALYSIS OF ETHICALITY JUDGMENTS OF EARNINGS MANAGEMENT

Keith G. Stanga and Andrea S. Kelton

ABSTRACT

This study examines factors that may influence participants in the financial reporting process as they assess the ethicality of a change in accounting estimate. Relying on the theory of correspondent inferences, we examine whether accountants and stockholders attribute a manager's intent to earnings management when the manager changes an accounting estimate. We also examine whether these attributions are associated with ethicality judgments of management's accounting actions. Unlike prior studies in this area, the manager's intent for making the accounting change in this study is unclear, which is similar to what occurs in business.

Results indicate that when a corporate manager changes an accounting estimate and the change results in reported earnings that meet analysts' forecasts, accountants and stockholders attribute management's intent to earnings management. Moreover, the participants' assessments of the likelihood that management was engaged in earnings management are significantly and negatively associated with ethicality judgments. Lastly, mediation analysis indicates that attributions of management's intent mediate the effect of changing an accounting estimate on ethicality judgments.

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These results provide some insight into the process by which financial reporting participants make ethicality judgments about certain accounting actions. The negative ethicality perception that is associated with perceptions of earnings management deserves attention by preparers and users of financial statements and in the education of these groups.

This study examines factors that influence participants in the financial reporting process as they assess the ethicality of a change in accounting estimate and consider whether management is engaged in earnings management. Earnings management has been called one of the most important ethical issues facing the accounting profession (Merchant & Rockness, 1994, p. 92). According to Healy and Wahlen (1999, p. 368)

> Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers.

A large body of accounting and finance literature provides evidence that earnings management is widespread and motivated by several reasons (Healy & Wahlen, 1999). One important and frequently cited managerial reason for managing earnings is to meet or exceed the earnings forecasts of financial analysts (Mulford & Comiskey, 2002, pp. 83–84; Healy & Wahlen, 1999, pp. 370–375) so that the market price of the company's stock does not decrease.

The flexibility inherent in GAAP provides opportunities for earnings management. For example, as long as an accounting estimate is reasonable and defendable within GAAP, a manager may select a lower estimate of warranty expense in a particular year to increase the current year's reported earnings so that it equals or exceeds the mean forecast estimates of financial analysts. According to a survey of several prominent groups in the financial community (Mulford & Comiskey, 2002, p. 144), the timing of operating expenses, such as warranty expense, represents by far the most common type of earnings management technique observed in practice.

Earnings management remains a topic for debate among practitioners, standard setters, and academics. A lack of consensus exists on when an accounting action is considered earnings management and the extent to which earnings management is acceptable. Survey results indicate that auditors do not require adjustment of all attempts at earnings management (Nelson, Elliott, & Tarpley, 2002). Thus, earnings management occurs even

in financial statements that have been issued an unqualified opinion, further suggesting that earnings management is not necessarily harmful to users of financial statements (Parfet, 2000). Alternatively, others believe that any type of earnings management is harmful to the financial community (Levitt, 1998). Although the purpose of the Sarbanes–Oxley Act of 2002 (SOX) was to improve the quality of financial reporting, research suggests that earnings management still exists in the post-SOX environment (Cohen, Dey, & Lys, 2007; Graham, Harvey, & Rajgopal, 2005). Thus, examining whether participants in the financial reporting process perceive certain accounting actions as earnings management remains an important and interesting area of research.

To provide insight into the appropriateness of earnings management, accounting research has examined earnings management from an ethical perspective. These studies have shown several factors that influence ethical judgments of earnings management, including the type of earnings management action (i.e., operating versus accounting methods) (Merchant & Rockness, 1994; Fischer & Rosenzweig, 1995), management's intent for earnings management (Merchant & Rockness, 1994; Kaplan, 2001a, 2001b; Stanga & Kelton, 2008), and the role of the individual making the ethical judgment (Kaplan, 2001b). However, these studies focused primarily on ethicality judgments and did not assess whether participants perceived the accounting act in question as earnings management.

Earnings management is difficult to detect, although most investors believe that companies manage earnings quite frequently (Hodge, 2003). Whether an accounting action, such as changing an accounting estimate, is considered earnings management depends on management's intent. In essence, "the definition of earnings management hinges fundamentally on managerial intent, which is difficult to assess using *ex post* accounting information" (Nelson et al., 2002, p. 176). For example, changing an accounting estimate simply to achieve reported earnings that meet analysts' earnings forecasts is a form of earnings management because management's intent is to meet an important earnings target. In contrast, changing an accounting estimate in response to changes in a company's economic circumstances is not earnings management, even if the company still meets an important earnings target, because management's intent is to make the company's earnings properly reflect economic circumstances.

Prior research suggests that ethicality judgments of earnings management are influenced by management's intent when management's intent is clearly stated to the study participants (Merchant & Rockness, 1994; Kaplan, 2001a, 2001b; Stanga & Kelton, 2008). However, management's true intent

is typically unknown, which makes it difficult to assess whether management has engaged in earnings management. Participants in the financial reporting process, such as accountants and stockholders, must infer management's true intent (i.e., whether management is managing earnings) from observable factors when judging the ethicality of management's accounting actions.

This study examines factors that may influence participants in the financial reporting process as they assess the ethicality of a change in accounting estimate. We rely on the theory of correspondent inferences (Jones & Davis, 1965), which provides a framework for examining an individual's inferences about another's behavior. We examine whether accountants and stockholders perceive a change in an accounting estimate as earnings management when the manager's intent for making the change is unclear and must be inferred. We also examine whether these perceptions are associated with ethicality judgments of the manager's actions.

We conduct an experiment using a case scenario in which a company changed an accounting estimate for warranty expense, and management's intent for changing the estimate is uncertain. The amount of warranty expense recorded by management in the case is experimentally manipulated at two levels: (1) Management recorded a different percentage estimate from prior years (''change''), or (2) Management recorded the same percentage estimate as prior years (''no change''). The net income of the company in the ''change'' condition met analysts' earnings forecasts; the net income of the company in the ''no change'' condition was less than the net income that analysts had forecasted. The case included economic circumstances that could also reasonably justify the change in accounting estimate. The participants' role in the financial reporting process was experimentally manipulated as either a corporate accountant employed by the company or a current stockholder in the company.

Results indicate that when a corporate manager changes an accounting estimate and the change results in reported earnings that meet analysts' forecasts, accountants and stockholders attribute management's intent to earnings management. Moreover, the participants' assessments of the likelihood that management was engaged in earnings management are significantly and negatively associated with ethicality judgments. Lastly, mediation analysis indicates that attributions of management's intent mediate the effect of changing an accounting estimate on ethicality judgments.

The results have implications for both theory and practice. This study extends prior research by using attribution theory to provide insight into the

process by which participants in the financial reporting process make ethicality judgments about certain accounting actions. Specifically, ethicality judgments depend, to some extent, on whether participants perceive that the corporate manager has engaged in earnings management. Additionally, perceptions of earnings management and ethicality judgments did not differ between accountants and stockholders. This result differs from Kaplan (2001b), who provided some evidence that ethicality judgments of earnings management are associated with an individual's role in the financial reporting process. The current study was conducted in the "post-Enron" period of business history, which has brought forth a renewed emphasis on accounting and business ethics. Our results suggest that in this new environment, both accountants and stockholders are sensitive to the ethical issues surrounding earnings management and financial reporting. Results from this study should be timely and meaningful to the accounting profession and business community as they seek to understand and improve financial reporting by providing some evidence of when certain accounting acts are perceived as earnings management as well as the associated effect on ethicality judgments.

The remainder of the article is organized as follows. The next section presents the theory and hypotheses for the study. The third section explains the research methods. The fourth section presents the study's results, and the final section discusses the results, implications, and limitations of the research.

THEORY AND HYPOTHESES

Theory of Correspondent Inferences

Ethicality judgments of earnings management are influenced by management's intent when intent is clearly stated (Merchant & Rockness, 1994; Kaplan, 2001a, 2001b; Stanga & Kelton, 2008). However, management's intent is typically unobservable to participants in the financial reporting process such as accountants and stockholders. These participants must infer management's true intent from observable factors, such as management's behavior and the effect of that behavior, when assessing whether management has engaged in earnings management and judging the ethicality of management's behavior. The theory of correspondent inferences (Jones & Davis, 1965) provides an attributional framework to examine ethicality judgments and the factors that influence whether participants in the

financial reporting process perceive an accounting action as earnings management. The theory has been applied in many non-accounting contexts (see Kelley & Michela, 1980; Harvey & Weary, 1984), in the context of auditors' assessments of management dispositions (Reckers & Wong-On-Wing, 1991; Reckers, Wong-On-Wing, & Krull, 1992), and in the context of determining management's reporting credibility (Mercer, 2005).

Attribution theory describes the process through which an individual identifies a cause of an observed event. An individual uses information about behavior and the specific circumstances surrounding the event to infer the cause of the event (Kelley & Michela, 1980). Actions may be attributed to either dispositional (i.e., attributes or motives of the actor) or situational factors (i.e., external factors not directly related to the actor). For example, an individual may attribute a change in accounting estimate to situational factors, such as a change in a company's economic circumstances or a new accounting standard. Alternatively, an individual may attribute the change to dispositional factors, such as the manager is engaging in earnings management.

The theory of correspondent inferences specifically addresses dispositional inferences. As noted by Jones and Davis (1965, p. 223): "*Correspondence* refers to the extent that the act and the underlying characteristic or attribute are similarly described by the inference." When situational factors do not appear to exist, correspondence will increase, resulting in a dispositional inference. The theory suggests that correspondence of inference is influenced by, among other things, the extent that the act deviates from prior expectancies and the non-common effects of the alternative courses of action (Jones & Davis, 1965; Jones & McGillis, 1976).

Deviation from Expectancies

When making attributions, a perceiver considers the extent to which the observed behavior deviates from prior expectancies about the actor's behavior. The theory of correspondent inferences predicts that the more the behavior deviates from prior expectancies, the more likely the behavior will be attributed to an underlying disposition of the actor, as opposed to situational factors (Jones & McGillis, 1976).

Expectancies are developed based on information about the actor's prior behavior and may be inferred based on the consistency of the behavior over time. In the context of the current study, participants in the financial reporting process would ordinarily expect management to use accounting

estimates that are consistent over time in the absence of situational factors that suggest that a change in the estimate is needed (Reckers et al., 1992; Reckers & Wong-On-Wing, 1991). The theory of correspondent inferences predicts that when a manager changes an accounting estimate (i.e., deviates from expectancies) and the change results in the company's earnings meeting analysts' forecasts, the perceiver will attribute the manager's intent to earnings management. Research examining auditors' attributions of management's motives for changing accounting estimates has found that deviations from expectancies affect auditors' attributions. Specifically, auditors attribute changes in accounting estimates to earnings management when the changes deviate from prior expectancies (Reckers et al., 1992; Reckers & Wong-On-Wing, 1991).

Non-common Effects

Non-common effects are those effects that differ among the alternative courses of action available to the actor. Perceivers use information about non-common effects to infer the actor's intent for a particular act (Jones & Davis, 1965). In the context of the current study, when a manager changes an accounting estimate and reported earnings meet analysts' forecasts only when the new estimate is used, the non-common effect is meeting analysts' forecasts. Consequently, financial statement users are likely to infer that management's intent for changing the accounting estimate is earnings management to meet analysts' forecasts (Reckers et al., 1992; Reckers & Wong-On-Wing, 1991).

The Effect of Role on Attributions of Intent

The earlier discussion suggests that under certain circumstances, a change in accounting estimate that results in a company's reported earnings meeting analysts' forecasts will likely be attributed to dispositional factors, specifically that the manager's intent is earnings management. However, the attribution may differ depending on the role of the perceiver in the financial reporting process. Merchant and Rockness (1994, p. 84) suggest that ethical judgments of earnings management "are probably also related to individuals' professional norms which, in turn, are related to the roles the individuals play in the financial-reporting process." Additionally, Kaplan (2001b) provided some evidence that ethicality judgments of earnings

management are associated with an individual's role in the financial reporting process since different roles result in differing exchange relationships within an organization (Adams, 1965). Our study examines attributions and ethicality judgments made by both corporate accountants and stockholders.[1]

Earnings matter to stockholders because earnings determine the value of stockholder investments. Companies that consistently meet analysts' earnings forecasts have higher share prices than companies that fail to meet analysts' forecasts (Kasznik & McNichols, 2002). Similarly, research shows that firms manage earnings to meet analysts' earnings forecasts to avoid stock price declines (Matsumoto, 2002; Burgstahler & Eames, 2003). Current stockholders may benefit economically from a change in accounting estimate that causes a company's reported earnings to meet analysts' forecasts. Using a rigorous analytical framework, Dye (1988) proposed that a firm's current stockholders have a demand for earnings management that benefits the company through maintaining or increasing earnings and stock value (p. 195). Because earnings management may benefit current stockholders but usually has negative connotations, current stockholders will be more likely to attribute a change in accounting estimate to a situational factor (i.e., a change in the company's economic circumstances) and less likely to attribute the change in accounting estimate to a dispositional factor (i.e., manager is engaging in earnings management).[2]

Dye's (1988) analytical model applies to a firm's stockholders, not to accountants. Unlike stockholders, corporate accountants typically do not have a similar demand for earnings management that increases reported earnings and investment value.[3] Therefore, we can reasonably expect that accountants will be more likely to strive for neutrality in financial reporting. Neutrality is the "absence in reported information of bias intended to attain a predetermined result or to induce a particular mode of behavior" (FASB, 1980, Glossary of Terms). To be neutral, "accounting information must report economic activity as faithfully as possible, without coloring the image it communicates for the purpose of influencing behavior in *some particular direction*" (FASB, 1980, para 100). Managed earnings are not neutral. A change in accounting estimate signals that earnings management might be occurring (Mulford & Comiskey, 2002, pp. 144–146). Accountants are exposed to the concept of professional skepticism that is required of auditors. Moreover, professional accountants, unlike stockholders, are subject to regulation by a professional body, and have professional standards of conduct that relate to financial reporting and to ethical issues.

Therefore, accountants will be more likely to attribute a change in accounting estimate to dispositional factors as opposed to situational factors. Specifically, accountants will be more likely to attribute management's intent for making a change in accounting estimate to earnings management. The earlier discussion supports our first two hypotheses:

H1a. A change in accounting estimate that causes reported net income to meet analysts' forecasts affects whether *accountants* attribute a manager's intent to earnings management.

H1b. A change in accounting estimate that causes reported net income to meet analysts' forecasts has no effect on whether *stockholders* attribute a manager's intent to earnings management.

The Effect of Attributions of Intent on Ethicality Judgments

Attribution theory suggests a link between attributions and consequences of the attributions (Kelley & Michela, 1980). Accounting research finds that auditors' attributions of management's motives for changing an accounting estimate are significantly associated with fraud risk assessments (Reckers et al., 1992), materiality judgments, and decisions regarding audit adjustments (Reckers & Wong-On-Wing, 1991).

This study examines whether attributions of management's intent to earnings management are associated with ethicality judgments. Jones (1991, p. 367) defined an ethical issue as one that exists when a decision maker's actions, when freely performed, may harm or benefit other people. Jones (1991) developed a model of individual ethical decision-making that is *issue contingent*. Ethical decision-making depends on characteristics of the ethical issue itself and, specifically, on the moral intensity of the issue. Jones (1991, p. 372) defines moral intensity as "a construct that captures the extent of issue-related moral imperative in a situation." Issues with higher moral intensity are associated with more extreme ethicality judgments than issues with lower moral intensity.

In this study, we expect moral intensity to be relatively high when participants perceive that the manager is engaged in earnings management. Earnings management is a fundamental issue that goes to the core of corporate financial reporting. Earnings management will be associated with relatively high moral intensity because such acts undermine the credibility of

the entire financial reporting system, which in turn is harmful to all who have an interest in the system (current stockholders, potential stockholders, creditors, and so forth) (FASB, 1980, para 110).

We expect that when a participant in the financial reporting process attributes management's intent for a change in accounting estimate to earnings management, the participant will perceive the issue as having high moral intensity and will provide a more negative ethicality judgment. The following hypothesis is proposed:

H2. Participants' attributions of the likelihood of earnings management are negatively related to their judgments of the ethicality of the accounting action.

Mediating Effect of Earnings Management Attribution

The foregoing theoretical discussion and research model (see Fig. 1) imply that attributions of management's intent (i.e., likelihood of earnings management) mediate the effect of a change in accounting estimate on ethicality judgments. In other words, the manager's decision to change an accounting estimate will affect the participants' ethicality judgments through participants' inferred intent of management. This expected mediating effect gives rise to the study's final hypothesis.

H3. The likelihood of earnings management mediates the effect on ethicality judgments of a change in an accounting estimate that causes reported net income to meet analysts' earnings forecasts.

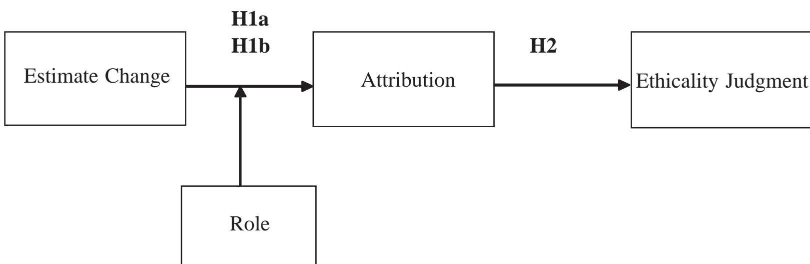

Fig. 1. Research Model.

RESEARCH METHODS

Design

The study is based on a 2×2 between-subjects design, as shown in Table 1. The study's independent variables are as follows:

1. *Estimate change* – Whether or not management changed the company's estimate of warranty expense from prior years. Participants in the "no change" condition were told that management decided to maintain the warranty expense estimate at the same percentage that the company used for the past three years (8% of net sales). Participants in the "change" condition were told that management decided to lower the warranty expense estimate in the current year to 6% of net sales. The company's net income in the "change" condition met analysts' earnings forecasts; the company's net income in the "no change" condition was less than the net income that analysts had forecasted.
2. *Role* – Role in the financial reporting process. Participants were assigned to the role of either an accountant (preparer of financial statements) or a stockholder (user of financial statements) of the company in the case.[4]

Participants were randomly assigned to one of the four treatment conditions.

Table 1. Experimental Design.

Role	Estimate Change	
	Change	No change
Accountant	6%[a]	8%[b]
Stockholder	6%[c]	8%[d]

[a]Participant is an entry-level accountant employed by the company; upper-level manager records 2004 warranty expense at 6% of net sales.
[b]Participant is an entry-level accountant employed by the company; upper-level manager records 2004 warranty expense at 8% of net sales.
[c]Participant is a common stockholder of the company; upper-level manager records 2004 warranty expense at 6% of net sales.
[d]Participant is a common stockholder of the company; upper-level manager records 2004 warranty expense at 8% of net sales.

Task

Each participant received a large envelope containing an informed consent form, a set of instructions, a one-page case involving accounting for warranty expense, an experimental questionnaire, and a request for demographic information. The experimental case is presented in the appendix.[5] The case described an accounting action taken by an upper-level manager of a large, publicly traded company. Specifically, the manager was deciding the proper amount of the year-end adjusting entry for warranty expense. The case stated that in past years, the company's CFO and external auditor had considered a 6–10% of net sales range for warranty expense to be reasonable, in accordance with GAAP, and material to the company. The company had recorded warranty expense at 8% of net sales in each of the past three years.

Additionally, the case stated that for each of the past several years, the company's reported net income had equaled or exceeded the net income that financial analysts had forecasted. For the current year in the case, the mean forecast estimate among financial analysts is net income of $310 million. The case presented a 2004 pro forma income statement for the company which showed net income at each percentage level of warranty expense from 6% to 10% of net sales. For 2004, reporting warranty expense at 8% of net sales would leave the company short of the mean earnings estimate forecasted by financial analysts. On the other hand, reporting warranty expense at 6% of net sales would make the company's reported earnings equal to analysts' forecasts.[6] Finally, the case stated the actual amount of warranty expense recorded by management and the resulting net income, depending on the experimental manipulation. Following the case, participants were asked to answer a series of questions regarding management's decision and to provide demographic data.

The warranty estimate provides an example of an accounting action that companies routinely take within the scope of GAAP. In this article, we seek to learn about the ethicality of this fairly subtle and common form of earnings management – changing a routine accounting estimate made *within the scope of GAAP*. This study does not include managerial actions that are clearly fraudulent, such as backdating sales invoices, recording fictitious sales, and reporting fictitious inventory. Fraudulent activities are outside the scope of GAAP and are obviously unethical and illegal.

By design, the case contained some ambiguity and did *not* clearly state the manager's true intent for his choice of warranty expense estimate, including whether he *intended* to manage the company's earnings. Participants had to

infer management's true intent from the facts presented in the case. The company in the case sold products that carry a three-year warranty against defects. The case stated that during the current year, the company introduced a new line of home products. This fact represents a new economic circumstance and a situational factor that provides a plausible reason that could justify a change in the accounting estimate for warranty expense. If participants perceive that the manager's true intent was to change the warranty estimate to reflect this situational factor, the action should not be considered earnings management. Additionally, the case noted that the company *did not pay* any performance-based bonuses; therefore, the manager in the case had no reason to manage earnings simply to earn a bonus. The case was therefore similar to real-world instances where accountants and stockholders must infer management's true intent when assessing whether management is engaged in earnings management.

The case was designed to be consistent with the assumptions and predictions of the theory of correspondent inferences. The change to a 6% estimate from the 8% that had been used in the past provided a deviation from expectancies, since the manager in the case *deviated* from the accounting estimate that the company had used in each of the past three years. Additionally, the case minimized the number of *non-common effects* because 6% was the only warranty estimate in the acceptable range that would have allowed the company to report earnings that would meet analysts' forecasts. The other percentages in the range for warranty estimate would have caused reported earnings to be less than analysts' forecasts.

Dependent Variables

The study's dependent variables are as follows:[7]

- Attribution of the manager's intent – Using a seven-point scale anchored by 1 (Very Likely) and 7 (Very Unlikely), participants were asked to assess the likelihood that the manager in the case was trying to manage the company's reported earnings through use of the warranty expense account (EARNINGS MANAGEMENT).
- Ethicality judgment – Using a seven-point scale anchored by 1 (Very Ethical) and 7 (Very Unethical), participants were asked to give their personal assessment of the *ethical acceptability* of the manager's decision regarding the estimate of warranty expense (ETHICS).

Participants

The experiment was conducted in a controlled classroom environment with 111 full-time, fourth-year (senior accounting majors) and fifth-year (Master of Accountancy) students at a major state university in the United States. The participants were used to proxy for users (i.e., stockholders) and preparers (i.e., corporate accountants) of financial statements.[8] This group was selected because it was determined through *a priori* reasoning and pre-testing that these subjects would likely understand the technical nuances of the accounting issue presented in the experimental case (accounting for warranty expense on the accrual basis) and would also be able to respond meaningfully, in a controlled setting, from the perspectives of both accountants and stockholders.

The Financial Accounting Standards Board (FASB, 1978) describes individual investors as those who have ''a reasonable understanding of business and economic activities and are willing to study the information with reasonable diligence.'' The FASB (1978) also notes that individual investors' ''understanding of financial information and the way and extent to which they use and rely on it also may vary greatly.'' Undergraduate (e.g., Pinsker, 2007) and graduate business students are frequently used to proxy for non-professional investors (Elliott, Hodge, Kennedy, & Pronk, 2007), and students are also often used in research on accounting ethics (e.g., Wright, Cullinan, & Bline, 1997, 1998; Shafer, 2004).[9]

Pilot Test

The instrument was pilot tested in two sections of junior-level, intermediate accounting classes. The pilot test indicated that subjects understood the task and did not reveal any difficulties in completing the task in a timely manner.

RESULTS

Manipulation Checks

After responding to the case and placing their responses back into the large envelopes that had been provided, participants answered two manipulation check questions. Participants were asked (1) what percentage of net sales the manager actually used to record warranty expense, and (2) what role they

assumed while reading and responding to the case. Fourteen participants responded incorrectly to one, or both, manipulation check questions, and those responses are excluded from the following analysis. The study's findings are therefore based on the responses of 97 participants.

Demographic Information

As shown in Table 2, the subjects were, on average, 23 years of age and had completed approximately nine accounting courses and one ethics course. The group was divided about equally between men and women. Two-thirds

Table 2. Participant Demographics.

	Mean	Standard Deviation	Minimum	Maximum
Panel A: Continuous Variables				
Age	23.37	3.56	20	40
Number of accounting courses completed	8.93	3.57	3	16
Number of ethics courses completed	1.05	0.64	0	3

	n	%
Panel B: Dichotomous Variables		
Gender		
Female	48	49.5
Male	49	50.5
Have you had an internship or other professional experience in accounting?		
Yes	64	66.0
No	33	34.0
Have you invested in common stock in the past?		
Yes	34	35.1
No	63	64.9
Do you plan to invest in common stock in the future?		
Yes	95	97.9
No	2	2.1
Have you previously read an annual report to shareholders?		
Yes	81	83.5
No	16	16.5
Have you previously conducted a financial analysis of a real company?		
Yes	70	72.2
No	27	27.8

had at least some professional experience in accounting. About a third had invested in common stock in the past, and virtually the entire group planned to invest in common stock in the future. Four-fifths had previously read an annual report to stockholders, and nearly three-fourths had previously conducted a financial analysis of a real company.[10] Thus, participants appear to be suitable for assuming the role of accountant or stockholder in this study.

Descriptive Statistics

Descriptive statistics for the dependent variables are presented in Table 3. Accountants and stockholders in the change condition were more likely to perceive the accounting act as earnings management than those in the no change condition. Moreover, accountants and stockholders in the change condition judged the accounting act as less ethical than those in the no change condition.

Tests of Hypotheses

H1a predicts that a change in accounting estimate that causes reported net income to meet analysts' forecasts will increase the likelihood that

Table 3. Descriptive Statistics Mean (Standard Deviation).

Role	Estimate Change	
	Change	No change
Accountant		
Likelihood of earnings Management[a]	2.04	5.00
	(0.77)	(1.19)
Ethical acceptability[b]	4.73	2.52
	(1.31)	(1.48)
Stockholder		
Likelihood of earnings management[a]	2.05	4.79
	(1.17)	(1.89)
Ethical acceptability[b]	4.64	2.25
	(1.09)	(1.68)

[a]Participants responded to a 7-point scale anchored by (1) Very Likely and (7) Very Unlikely.
[b]Participants responded to a 7-point scale anchored by (1) Very Ethical and (7) Very Unethical.

Table 4. Tests of Hypothesis 1.

Estimate Change	Mean Likelihood of Earnings Management[a]	df	*t*-Statistic	*p*-Value[b]
Panel A: Test of Hypothesis 1a – Accountants				
Change	2.04	49	−10.577	<.001
No change	5.00			
Panel B: Test of Hypothesis 1b – Stockholders				
Change	2.05	44	−5.86	<.001
No change	4.79			

[a]Participants responded to a using a 7-point scale anchored by (1) Very Likely and (7) Very Unlikely.
[b]*p*-value is two-tailed.

accountants will attribute management's intent to earnings management. H1b predicts that a change in accounting estimate that causes reported net income to meet analysts' forecasts will have no effect on whether *stockholders* attribute management's intent to earnings management. As shown in Panel A of Table 4, accountants were significantly more likely to attribute the manager's intent to earnings management when the manager changed the accounting estimate ($t = -10.577$, $p < .001$). When the accounting estimate was changed, accountants presumably attributed the act to dispositional factors, specifically that the upper-level manager was engaged in earnings management (mean response = 2.04). Thus, H1a is supported.

As shown in Panel B of Table 4, stockholders were also significantly more likely to attribute the manager's intent to earnings management when the manager changed the accounting estimate ($t = -5.86$, $p < .001$). Contrary to expectations, stockholders in the change condition inferred that the manager was engaged in earnings management (mean response = 2.05). H1b is not supported. Interestingly, the change in accounting estimate led participants in *both roles* to infer that the manager was managing the company's earnings.[11]

Hypothesis 2 predicts that participants' attributions of the likelihood of earnings management will be negatively related to their judgments about the ethicality of the accounting action. Results indicate that EARNINGS MANAGEMENT was significantly and negatively correlated with ETHICS (correlation coefficient = -0.765, $p < .001$). Thus, H2 is supported.[12]

Hypothesis 3 predicts that the likelihood of earnings management will mediate the effect of a change in an accounting estimate on ethicality

judgments. Mediation analysis was performed based on guidance provided by Baron and Kenny (1986). The following relationships must be significant in order to establish mediation: (1) Independent variable (ESTIMATE CHANGE) and dependent variable (ETHICS); and (2) Independent variable (ESTIMATE CHANGE) and the mediator (EARNINGS MANAGEMENT). Next, if the relationship between the independent variable (ESTIMATE CHANGE) and the dependent variable (ETHICS) is no longer significant or the strength of the relationship is significantly decreased in the presence of the significant relationship between the mediator (EARNINGS MANAGEMENT) and the dependent variable (ETHICS), then mediation is established.

Accordingly, the following analysis was performed with results presented in Table 5. First, a one-way ANOVA was performed with ESTIMATE CHANGE as the independent variable and ETHICS as the dependent variable.[13] As shown in Panel A of Table 5, ESTIMATE CHANGE was statistically significant ($p < .001$). Next, an ANOVA was performed with ESTIMATE CHANGE as the independent variable and EARNINGS MANAGEMENT as the dependent variable (Panel B of Table 5). ESTIMATE CHANGE was statistically significant ($p < .001$). Finally, ETHICS was regressed on EARNINGS MANAGEMENT and ESTIMATE

Table 5. Tests of Hypothesis 3.

Source	Type III Sum of Squares	df	Mean Square	*F*	Significant
Panel A: Effect of estimate change on ethics					
Model	128.240	1	128.240	65.518	<.001
ESTIMATE CHANGE	128.240	1	128.240	65.518	<.001
Error	185.945	95	1.957		
Corrected total	314.186	96			
Panel B: Effect of estimate change on earnings management					
Model	197.820	1	197.920	117.158	<.001
ESTIMATE CHANGE	197.820	1	197.920	117.158	<.001
Error	160.406	95	1.957		
Corrected total	358.227	96			

Independent Variable	Coefficient	Standard Error	*t*-Statistic	Significant
Panel C: Effect of earnings management and estimate change on ethics				
Intercept	5.363	0.479	11.202	<.001
EARNINGS MANAGEMENT	−0.607	0.092	−6.625	<.001
ESTIMATE CHANGE	0.565	0.352	1.602	0.112

CHANGE (Panel C of Table 5). The coefficient on EARNINGS MANAGEMENT was statistically significant ($p < .001$), and the coefficient on ESTIMATE CHANGE was not significant ($p = .112$). Thus, EARNINGS MANAGEMENT mediates the relationship between ESTIMATE CHANGE and ETHICS. H3 is therefore supported.

DISCUSSION

Enron and other financial scandals have made ethics one of the most crucial topics to the accounting profession. In the words of a recently retired CEO of Deloitte & Touche: "To regain the trust and respect it previously enjoyed, the [accounting] profession must rebuild its reputation on its historical foundation of ethics and integrity" (Copeland, 2005, p. 35). This study examines factors that may influence participants in the financial reporting process as they assess the ethicality of a change in accounting estimate. Relying on the theory of correspondent inferences (Jones & Davis, 1965), we examine whether accountants and stockholders attribute a manager's intent to earnings management when the manager makes a change in accounting estimate that results in a company's reported net income meeting analysts' earnings forecasts. We also examine whether these attributions influence ethicality judgments of management's actions.

Results indicate that participants in the financial reporting process perceive a change in accounting estimate as earnings management when the change causes reported earnings to meet analysts' forecast estimates. Interestingly, the participant's role does not affect attributions of management's intent. Participants' assessments of the likelihood that management was managing earnings were significantly and negatively associated with ethicality judgments. Results also indicate that assessments of the likelihood of earnings management mediate the effect of a change in accounting estimate on ethicality judgments.

Brooks (2004, p. 311) has pointed out that "the assumption of a monolithic shareholder group interested only in short-term profit is undergoing modification because modern corporations are finding their shareholders are also made up of persons and institutional investors who are interested in longer-term time horizons *and in how ethically business is conducted*" (emphasis added). In accounting, a strong desire exists "for reports that are more relevant to the various interests of stakeholders, more transparent, and more accurate than in the past" (Brooks, 2004, p. 19). This study suggests that in the current environment, accountants and

stockholders are more highly attuned to ethical issues and demand financial reports that are truly neutral – reports that have not been managed to a predetermined outcome. Interestingly, results from this study suggest that both groups demand neutral financial reporting and are aware of the ethical issues surrounding earnings management.

This study suggests that in the current "post-Enron" environment of accounting and business, earnings management is not ethically acceptable, even when the underlying accounting action is *within the scope of GAAP*. The cover story in a recent edition of *Business Week* (Henry, France, & Lavelle, 2005) reports on significant changes in the roles of corporate CEOs, auditors, directors, and lawyers. Accounting-firm partners assert that "it is much easier now to get companies to make accounting estimates and judgments that are safely right down the middle of ranges, neither too aggressive nor too conservative" (p. 94). A recent survey of medium and large companies (Carpenter, Fennema, Fretwell, & Hillison, 2004) examined changes in corporate culture that have occurred since passage of the Sarbanes-Oxley Act of 2002. Among other things, the study found a greater emphasis today on ethics and accounting accuracy and overall financial reporting quality. Although earnings management has historically been a common practice, results from the Carpenter et al. (2004) study indicate that its ethical acceptability appears to be declining today.

On the other hand, a recent survey of CFOs summarized in *Fortune* magazine shows that about 50% of the CFOs surveyed feel under about the same amount of pressure "to make the numbers work" as they felt prior to the Sarbanes-Oxley Act. Moreover, almost 20% of the CFOs surveyed felt *even more pressure today* to make the numbers work (Demos, 2004). These findings show that earnings management has certainly not gone away and that a need to focus on high ethical standards continues to be paramount when making financial accounting and reporting decisions.

This study has several limitations, which also suggest areas for future research. This study used senior and graduate accounting students as surrogates for accountants and stockholders. These participants had a reasonably high level of accounting domain knowledge that could enable them to understand the technical accounting issues presented in the case and to respond to the case scenario in a controlled environment. Nevertheless, we acknowledge that our participants' characteristics and judgments may not accurately reflect those of actual accountants and actual stockholders in the business community. We do not know whether our results would generalize to "real" accountants, who typically have more experience than our participant group. We also do not know whether our results would

generalize to "real" stockholders, who may have less accounting domain knowledge than our participant group. Future research in this subject area could perhaps benefit from a representative group of corporate accountants and stockholders in the business community.

Additionally, while we exercised considerable care in designing, pilot testing, and administering our research instrument, we cannot rule out potential demand effects. As with most experimental studies, we acknowledge that our results may not generalize outside the context used in the current study.

This study dealt with only one type of accounting estimate – a change involving warranty expense. We do not know whether results are generalizable to issues involving other types of accounting estimates. Additional research could be extended into other areas that require accounting estimates, such as bad debts, depreciation, and impairments of plant and intangible assets.

Despite these limitations, this study provides evidence that when a company changes an accounting estimate and management's intent for making the change is uncertain, accountants and stockholders tend to be aligned in their thinking and are likely to perceive that earnings management is occurring. When financial reporting participants attribute an accounting estimation decision to management's desire to manage earnings, a decline in perceived ethicality occurs. This negative ethicality perception that is associated with perceptions of earnings management deserves attention by preparers and users of financial statements and in the education of these groups.

NOTES

1. Ethical judgments may also be influenced by practical experience and training. However, in a review of the literature on ethical decision making in business, Loe, Ferrell, and Mansfield (2000, p. 187) note that research on the effects of education and work experience on ethical judgments provides mixed results and suggests that "we do not clearly understand the role of experience and education in ethical decision making in organizations."

2. This expectation is also supported by research in social psychology and organizational behavior, which suggests that individuals frequently make egocentric judgments about fairness. In other words, a perceiver's judgment about the fairness of an action is frequently biased in one's own direction to reflect the perceiver's self-interest (see Messick & Sentis, 1979; Thompson & Loewenstein, 1992).

3. Accountants may receive indirect economic benefits from earnings management that improves the value of the company (e.g., job security). However, we know of no

theoretical model similar to that provided by Dye (1988) for stockholders which suggests that accountants actually *demand* earnings management.

4. Participants assigned to the accountant role were also informed that they did not own stock in the company.

5. This version of the instrument is for the "no change" condition. The case for the "change" condition differs only as to the amount recorded for 2004 warranty expense.

6. SFAS 154 (FASB, 2005, para 22) extends previously existing principles that apply to accounting estimates and requires companies to publicly disclose the effects of material changes in accounting estimates. Therefore, financial reporting participants inside and outside the firm have at least some opportunity to learn about this information directly from the company. Participants may also learn about this type of information by analyzing relationships between certain accounts over time.

7. The study included some additional questions that are not related to hypothesis testing in this article.

8. No statistical differences were noted in the hypotheses tests between senior and graduate students. The number of senior and graduate students assigned to each role was not significantly different.

9. Research comparing ethical judgments of students and practitioners provides mixed results. Cohen, Pant, and Sharp (2001) found few differences in ethical awareness and orientation between accounting students and practicing accountants. Alternatively, studies by Elias (2002) and Fischer and Rosenzweig (1995) show students to be more lenient in their ethicality judgments of accounting methods of earnings management than practicing accountants. These studies suggest that ethical judgments of students may be less harsh than practitioners, which may bias against finding results in our study and further supports the use of student participants.

10. Demographic data were analyzed to ensure randomization between groups. No significant differences ($p < .05$) between experimental groups were observed for each of the demographic variables noted in Table 2, except for whether participants had previously read an annual report (ANNREP). To examine the potential impact of this variable, ANNREP was included as a covariate in the hypotheses testing. ANNREP had no statistically significant effect on the analyses; therefore, the variable is not included in the analyses or in results as reported in this paper.

11. Results from a two-way ANOVA indicate that the main effect of ESTIMATE CHANGE is significant ($p < .001$), the interaction between ROLE and ESTIMATE CHANGE is not significant ($p = 0.687$) and the main effect of ROLE is also insignificant ($p = 0.707$).

12. Kaplan (2001b) found some initial evidence suggesting that role may matter when making ethical judgments about earnings management. A regression was performed with ETHICS as the dependent variable and ROLE and EARNINGS MANAGEMENT as the independent variables. ROLE was not significant ($p = .269$). Thus, ROLE did not affect participants' ethicality judgments in this study.

13. Although we predicted that ROLE would have an effect in our model (Fig. 1), tests of hypotheses 1a and 1b show that the relationship between ESTIMATE CHANGE and EARNINGS MANAGEMENT is significant for both accountants

and stockholders. Additional analysis was performed to determine any effect of ROLE on the mediation analysis. First, an ANOVA was performed with ROLE and ESTIMATE CHANGE as the independent variables and ETHICS as the dependent variable. ROLE was not significant ($F = 0.403$, $p = 0.527$) and the interaction between ROLE and ESTIMATE CHANGE was also not significant ($F = 0.094$, $p = 0.760$). An additional ANOVA was performed with ROLE and ESTIMATE CHANGE as the independent variables and EARNINGS MANAGEMENT as the dependent variable. ROLE was not significant ($F = 0.142$, $p = 0.707$) and the interaction between ROLE and ESTIMATE CHANGE was also not significant ($F = 0.163$, $p = 0.687$). Thus, ROLE does not appear to affect the mediation analysis.

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APPENDIX. EXPERIMENTAL CASE

Aldine Company is a large, publicly traded corporation that supplies products to a variety of retail outlets. All products carry a three-year warranty against defects. At the end of every year, the company has consistently followed the practice required by generally accepted accounting principles of increasing warranty expense and increasing the estimated liability for product warranties for the company's estimate of the costs of servicing the product warranty. During 2004, the company introduced *a new line* of home products.

Warren Johnson is an upper-level manager with Aldine Company who has a background in accounting and finance. Aldine Company compensates its upper-level managers only with salaries. The company does not pay any performance-based bonuses.

It is now December 31, 2004 and Mr. Johnson is reviewing Aldine's year-end financial statements in order to prepare year-end adjusting entries. Mr. Johnson is currently focused on the company's adjusting entry for

warranty expense. The company's chief financial officer (CFO) and external auditors agree that any warranty expense estimate for 2004 that is between 6% and 10% of net sales would be reasonable, in accordance with generally accepted accounting principles, and considered material to Aldine Company. For the past several years, the CFO and the external auditors have considered this 6–10% range for warranty expense to be reasonable.

The actual amount of warranty expense reported on the company's income statement was 8% of net sales for each of the past three years. The following 2004 pro forma income statements demonstrate the effect of recording warranty expense at each percentage in the acceptable range (ignoring income taxes):

($ in millions)	2004 Warranty Expense Estimate (% of net sales)				
	6%	7%	8%	9%	10%
Net sales ($)	1,000	1,000	1,000	1,000	1,000
Total expenses (excluding warranty expense) ($)	630	630	630	630	630
Warranty expense ($)	60	70	80	90	100
Net income ($)	*310*	*300*	*290*	*280*	*270*

For each of the past several years, Aldine Company's reported net income has equaled or exceeded the net income that financial analysts have forecasted. The mean estimate among financial analysts is that Aldine Company's 2004 net income will be *$310 million*.

Mr. Johnson decides to record 2004 warranty expense at *8% of net sales, which is the same percentage that Aldine Company used for each of the past three years*. Therefore, Aldine Company's 2004 reported net income is *$290 million*, as shown in the above table.

WHO SHOULD TEACH ETHICS COURSES IN BUSINESS AND ACCOUNTING PROGRAMS?

Mohammad Abdolmohammadi

ABSTRACT

Data were collected from samples of accounting faculty ($n = 45$*), professionals (*$n = 87$*) and graduate students (*$n = 68$*) on issues related to ethics education in business and accounting programs. There was a high convergence in the perceptions of the three subject groups indicating that at least one stand alone course should be taught in each of graduate and undergraduate accounting and business programs. The results also indicate that ethics should be integrated in all accounting and business courses. The subjects' perceptions also indicated that ethical conduct is positively and significantly improved by ethics education. Finally, the subjects agreed that ethics courses should be taught collaboratively by both accounting and philosophy faculty. These results provide support for NASBA's (2006) proposal that more extensive ethics education by business schools and accounting programs is needed for the accountants entering the profession. However, there is a question as to whether colleges and universities have the faculty resources to offer these courses.*[1]

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INTRODUCTION

This chapter provides perceptual data from accounting educators, professional accountants, and graduate accounting students on (a) Whether ethics courses should be offered in business and accounting programs, (b) Whether perceived ethical conduct is positively and significantly improved by ethics education, and (c) Who should teach ethics courses? While an extensive literature has developed on the first two issues in the past two decade, the results are mixed, and the three groups of accounting faculty, professionals, and graduate accounting students have not been surveyed simultaneously in the past as is the case in the current study. There is very little information on the third issue, who should teach ethics, in the literature.

The study contributes to the current debate in accounting on whether and how to train accounting students in ethics. In its initial proposal, the National Association of State Boards of Accountancy (NASBA, 2005) proposed that three semester credit hours (SCH) of business ethics and three SCH of ethics in the accounting profession should be required for taking the CPA exam. Some states (e.g., Texas and Maryland) already have this requirement in place for the candidates seeking to take the CPA examination in those states. However, NASBA's (2005) proposal met with substantial resistance from various constituents, including the American Accounting Association (AAA) primarily because of insufficient evidence in the literature on the need and efficacy of such requirement. The American Accounting Association's Education Committee (AAAEC, 2006) states that "We believe there are several streams of research that should be pursued prior to development of new [ethics course] rules." Consequently, in its October 2005 annual meeting, NASBA's Board of Directors created a new task force of interested stakeholders (e.g., AAA, AACSB, AICPA) to revise the proposed rules and to issue a new exposure draft. The result has been a new proposal in which NASBA (2006) has proposed two alternative courses of action. One alternative calls for a stand alone there SCH ethics course in accounting, while another alternative calls for one specific ethics course in accounting as well as integration of ethics into other accounting courses for an equivalent of three SCH.

Many academic writers acknowledge the importance of incorporating ethics into the accounting curriculum. For example, Swanson (2005) calls for courses in ethical development as the foundation for improving accountants' moral reasoning and for reducing unethical behavior in practice. Abdolmohammadi and Baker (2005) reason that the 150-credit hour requirement for the CPA exam essentially adds a fifth year of studies to

many accounting curricula, thus creating the space needed to offer courses on ethics. Blanthorne, Kovar, and Fisher (2007) present accounting educators' views that there is a need for ethics courses in accounting curricula. Nevertheless, academic institutions worry that separate ethics courses may place heavy burden on their academic resources. AAAEC (2006) sums up the problem as, "Who is best qualified to teach a course in business or accounting ethics? Few, if any, are trained for this in our doctoral programs." Nevertheless, AAAEC (2006) argues for flexibility so that various universities may select their own courses to integrate ethics. AAAEC (2006) states that "A requirement for the equivalent of six SCH, including Business Law, and allowing pedagogically both an option to teach a separate course or embed ethics content in other courses would be acceptable and consistent with current wisdom found in AACSB standards and among faculty at major institutions (not withstanding general opposition to the implicit input-based model of education)." Rather than an input-based model, AAAEC (2006) advocates an output-based model in which "While universities may choose to integrate ethics into various courses and/or have a separate course on ethics, NASBA and member state boards have the opportunity to test students on ethics via the CPA exam or an additional state ethics test. Such testing ensures that professionals have achieved a desired level of competency and understanding regardless of the method used by universities to educate the CPA candidates."

In conclusion, the literature suggests that there is support for ethics education. Professional examination requirements also specify the need for substantial ethics education. For example, 15–20% of regulation part of the CPA exam covers ethics and professional and legal responsibilities (AICPA, 2005, p. 11). However, the nature of the delivery of this education is unclear.

Another issue of interest is student perceptions about ethics courses. While the literature provides ample evidence on perceptions of professional accountants and accounting educators, the perceptions of accounting students are not widely investigated. Yet, the study of perceptions of students is critically important because as individuals taking these courses, students are a major stakeholder in this issue. However, to the author's knowledge perceptions of students with respect to the need for accounting ethics courses have not been reported in the literature. Thus, the current research provides perceptual evidence from not only accounting educators and professionals but also graduate accounting students as important constituents in the debate about ethics education.

Inclusion of accounting educators is important because they are instrumental in the design and delivery of ethics courses in their colleges

and universities, thus their views are important. Professional accountants and accounting students' input is also important to consider in the design and delivery of these courses because they are important stakeholders of ethics courses in the curriculum. Thus, I collected data on the need for ethics courses in graduate and undergraduate business and accounting programs. The results indicate consensus among the three respondent groups that at least one stand alone course should be taught in each of graduate and undergraduate accounting and business programs, and also integrated in all other courses. These results provide support for NASBA's recent proposal that more extensive ethics education by business schools and accounting programs are needed for the accountants entering the profession. The results also indicate that ethical conduct is positively and significantly improved by ethics education. Finally, the results are clear that the consensus of all three groups indicate that ethics courses should be taught collaboratively by both accounting and philosophy faculty. Collaborative teaching may mitigate the concern raised by the AAAEC (2006) about accounting faculty not being qualified to teach a course in business or accounting ethics because few, if any, are trained for this in our doctoral programs.

The remainder of the chapter includes the background literature which is presented in the next section leading to the research hypotheses. The next two sections discuss the method of investigation and the results. The chapter ends with a section on a summary and conclusions from the study.

BACKGROUND AND HYPOTHESES

In 1987, the National Commission on Fraudulent Financial Reporting (also called the Treadway Commission, 1987) recommended that business schools and accounting programs integrate ethical values into their curricula. This recommendation generated debate in the literature on whether ethics actually can be taught. Many academic writers believe that ethics can be taught and they cite Kohlberg's (1981) cognitive developmental theory for support. This theory posits that people develop their moral reasoning in stages and that education can help move one from lower stages to higher stages of moral reasoning. Empirical results generally support this proposition. For example, investigating psychology students, Ries (1992) reported modest gains from a semester-long ethics intervention course, while Bebeau (1994) reported significant gains from a four-year ethics integration program for dentistry students.

In her pioneering paper in accounting, Armstrong (1987) presented pedagogical methods for use in ethics education in accounting. These methods include readings from journal articles, analysis of ethical dilemmas, and video vignettes with ethics-rich case studies. While these methods have dominated accounting ethics education since Armstrong's paper (Kerr & Smith, 1995), their effects on improving ethical reasoning and behavior among accounting students and professionals have been mixed. For example, Shaub (1994) presented evidence indicating that practicing CPAs and auditing students who had taken a business ethics course in college had significantly higher moral reasoning levels than those who did not. Coyne, Massey, and Thibodeau (2005) show that students who were provided with value relevant case studies of cost/benefits of acting ethical had higher levels of ethical sensitivity when compared with control groups. However, in a study of 126 undergraduate accounting students, Ponemon (1993) reported that ethics intervention course was not effective in improving students' ethical reasoning. The mixed results do not provide clear guidance about the efficacy of ethics education in undergraduate accounting programs.

With respect to graduate students, a meta-analysis of the ethics literature concludes that older subjects are more receptive to ethical training than younger students (Pascarella & Terenzini, 1991) and that ethical reasoning improves with age and education (Rest, 1994). Empirical investigation of these expectations in graduate programs has produced encouraging results. For example, Bebeau's (1994) study of the effects of integrated four-year ethics education in dentistry showed significant gains. Abdolmohammadi (2005) presents modest gains from a three-week intervention module, and integrated case studies in a capstone course in a Masters of Science in Accountancy (MSA) program. This evidence suggests that ethics courses in graduate accountancy programs can benefit students' skills in ethical reasoning.

In addition to these empirical studies, surveys have been conducted on whether ethics can be taught. For example, Smith (1993, p. 19) report that professors overwhelmingly agree that "ethics and personal integrity should be taught" and that ethics should be integrated into all accounting courses, not just the auditing course. Kerr and Smith (1995) surveyed accounting students and reported that the subjects look for, and need, ethical and moral direction. This evidence can be interpreted as a need for ethics education. A recent paper (Blanthorne et al., 2007) surveying accounting educators also finds perceptual evidence of the need for ethics education. For evidence from professionals, a survey of Canadian Chartered Accountants indicates that they believe that virtues such as integrity, truthfulness, and diligence can be taught or developed through practice (Libby & Thorne, 2003).

The studies reviewed suggest that various constituencies agree that ethics can be or should be taught. Also prior studies have established through experimental work that ethics education generally improves students' ethical reasoning. Recent studies have used perceptions of educators and professionals with respect to the importance of ethics education. However, to the author's knowledge no study has investigated the perceptions of accounting students with respect to the need for ethics education and input on who should teach ethics courses, as is investigated in the current research. Also, the nature of the implementation of ethics education is unclear although in general, the literature can be interpreted as suggesting that at least one course should be taught in each of undergraduate and graduate accounting and business programs. Another interpretation is that ethics should be integrated in all accounting and business courses. These expectations lead to the following set of hypotheses:

H_{1a}. Accounting faculty, professionals and students agree that at least one ethics course should be taught in *undergraduate business* programs.

H_{1b}. Accounting faculty, professionals and students agree that at least one ethics course should be taught in *undergraduate accounting* programs.

H_{1c}. Accounting faculty, professionals and students agree that at least one ethics course should be taught in *graduate business* programs.

H_{1d}. Accounting faculty, professionals and students agree that at least one ethics course should be taught in *graduate accounting* programs.

H_{1e}. Accounting faculty, professionals and students agree that ethics should be *integrated in all business and accounting* courses.

The ultimate goal of ethics education is to prepare students for ethical conduct in the workplace. While the extant literature suggests that ethics training improves ethical reasoning that in turn is associated with ethical conduct (Thoma, 1994), accounting literature provides mixed results for these conclusions. For example, while Ponemon (1993) finds insignificant effects from ethics training on ethical reasoning for undergraduate students, Abdolmohammadi (2005) finds significant positive effects for graduate students. Also, while Ponemon (1993) and Bay and Greenberg (2001) find a quadratic relationship between ethical reasoning and behavior (i.e., both low and high levels of ethical reasoning are associated with more incidents of unethical behavior than the mid-level ethical reasoning) by undergraduate accounting students, Abdolmohammadi and Baker (2005) find a significant inverse relationship between ethical reasoning and

plagiarism for both graduate and undergraduate accounting students. While the empirical results are mixed in the literature, the extant ethics literature and recent accounting studies suggest an expectation that respondents in the current study agree that ethics education will improve ethical conduct. Thus,

H_2. Accounting faculty, professionals and students agree that ethics education will improve ethical conduct.

Finally, teaching ethics requires specialized knowledge that accounting faculty may not posses. Starting with Armstrong (1987), the accounting literature has primarily focused on different delivery methods, but not different subject matter instructors. This focus has ignored the fact that accounting faculty is not trained to teach ethics. As stated earlier, the AAAEC (2006) believes that "Few, if any, are trained for this [teaching ethics] in our doctoral programs." Accounting educators are expected to understand the code of professional conduct of their profession and also be familiar with recent business and accounting scandals that have provided urgency for ethics education. However, typically they are not trained as philosophers or ethicists in their doctoral programs, and as such may not be fully familiar with ethical theories that are grounded in the field of philosophy.

The lack of training of accounting faculty to teach ethics means that accounting faculty may not be qualified to teach ethics courses. On the other hand, philosophy professors are knowledgeable about theories of ethics and philosophy, but may not be knowledgeable about ethics-intensive technical accounting issues. Thus, they may not be qualified to teach accounting/business ethics courses. This conclusion suggests that accounting ethics courses should be taught collaboratively by both accounting and philosophy professors. Thus,

H_3. Accounting faculty, professionals and students agree that ethics should collaboratively be taught by accounting and philosophy professors.

RESEARCH METHOD

A survey questionnaire was pilot tested with seven subjects (four professionals and three educators) at a continuing professional education course sponsored by a state CPA society in Northeastern United States. The subjects provided detailed comments, based on which the survey was significantly revised. The Perseus on-line survey software was used to place

the revised questionnaire online. The on-line version was tested twice by the author and the Perseus administrator, where a small number of errors were found and corrected before the final questionnaire was released.

The questionnaire had two sections. In the first section, 18 questions were listed ranging from whether ethics can be taught to capitalism and ethics will always be in conflict. A five-point scale (strongly agree, agree, neither agree or disagree, disagree, and strongly disagree) was used for subject responses. The second section of the questionnaire asked about whether (a) a full course; (b) ethics modules in other courses; and/or (c) ethics seminars should be required, taken as electives, or neither. The subjects responded to these questions for undergraduate and graduate business and accounting programs. A question asked whether in the subjects' experience graduates of schools with strong emphasis on ethical training were better at making ethical decisions than those with weak ethical training. This question was followed by a question on who should teach ethics courses (accounting faculty, philosophy faculty, or both). Finally, a question was used to collect demographic data such as age and work experience.

The questionnaire was distributed to three groups of subjects: accounting faculty, graduate accounting students,[2] and professional accountants between January and August 2005. Specifically, the Perseus link to the questionnaire was e-mailed to a contact partner in a regional accounting firm located in Northeastern United States. He distributed the e-mail to all professionals within the firm that he deemed appropriate. Also, the AECM faculty/professional list serve was used to seek voluntary participation of accounting educators and professionals. Finally, the Perseus link to the questionnaire was e-mailed to students enrolled in a graduate capstone accounting course that the author taught in spring and summer of 2005. Altogether, 45 educators, 87 professionals, and 68 graduate students participated in the study.

Demographic information about the samples is presented in Table 1. As Panel A shows, of the 45 educators 28 were males while 16 females. Among the faculty 18 were lecturers or assistant professors, 15 associate professors, and 11 full professors (one did not reveal his/her rank).[3] The 87 professional participants were more gender balanced with 45 males and 41 females. Twenty eight of the professionals reported to be assistant/staff, while 16 were seniors, 19 managers, and 13 partners. The remaining 11 did not reveal their rank or indicated that rank was not applicable to them. Reflecting the trend in recent years, of the 68 students who participated in the study, 29 were males and a larger number (39) were females. Since the survey was conducted via Perseus link on the Internet, the response rate for

Table 1. Study Participants ($N = 200$).

	Faculty $N = 45$		Professionals $N = 87$		Graduate Students $N = 68$	
Panel A: Background						
Gender						
Male	28		45		29	
Female	16		41		39	
Education level						
Undergraduate only	0		48		9	
MBA/MSA/JD/Other graduate	17		35		58	
DBA/PhD	27		0		1	
Specialty						
Accounting	32		26		25	
Auditing	4		10		15	
Both	6		45		27	
Certification						
CPA	27		32		3	
CMA/CIA	12		0		0	
Other (e.g., CFA)	8		14		6	
None	12		48		60	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Panel B: Age and Experience						
Age in years	51.00	9.25	32.67	11.18	24.30	3.46
Years of experience in practice	8.03	7.51	7.96	8.70	1.61	1.68
Years of experience in teaching	15.13	10.18	0.49	1.98	0.05	0.37
	Hours: Mean (SD)	Exposed: % Yes	Hours: Mean (SD)	Exposed: % Yes	Hours: Mean (SD)	Exposed: % Yes
Panel C: Ethics Education						
Ethics training	71.5 (173.4)	79%	45.46 (51.66)	87%	44.45 (49.29)	68%
χ^2 (Significance) of exposed/non-exposed			7.32 (0.026)			

the educators and professional accountants is hard to determine because the author does not know exactly how many people were reached by e-mail or list serve. The response rate for the graduate students was 87%.

As expected all educators had graduate degrees (27 DBA/PhD and 17 other graduate degrees), while most professionals reported to have earned

an undergraduate degree in accounting (39) or other fields (9). Thirty five professionals reported to have completed a graduate degree. Most students (58) reported to have had a master's of science degree in accountancy (MSA), which may reflect the degree program they were finishing up at the time.[4] While most educators (32) and students (25) reported to specialize in accounting, the majority of professionals (45) reported to specialize in both accounting and auditing. Also, as expected while a majority of students (60) did not have a professional certification, 45% of the professionals and 73% of faculty had one or more professional certifications.

Panel B of Table 1 presents comparative age and experience of the subjects. The educators had an average age of 51 years (standard deviation = 9.25) and 8.03 years of experience in practice and 15.13 years in teaching. As expected, student subjects were the youngest (24.30 years) had little practical experience (1.61 years), or teaching experience (only 0.05 years). In comparison, professional subjects were somewhere in between educators and students in that their age averaged 32.67 years and they had 7.96 years of practical experience and 0.49 years of teaching experience.

Finally, Panel C in Table 1 provides summary statistics about subjects' exposure to ethics training. Overall, 79% of educators, 87% of professionals, and 68% of students reported to have had exposure to ethics training. The χ^2 test of differences in frequencies showed a significant difference between the three groups ($\chi^2 = 7.32$, $p = 0.026$). This is an interesting finding in the sense that despite the business and accounting scandals of the early 2000s, and the emphasis in academic and professional circles about the importance of ethics and ethical training to the accounting profession, still a substantial proportion of the subject groups had not been exposed to any ethical training. In terms of the number of hours of training, the educators reported to have had 71.5 contact hours of training, while professionals had an average of 45.46 contact hours and students had an average of 44.45 contact hours.[5] Owing to the high variation (see standard deviations in Panel C), these averages were not significantly different (F-statistic = 1.34, $p = 0.265$, not tabulated).

RESULTS

Can Ethics be Taught?

Panel A in Table 2 presents the level of agreement among accounting faculty, professionals and graduate students regarding whether ethics can be

Table 2. Agreement among Subjects Regarding whether Ethics can be Taught.

Subjects	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Total
Faculty	10 (22.73%)	21 (47.73%)	7 (15.91%)	4 (9.09%)	2 (4.54%)	44 (100%)
Professionals	15 (17.24%)	45 (51.72%)	13 (14.94%)	13 (14.94%)	1 (1.16%)	87 (100%)
Graduate students	7 (10.29%)	45 (66.18%)	11 (16.18%)	3 (4.41%)	2 (2.94%)	68 (100%)
χ^2 (Significance)			10.68 (0.210)			
All	32 (16.08%)	111 (55.78%)	31 (15.58%)	20 (10.05%)	5 (2.51%)	199 (100%)
All (three response categories)	143 (71.86%)		31 (15.58%)	25 (12.56%)		199 (100%)

taught. As reported in the bottom row, over 70% of the subjects strongly agreed (16.08%) or agreed (55.78%) that ethics can be taught. While 10.05% disagreed and 2.51 percent strongly disagreed, the remaining 15.58% were neutral on the question. The Chi-square test of the frequencies of the response choices indicated insignificant differences between the three respondent groups ($\chi^2 = 10.86$, $p = 0.210$). These results provide evidence that is consistent with the literature.

Nature of Ethics Coverage (H_{1a}–H_{1e})

Responses from the subject groups regarding stand alone business and accounting courses and integration of ethics in all business and accounting courses are presented in Table 3. The summary statistics provided are median, mean, and standard deviation. Given the categorical response scale of 1–5 (strongly agree to strongly disagree), the non-parametric Kruskal–Wallis test of the medians is used to investigate differences between the three subject groups. The results show that the three subject groups agree (median = 2) that at least one course on business ethics should be offered in undergraduate and graduate business programs. The Kruskal–Wallis test does not indicate significant differences between the three subject groups with respect to this response. All subjects also agree (median = 2) that at least one course on accounting ethics should be offered in undergraduate

Table 3. Nature of Ethics Coverage Numbers in Cells are Median-Mean (Standard Deviation).

Subjects	At Least One Course in Business Ethics[a]		At Least One Course in Accounting Ethics[a]		Ethics Should be Integrated in[a]	
	Under-graduate	Graduate	Under-graduate	Graduate	Business courses	Accounting courses
Faculty	2.00–2.00 (1.07)	2.00–2.07 (1.12)	2.00–2.20 (1.22)	2.00–2.24 (1.25)	2.00–1.89 (0.93)	2.00–1.96 (0.95)
Professionals	2.00–1.64 (0.71)	2.00–1.77 (0.92)	2.00–1.62 (0.71)	2.00–1.78 (0.91)	2.00–2.10 (1.06)	2.00–2.12 (1.12)
Graduate students	2.00–1.66 (0.80)	2.00–1.66 (0.75)	2.00–1.66 (0.82)	2.00–1.71 (0.79)	2.00–1.91 (0.87)	2.00–1.91 (0.94)
Kruskal–Wallis *H*-statistic (Significance)	3.28 (0.194)	3.50 (0.174)	7.24 (0.027)	5.07 (0.079)	1.35 (0.508)	1.18 (0.555)

[a]Matched-pair *t*-test does not indicate difference between the two categories.

and graduate accounting programs. The response means and the Kruskal–Wallis tests indicate that professionals and graduate students' agreement is stronger than the faculty with respect to at least one course in undergraduate (H-statistic $= 7.24$, $p = 0.027$) and graduate (H-statistic $= 5.07$, $p = 0.079$) accounting programs. Finally, all participants have consensus (i.e., the Kruskal–Wallis Test does not indicate differences by subject group) that ethics should be integrated both in business and accounting programs (median = 2). These results provide evidence in support of H_{1a}–H_{1e}.

Will Ethics Education Improve Ethical Conduct (H_2)?

A number of questions addressed whether ethics education will improve ethical reasoning and conduct. Table 4 presents subject perceptions of whether improvements in ethical reasoning and behavior from ethics training can be measured. An interesting finding is that there is high consensus (i.e., insignificant non-parametric Kruskal–Wallis test of differences in medians) that the subjects neither agree nor disagree with the statement that "Ethical behavior improvements from ethics courses can be measured." On the other hand, while faculty and graduate students agree (median = 2) that "Ethical reasoning improvements from ethics courses can be measured," professionals neither agree nor disagree (median = 3) with

Table 4. Can Improvements in Ethical Reasoning and Behavior from Ethics Courses be Measured? Numbers in Cells are Median–Mean (Standard Deviation).

Subjects	Effects of Ethics Courses on	
	Ethical reasoning	Ethical behavior
Faculty	2.00–2.58 (0.87)	3.00–2.93 (0.93)
Professionals	3.00–2.71 (0.84)	3.00–2.90 (0.84)
Graduate students	2.00–2.40 (0.88)	3.00–2.81 (0.96)
Kruskal–Wallis *H*-statistic (Significance)	5.78 0.056)	1.08 (0.582)

this statement and the difference is marginally significant (*H*-statistic = 5.78, $p = 0.056$).

This is an interesting finding in the sense that while subjects agree that ethics can be taught, they generally do not agree or disagree that ethical reasoning or behavior resulting from this education can be measured. I used regression analysis to formally investigate the relationship between improvements in ethical behavior (dependent variable) and "ethics can be taught" and "improvements in ethical reasoning" (independent variables). The results are presented in Panel A of Table 5. As the table shows, the regression model is highly significant at the 0.000 level (*F*-statistic = 51.60) and so are the effects of the independent variables EthCanbeTaught and EthReasoning. The R^2 of 34.2% indicates that the variation in ethics can be taught and measurement of improvements in ethical reasoning explains 34.2% of the variation in measurement of ethical conduct improvements. However, the Constant in the model is also highly significant (*t*-statistic = 5.88, $p = 0.000$) indicating that the model is missing other important independent variables.

Panels B and C in Table 5 provide alternative measures of the effects of ethical training on ethical conduct. In Panel B, subjects' responses on "Enron-like fraud can be reduced as a result of ethics training" are regressed against "business ethics courses" and "business ethics integration." As the panel shows, the regression model is highly significant at the 0.000 level (*F*-statistic = 10.15) and so are the effects of the independent variables BusEthCourse and BusEthIntegration. However, the R^2 is only 8.4% and

Table 5. Regression Results.

Panel A: Ethical Behavior Improvement as a Function of Ethics Taught and Ethical Reasoning Improvement

Predictor	Hypothesized Sign	Coefficient	*t*-Statistic	Significance
Constant		1.08	5.88	0.000
EthCanbeTaught	+	0.23	3.82	0.000
EthReasoning	+	0.50	7.90	0.000
Model adjusted $R^2 = 34.2\%$				

Analysis of Variance

Source	DF	SS	MS	*F*	*p*-value
Regression	2	54.55	27.27	51.60	0.000
Residual error	193	102.01	0.53		
Total	195	156.55			

Panel B: Enron-Like Fraud can be Reduced as a Result of Ethics Course and Integration

Predictor	Hypothesized Sign	Coefficient	*t*-Statistic	Significance
Constant		1.79	9.31	0.000
BusEthCourse	+	0.28	3.42	0.001
BusEthIntegration	+	0.15	2.16	0.032
Model adjusted $R^2 = 8.4\%$				

Analysis of Variance

Source	DF	SS	MS	*F*	*p*-value
Regression	2	18.50	9.25	10.15	0.000
Residual error	195	177.71	0.91		
Total	197	156.55			

Panel C: Relationship between Employer Emphasis on Ethical Conduct and Ethical Training

Predictor	Hypothesized Sign	Coefficient	*t*-Statistic	Significance
Constant		0.30	2.59	0.010
EthTraining	+	0.75	18.00	0.000
Model adjusted $R^2 = 62.0\%$				

Analysis of Variance

Source	DF	SS	MS	*F*	*p*-value
Regression	1	118.76	118.76	324.15	0.000
Residual error	197	72.17	0.37		
Total	198	190.93			

the Constant is also highly significant (t-statistic = 9.31, $p = 0.000$) indicating that the model is missing other important independent variables.

Perhaps the most direct test of the relationship between ethical conduct and ethical training in this study is the relationship between "employer emphasis on ethical conduct" and "ethical training." Panel C in Table 5 presents this relationship in a linear regression model. As the panel shows, the regression model is highly significant at the 0.000 level (F-statistic = 324.15) and so is the effect of the independent variables Ethtraining. Also the R^2 of 62.0% explains a high level of variation in ethical emphasis by employers as a result of their emphasis on ethical training. However, the Constant is still significant (t-statistic = 2.59, $p = 0.010$) indicating that the model is missing other important independent variables.

Overall, the alternative analyses presented in this section provide support for H_2, indicating that participants' perceive that ethics training/integration has positive effects on ethical reasoning and conduct. It is customary to present correlation matrix between independent variables used in regression to check for multicolinearity. Table 6 provides a correlation matrix for variables used in Table 5. As shown there are significant correlations between these variables. However, with the exception of the variables "Graduate" and "Undergraduate" business ethics courses that have a Pearson correlation coefficient of 0.678, no other correlation reaches the level of 0.500 that would indicate concern for multicolinearity. As a result, in the regression in Panel B of Table 5 either graduate or undergraduate business ethics course was used as BusEthCourse variable, but not both. Not surprisingly the results were similar.

Table 6. Correlation Matrix for the Independent Variables in Table 5.

		1	2	3	4	5	6
1	Ethics can be taught	1.000					
2	Ethical reasoning can be measured	0.305	1.000				
		0.000					
3	Undergraduate business ethics course	0.431	0.151	1.000			
		0.000	0.033				
4	Graduate business ethics course	0.313	0.079	0.678	1.000		
		0.000	0.268	0.000			
5	Integration in all business ethics courses	0.176	0.359	0.207	0.184	1.000	
		0.013	0.000	0.003	0.010		
6	Ethical training by employer	−0.008	−0.084	0.057	0.070	−0.075	1.000
		0.909	0.240	0.421	0.322	0.296	

Who Should Teach Courses on Ethics (H_3)?

From the data presented in the previous sections, it is clear that in addition to their agreement that ethics should be Integrated in all business and accounting programs, the subjects agree that at least one ethics course in business programs and one in accounting programs should be offered. If so, who should teach these courses? As Table 7 shows only 24.24% of all subjects indicate that accounting faculty alone should teach these courses. Even less (3.54%) of the subjects indicate that philosophy professors alone should teach these courses. On the other hand, a majority (72.22%) of all respondents indicate that ethics courses should be taught by both accounting and philosophy faculty. The χ^2 test of the frequencies of the responses indicated statistically insignificant differences between the three respondent groups ($\chi^2 = 3.57$, $p = 0.467$). Overall, these results suggest a need for collaborative efforts by philosophy and accounting faculty to teach the ethics courses.

Additional Analysis

The results reported in previous sections are quite robust because they are not affected by various demographic variables. The χ^2 test was performed to investigate the effects of a number of demographic variables on subject responses relating to whether ethics can be taught. This analysis indicated insignificant differences by various demographic variables. For example, analysis by gender did not indicate any difference between males and females ($\chi^2 = 1.54$, $p = 0.820$).

Table 7. Who should Teach Ethics Courses?

Subjects	Accounting Faculty	Philosophy Faculty	Both	Total
Faculty	13	2	29	44
	(29.55%)	(4.55%)	(65.90%)	(100%)
Professionals	22	4	60	86
	(25.58%)	(4.65%)	(69.77%)	(100%)
Graduate students	13	1	54	68
	(19.12%)	(1.47%)	(79.41%)	(100%)
χ^2 (Significance)		3.57 (0.467)		
All	48	7	143	198
	(24.24%)	(3.54%)	(72.22%)	(100%)

Additional analysis indicated that the three subject groups disagree (Median = 4) that the coverage of AICPA's Code of Professional Conduct is sufficient for ethics education in the undergraduate or graduate accounting programs. The subjects also disagreed with the statement that ethics training should be left to employers. However, regarding changes in laws and accounting/auditing standards, there was a significant difference between the three groups. Specifically, while faculty disagreed (median = 4) with this statement, professionals and graduate students neither agreed nor disagreed (median = 3) with this statement where the difference between the subject groups was highly significant (H-statistic = 10.11, $p = 0.006$). The results indicate that subject groups have more disagreement with ethics education being left to the employers (median = 4) than to changes to laws and accounting/auditing standards (median = 3) where the two-sample non-parametric Mann–Whitney test of the medians (not tabulated) indicates significant difference (W-statistic = 51,312.5, $p = 0.000$).

Additional questions were asked to gather data on whether full courses on ethics should be required, elective, or neither. The median value of all subject choices was to require a full course for undergraduate, graduate business and accounting programs. The next question asked whether ethics modules should be a required integration in other courses, elective, or neither. Once again the median response was that these modules should be required of all courses in undergraduate, graduate business and accounting programs. I also asked whether ethics seminars outside business and accounting courses should be required, elective, or neither. The median response of all subjects was that these seminars should be elective.

The subjects in this study were asked whether "Capitalism and ethics will always be in conflict?" While faculty and professionals neither agreed nor disagreed with this statements (median = 3), graduate students agreed with it (median = 2) and the differences were statistically significant (H-statistic = 8.20, $p = 0.017$). This finding may indicate that business schools are too busy teaching students how to get ahead in business to the extent that conflicts with ethical conduct can be expected.

Another analysis performed was to investigate whether subjects perceive that "Improved accounting/auditing standards will reduce instances of Enron-like fraud." Here the median for all three groups was 2 indicating that they agreed with the statement. This result may be an indication of support for initiatives in the early 2000s to strengthen accounting/auditing standards in response to the Enron scandal.

SUMMARY AND CONCLUSIONS

The consensus of the three groups of accounting faculty, professionals and graduate students is that ethics can be taught. This finding is consistent with prior studies that have surveyed these groups separately in the past. The subjects then agreed that at least one stand alone course should be taught in each of graduate and undergraduate accounting and business programs. They also agreed that ethics should be integrated in all other courses. These results provide evidence in support of a recent proposal from the National Association of State Boards of Accountancy (NASBA, 2006) that ethics should be taught in stand alone courses and also integrated in business and accounting courses. For example, the results appear to suggest that business schools should have at least one course in business ethics and one in accounting ethics. This is the model that at least two states, Maryland and Texas have already adopted as requirements for taking the CPA examination.

A question that comes up is whether ethics education actually is worth the effort. It would be if it results in improvements in students' ethical reasoning, and ultimately in improvements in their ethical conduct. The extant ethics literature provides empirical evidence that significant improvements in ethical reasoning result from ethics intervention courses, and that ethical reasoning is positively and significantly correlated with ethical conduct. However, evidence from accounting is mixed on both of these outcomes of ethics training. While prior literature uses various measures of ethical reasoning (e.g., the *P*-score) and ethical conduct (e.g., plagiarism), the subjects in the current study neither agreed nor disagreed that improvements in ethical reasoning or conduct can be measured. However, the subjects agreed that ethics education improves ethical conduct. For example, they agreed that ethics education will reduce instances of Enron-like fraud. Given the mixed empirical results in accounting, the current finding indicates a need for further empirical and perceptual tests in realistic settings.

The final major finding of the study is the subjects' perception of the qualification of the instructors to teach accounting ethics. They clearly indicate that ethics courses should be taught collaboratively by both accounting and philosophy faculty. This is probably at the heart of the problem with ethics education in accounting programs. Faculty resource limitations make this a tough sell to educational institutions, even if the course is developed and taught by both accounting and philosophy faculty members the first time around to be taught later by one of them.

An alternative model might be to offer training courses by accounting faculty with experience in ethics education and philosophy faculty to jointly train a cadre of accounting faculty from various institutions to then return and teach these courses in their institutions. There is a serious need for consideration and empirical test of this and other possible alternatives to teach the ethics course.

Another finding of the study is that subjects agree that improved accounting/auditing standards will reduce instances of Enron-like fraud. This finding may be a result of legal initiatives such as the Sarbanes-Oxley Act (SOX, 2002) and the perceived improvement in accounting standards that ensued the Act. For example, Section 404 of SOX (2002) expanded management responsibility with respect to effectiveness and reporting of corporate internal control systems. The Public Company Accounting Oversight Board that was created as a result of the SOX (2002) Act has issued Auditing Standard No. 5 (PCAOB, 2007), which provides detailed guidance to auditors for the audit of internal control systems over financial reporting by public companies. These regulations may have resulted in perceptions that improved laws and standards can prevent Enron-like fraud.

Finally, accounting faculty and professionals neither agreed nor disagreed with the statement that capitalism and ethics are always in conflict, while graduate students agreed with it. The finding from graduate students is not encouraging in the sense that these students may graduate from business schools with the perception that capitalism and ethics will always be in conflict. This perception may be an indication that business schools fail to instill in their students the belief that ethics and business need not be in conflict. On the contrary, good ethics may be good business. While there are statements to this effect in the literature,[6] empirical studies to systematically document and communicate it may be of interest to academics, professionals, and students.

As a perceptual study, the current research had a number of limitations that can be used as motivation for future studies. For example, in response to the question on whether ethics classes should be offered, the subjects overwhelmingly said yes. However, it is not clear if the subjects' answer would be the same if they were asked to take into consideration factors such as the time, resource and ability constraints that affect the offering of effective ethics classes. Future research is needed to investigate these issues.

Another limitation is related to the fact that the subject groups represent convenience samples. Specifically, while all accounting educators in the sample were from the AECM list serve, professionals were from the AECM list serve and from a regional accounting firm in Northeastern United

States. The student sample was from a graduate capstone course that the author taught at a business school in Northeastern United States. Thus, the samples do not represent random selection. As such caution should be exercised in generalizing the results of the study. Future studies are needed to investigate the issues addressed in this chapter with other samples of interest.

Finally, accounting professionals in the sample neither agreed nor disagreed on whether ethical reasoning can be taught in ethics courses. This result may raise a question as to whether professionals understood the question. The distinction between ethical behavior and ethical reasoning is generally understood by faculty familiar with ethical theories, or students who had recently completed an ethics class. However, it is not clear if accounting professionals have the same level of understanding of this issue. Consequently, the finding that professionals neither agreed nor disagreed with ethical reasoning to be taught should be interpreted cautiously. Future research may benefit from including debriefing questions at the end of their questionnaire to collect data about understanding of key terms used in the study.

Despite the limitations noted above, the convergence of perceptions of accounting educators, professionals, and graduate students about the need for ethics courses in graduate and undergraduate accounting and business programs is a strong finding. Also, noteworthy is the agreement between the three groups that accounting ethics courses should be collaboratively taught by accounting and philosophy professors. Given resource constraints in business schools and the shortage of accounting faculty, future research should focus on innovative ways of developing collaborative courses on ethics for future offering that can stay within university budgetary constraints.

NOTES

1. NASBA further revised its proposal in 2007 to a three-semester-hour course or integration of ethics into all accounting courses equivalent to a three-semester-hour course as a condition for taking the CPA examination.

2. Graduate students were used because they have the benefit of experience from their undergraduate studies and practical experience before entering their graduate programs.

3. Missing data such as this make the totals slightly different from those reported in Table 1.

4. Given the capstone course in which data were collected, most students were in the last semester of their MSA study.

5. A college ethics course was assumed to be equivalent of 35 contact hours.
6. For example, Aguilar (1994) reports that Johnson & Johnson's former CEO, James Burke, estimated that "an investment of $1,000 in each of 30 companies with higher-than-average ethical values after 30 years was worth 4.7 times a similar investment in composite of the Dow-Jones ($701,150 versus $148,110).

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ACCOUNTING ETHICS EDUCATION: WHERE DO WE GO FROM HERE?

David Levy and Mark Mitschow

ABSTRACT

The ethical preparation of entry-level accountants has become a topic of concern in recent years. Assuming an eventual increase in business ethics course requirements, the question becomes where should these courses be taught and what should they include? We address these questions as follows. The first section reviews the recent accounting scandals and their effects, including the calls for reform in accounting education to which they gave rise. The second section offers a somewhat more detailed discussion of the material introduced in the first section, and marshals it in support of a two-course ethics sequence for accounting students. The third section reviews Armstrong's (1993) foundational work, and then offers specific arguments for requiring a general business ethics course during students' sophomore or junior year, in addition to an accounting-specific ethics course during the senior or graduate year. The fourth section concludes the essay by indicating some limitations in our proposal, as well as some direction for future research.

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INTRODUCTION

Calls to reform accounting education go back to the financial scandals of the 1890s (Merino, 2006). Since that time numerous commissions and other reformers[1] have argued for an accounting curriculum that would give accounting students the historical knowledge, ethical awareness, and creativity necessary to address complex business problems. Despite these calls, however, the accounting curriculum has become consistently more technical in nature, thereby failing to deliver the more liberally educated accountants the profession requires.

While the absence of more broadly educated accountants has likely hurt the profession in a number of areas, we believe that inadequate ethics education is among the most critical failures. Massive accounting failures during the savings and loan crisis of the 1980s led to the largest financial system meltdown since the Great Depression and cost public accounting firms billions of dollars in liability awards (Mitschow, 1994). Just a decade later, accounting failures in the late 1990s led to billions of dollars in losses, the collapse of Arthur Andersen, and passage of the Sarbanes-Oxley Law.

Substantive, well-considered proposals for improving accounting ethics education go back at least to Armstrong (1993), yet there has been little movement beyond the one-course business ethics requirement prevalent at most universities. Frustration with such inaction caused the National Association of State Boards of Accountancy (NASBA) to propose that candidates for the CPA exam be required to take a course in general business ethics and another in accounting ethics (Johnson & Smith, 2005). While this proposal failed, we believe that similar reforms will eventually be forced through unless the academic accounting community takes meaningful steps to address NASBA's concerns.

The purpose of this essay is twofold. First, we show why accounting graduates need additional ethics education to effectively navigate the increasingly complex markets in which they will be working. Second, we build upon Armstrong (1993) to develop a proposed two-course ethics sequence focusing first on general business ethics and then on accounting ethics.

THE NEED FOR INCREASED BUSINESS ETHICS EDUCATION

Massive financial scandals over the past decade have subjected the accounting profession to enormous pressure in a number of areas.

The accounting failure associated with the Enron debacle resulted in the collapse of Arthur Andersen and the loss of 28,000 accounting jobs,[2] and the remaining "Final Four" international public accounting firms have each faced significant civil penalties due to other accounting failures. The repeated audit failures associated with virtually every recent financial scandal have led to a decline in public confidence in the public accounting profession. Academia has also come under fire, with critics accusing accounting educators of generating research that is irrelevant to students and professionals (Ghoshal, 2005), for allowing the major research journals to be dominated by "overly simplistic models at the expense of exploring and teaching valuable communication and management skills" (Cohen & Holder-Webb, 2006, p. 17), and for failing to provide clear guidance on important issues such as the impact of management consulting services on auditor independence (Conley, Laker, & Mitschow, 2005). The problem has become so severe that Cohen and Holder-Webb (2006, p. 19) ask:

> Have we unwittingly produced a lost generation of professionals who are mesmerized by the need to meet the expectations of financial analysts? Have we contributed to the dissolution of morals in the business environment through our teaching and our research? Have we provided our students with technical skills, while neglecting the tools necessary for them to navigate a complex and morally ambiguous environment?

One consequence of the recent scandals has been an increased emphasis on better business ethics preparation for CPA examination candidates. In 2005 the National Association of State Boards of Accountancy (NASBA) issued exposure revisions 5-1 and 5-2, which among other things would require CPA exam candidates to take a course in general business ethics and another in accounting ethics.[3] In addition, the Texas State Board of Accountancy recently required that both the content of the required ethics course and the instructor be approved by the board. Moreover, influential accreditation agencies for business schools – such as the Association to Advance Collegiate Schools of Business (AACSB) International – have lately emphasized the place of ethics education within the business curriculum, at both the undergraduate and graduate levels.[4] In the same vein, AACSB (2004) International has called on business schools "to renew and revitalize their commitment to the centrality of ethical responsibility at both the individual and corporate levels" (p. 9).

The professional and academic shortcomings described above all involve a failure to inculcate a sense of professional responsibility and business ethics in accounting professionals. While much of the responsibility for this failure lies with the professional accounting community,[5] another cause

could be inadequate academic grounding in accounting ethics. While the current lack of research in this area makes a definitive answer impossible, the authors believe that a major reason for this lack of grounding is the underemphasis of ethics and professional standards of conduct in the accounting curriculum and (particularly) research. If we are correct, then the accounting profession can anticipate more audit failures, increased tort liability, and a continued erosion in professional autonomy for both the professional and academic accounting communities if the ethical preparation of entry-level accountants is not improved.

There appears to be a strong demand that CPA candidates undergo significantly greater ethics training. Unfortunately, the historical underemphasis on accounting education research has led to lack of reliable data on accounting pedagogy in general (Reckers, 2006, pp. 35–36), a problem that clearly extends to accounting ethics pedagogy as well (Bean & Bernardi, 2006). While additional research on accounting ethics pedagogy is required to reach a definitive conclusion,[6] the recent surge in accounting scandals possibly was due in part to inadequate accounting ethics training. This in turn suggests that improved professional ethics education in the accounting curriculum might mitigate future audit failures.

We agree with Warren and Rosenthal (2006, p. 693) that business ethics is too large a subject for one course.[7] The unique nature of public accounting makes their observation even stronger regarding accounting ethics. Unlike other business professionals, public accountants' primary responsibility is to financial statement users at large rather than the specific entities that pay them. To provide the public with useful, relevant, and reliable information, public accountants must develop principles-based ethical standards that go beyond mere adherence to rules (Cheffers & Pakaluk, 2005, p. 11). Principles-based standards are more difficult to inculcate than rule-based ones, but failure to do so sets the stage for accounting failures such as Enron and Worldcom (Cheffers & Pakaluk, 2005, pp. 12–13).

Given the unique nature and complexity of accounting ethics, we believe that two courses (plus integration) are necessary to deal adequately with the subject and scope of ethical issues in accounting, particularly in professional accounting. Students should first receive a thorough grounding in general business ethics – ideally developed in close concert with faculty external to the business school, if not taught by such "outside" faculty – in their sophomore or junior year (i.e., before they engage in professional internships). In addition, the unique ethical environment and dilemmas faced by public accountants suggests the need for an additional course in accounting ethics. Ideally, students would take this course in their final

term, after they had taken all their technical accounting courses and engaged in any internship. The specific reasoning for this, as well as what should be covered in each course, is outlined in the following sections.

THE PROPOSED ACCOUNTING ETHICS SEQUENCE

One argument against increased business ethics education is that college students are too old for such education to be effective. However, Armstrong (1993) tested a ''sandwich approach'' for teaching business ethics that included a general business ethics course, an accounting-specific course, and a strong ethics component in other accounting classes. This ''both-and'' education resulted in increased moral sensitivity as measured by DIT scores (Armstrong, 1993).

Our proposal also calls for a two-course business ethics sequence for accounting students. However, while we agree with Armstrong's call for ethics coverage within other accounting courses, the specific content of such material is beyond the scope of this essay. Furthermore, while Armstrong includes important material in her proposed accounting ethics course, more topics have arisen since 1993 that should also be covered. These are outlined below.

Armstrong (1993)

Armstrong (1993) addressed four important issues. First, she supported Loeb's position that the goals of accounting ethics education should be to ''stimulate a student to ... recognize issues in accounting that have ethical implications'' and ''... develop a sense of moral obligation or responsibility'' (Loeb, 1988). Second, Armstrong proposed a ''both-and'' approach for teaching accounting ethics that included a general course in business ethics that included ''traditional ethical theories from the field of philosophy, theories of moral development, and the sociology of professions'' (Armstrong, 1993). After establishing this necessary theoretical grounding, accounting students should then examine official codes of conduct in the accounting profession and other relevant materials (e.g., Congressional and Federal Trade Commission investigations, opinion surveys, and case studies), with an emphasis on developing broad principles and moral reasoning skills rather than knowledge of the rules per se (Armstrong, 1993). Third, Armstrong then offered her accounting course as a senior elective and found that the moral reasoning skills (as measured by

DIT scores) of students taking the course were significantly higher than those of students who did not take the experimental course. This confirmed Rest's finding that moral judgment "is more strongly related to education than to age" (Rest, 1979). Fourth, Armstrong discussed implications for future curriculum development.

Armstrong (1993) provides a strong argument for improved accounting ethics education. However, while the intervening 15 years have provided additional evidence of the need for such improved ethics training, little has been done in this area. The purpose of this essay is to provide additional support for the two-course model and to provide suggestions for what those courses should cover.

The General Business Ethics Course

In this section, we will argue for the inclusion of a general business ethics course during the sophomore or junior year of an accounting student's program. In addition to describing the content of this course, we will offer reasons to believe that the course should be at least developed by (or in concert with) the Department of Philosophy/Religion, not the School of Business. Moreover, we will discuss a specific *attitudinal* issue that we believe can be a major obstacle to this kind of course's success.

In general, the primary learning objectives of a typical business ethics course concern *recognition* and *analysis*. Students in such a course should be positioned to recognize a wide range of ethical challenges facing businesses and the individuals who conduct them, as well as provided with tools of analysis for resolving these challenges, including the basic language of ethical discourse. Although we have little reason to believe that individuals with an academic background in Philosophy or Religion will be better prepared than those with training in some Business field to address the recognition objective, we believe that they clearly are better prepared to address the analysis objective. We do not to suggest that faculty affiliated with a Department of Philosophy or Religion are *ipso facto* more ethical than their peers affiliated with a School of Business; however, their specific training lends itself to thinking systematically and abstractly about the process of thinking about difficult ethical issues. To borrow an analogy introduced by Cheffers and Pakaluk (2005), philosophers are like grammarians:

> When we speak English, we implicitly regard some ways of speaking as appropriate and others not. Most of the time, we take these things for granted and do not deliberate about them. But some people (professional grammarians), aim to make these

> considerations explicit, and then that sort of explicit reflection on grammar can undeniably help us to write and speak more effectively and clearly. Philosophers, in thinking systematically about ethics, take on the role of 'grammarians' of ethical reasoning; a good theory of ethics can help us act better, much as grammar can help us speak and write better. (p. 62)

As this analogy suggests, the process of *stepping back* and reflecting on behaviors we ordinarily take for granted can enable those who engage in that process to improve those behaviors. While in some sense all pedagogy involves some sort of "stepping back" (for example, students learning to conduct historical research by discovering and interpreting first-hand accounts in archives are served well by a combination of "hands on" trials and reflective discussion of their experiences with those who possess relevant expertise), we believe that the first kind of ethical reflection in which young business students should engage – namely, critical reflection about *how* to think about complex ethical issues – is not likely to be shaped most effectively by the faculty of the School of Business, simply because they lack the requisite training.

We note that similar points can be made about several other kinds of issues. For example, one might expect the curriculum for some Sociology courses to include an examination of the effectiveness of capital punishment as a deterrent in those jurisdictions in which capital cases are most frequently and aggressively prosecuted. One might also expect that a negative finding (i.e., the discovery that there is no statistically significant deterrent effect in such jurisdictions) might be marshaled in such a course in support of the claim that capital punishment is unjust. However, such use of this evidence would presuppose that capital punishment can be defended as a just policy only in terms of deterrence. This presupposition itself demands critical scrutiny of the sort one would expect to find, not in that (or any other) Sociology course, but instead in a philosophical ethics course (of the kind that sometimes is titled "Contemporary Moral Problems" or the like). This is so simply because the training philosophers, and not sociologists, receive consists essentially in the practice of this kind of critical reflection.

To take another issue – one that is rather likely to be dealt with in a general Business Ethics course – policies of affirmative action in hiring raise complex ethical issues ranging from fairness and compensatory justice to assessment of likely consequences to various rights claims. One can find in the literature arguments for and against affirmative action policies rooted in any or all of these moral foundations. We grant that faculty affiliated with the School of Business will possess the skills necessary to present and facilitate discussion about these arguments. However, we believe that moral

philosophers are much better equipped to guide students through the process of genuinely critical reflection about a range of such arguments, especially insofar as doing so requires that one consider the fundamental grounds of rights claims and how such claims are to be balanced with and against various sorts of utilitarian considerations. This set of material lies beyond what is requisite for gaining the credentials necessary to be a professor of management, marketing, accounting, or finance.

What these examples suggest is that genuine critical reflection about the most fundamental moral concerns – whether in abstract or when considered in the context of some specific ethical issue – is more likely to be fruitful if it is guided by those whose training is in moral philosophy, not some area (such as Sociology or Business) in which ethical issues arise. This is the point of Cheffers and Pakaluk's "grammarian" analogy: if one wishes to be led reliably through the process of reflection on the rules of Standard English – especially if one is seeking to improve one's facility with that language – one is better served by seeking guidance from a grammarian, rather than an "average" user of that language. By analogy, one should turn to a moral philosopher for guidance in instruction concerning the process of moral reflection, especially if one is seeking to become more expert at such reflection oneself.

We note that mounting evidence suggests that early (and frequent) exposure to specific kinds of reasoning makes a meaningful difference once students enter their professional lives. To cite just one study, Nelson, Ratliff, Steinhoff, and Mitchell (2003) report that "student groups with more formal training in logic will outperform student groups with less formal training in logic in identifying justified and unjustified auditor conclusions based on the validity of the argument form" (p. 20). That is, specific training in relevant kinds of reasoning/analysis actually affects students' ability to issue appropriate judgments, and this in turn has a positive effect on their acting appropriately. We are not suggesting that moral reasoning simply reduces to formal/logical analysis; rather, this study's evidence suggests that business students would be well served by specific and sustained exposure to the process of moral reasoning *early in their academic life*. This reasoning thus supports our proposal to offer the general Business Ethics course during the Sophomore (or Junior) year.

We note also that a trend in favor of business training at the undergraduate level that includes significant exposure to the Liberal Arts is growing (White, 2005). Students with backgrounds in philosophy, literature, and history are regarded as possessing skills in writing, thinking, and communicating that are easily adapted to a wide range of contexts

(Golds, 2006). Moreover, they are regarded as possessing a deeper understanding of values that in turn contributes to their becoming more effective leaders, and developing deeper characters. Requiring a general business ethics course that is outside of the purview of the School of Business – especially if the requirement is targeted fairly early in the students' course of study – provides these students with some encouragement to regard their own education as not merely vocational, but instead as contributing to their development as "whole people." For Accounting students in particular, broad exposure to the Liberal Arts would heighten their awareness of the complex interplay between and among society's institutions and human elements. That is, broad reading in and reflection about literature, history, and philosophy itself provides practice at identifying and anticipating moral problems, and at recognizing the full range of consequences of both institutional policies and individual choices. This exposure would help to strengthen their understanding of Accounting as a profession that helps to secure and serve the "public interest" in terms that go well beyond some narrow set of economic concerns, however important those concerns are in their own right (Cheffers & Pakaluk, pp. 87–96).

Thus far, our argument could be taken as providing a rationale for business students to take ethics courses generally, as opposed to a course in business ethics specifically. Our comments about the role of business education against the background of a broader Liberal Arts education seem to suggest that exposure to any "liberating" educational opportunity is as good as any other. Still, we propose that a course in business ethics should be required of these students.[8]

This position grows out of recognition that some distinctive moral issues arise in the context of a business organization and its relationship to society. Business people have unique fiduciary responsibilities to their principals; the conduct of a business organization can directly and indirectly affect the well-being of entire communities, and of our planet. This is not to suggest that the actions of all individuals – whether in their roles as private citizens, medical practitioners, or even professors – cannot also fruitfully be understood in similar terms. However, it is to suggest that the context of a business organization provides a unique set of conditions that warrants its own attention.

These facts shape what we believe should be the *content* of a business ethics course. Of course, there should be an introduction to moral reasoning and to the great normative traditions that come out of philosophy and religion (utilitarianism, Kantian ethics, rights-based theories, virtue ethics).

Beyond this, however, the course should focus on what constitutes the distinctive set of challenges to ethical behavior in a business context. This type of ethics course includes an examination of the place of business within society, the moral foundations of commerce in general (free markets/capitalism versus controlled markets/socialism, including various hybrid models), questions of distributive justice (aggregate wealth of society versus individual demands), the moral foundations of contracts and the agent–principal relationship (including conflicts of interest), and the basis of competing claims against business by various stakeholder groups; these all should be examined in terms of both domestic and international business. In addition, the course should consider the relationship between the ethical issues confronting businesses and the legal environment in which businesses operate; however, a concerted effort should be made not to reduce ethical issues to questions of mere compliance with the law.

Whatever "business-specific" issues are covered in such a course, we stress again that the primary objectives of this course concern the recognition of ethical issues that arise in the business context and the development of processes of ethical analysis. Thus, we have not here proposed any radical revision of the content of the Business Ethics course. Our argument chiefly concerns when this course should appear in the students' program, and by whom it should be taught.

An examination of many of the leading business ethics textbooks written (or edited) from a philosophical perspective reveals that they provide the appropriate content for such courses. This is the place for neither a comprehensive review of the leading textbooks nor for a recommendation of just one such text. However, Beauchamp and Bowie (2004), DesJardins and McCall (2005), Heath (2002), Hoffman, Frederick, and Schwartz (2001), Larmer (2002), Shaw and Barry (2007), and Velasquez (2006) are representative samples of texts that balance treatment of the philosophical moral tradition with clear exposition of the distinctive ethical challenges that arise in the context of the practice of business. Most of these texts are revised regularly to include recent cases and to reflect changes in the legal and regulatory environment. These texts, and others like them, tend to present the moral issues in business via balanced argumentation (as opposed to dogmatic proclamation of a single, correct resolution). This suggests that the faculty conducting the class and overseeing the curriculum will need significant training in ethical reasoning of the sort typically found in Philosophy/Religion faculty, not Business faculty, if classroom discussion is to be fruitful.

Some critics of allowing faculty outside the Business School to teach the Business Ethics course worry about the hostility to business exhibited in

some parts of the humanities faculty, and the related efforts to "enlighten" young business students so that they pursue a different path.[9] When an anti-business attitude informs the instruction in a general business ethics course, young business students are led to anticipate that their roles, once they enter the professions, involve a heavy dose of ethical "gate-keeping:" they should constantly be on the lookout for corrupt individuals and the corrupting influence on society of their single-minded pursuit of shareholder interest.[10]

We concede that this problem is sometimes present. However, rather than seeing it as providing overwhelming reason to avoid requiring of sophomore or junior business students a general business ethics course developed or taught by faculty outside the School of Business, we see it as placing a responsibility on business faculty – especially Deans and other program coordinators – to cultivate a cooperative relationship with the Department of Philosophy/Religion, and to stress the need for the curriculum to be developed and handled in an even-handed way. In the cultivation of this relationship, of course, it is helpful if the business faculty is sincere in its recognition of the value of the Liberal Arts for its students, and especially of the ways in which Humanities faculty can assist business students in becoming more reflective moral agents. Although risks are always involved in allowing an outside department to develop the curriculum for one's own program, the process of working with the faculty of the Philosophy or Religion department provides an opportunity for Deans and program coordinators to model effective leadership – something both desirable for students to see and essential for satisfying some accreditation standards, such as AACSB's Standards 13 and 15.[11]

The Accounting Ethics Course

While learning accounting ethics rules is a necessary condition for ethical preparation, it is not a sufficient one. As Cheffers and Pakaluk (2005, p. 31) outline:

(1) The rapidly changing nature of the accounting profession makes developing rules that cover all situations impossible.
(2) Applying accounting rules requires interpretation, which in turn requires sound judgment and an understanding of first principles.
(3) Properly interpreting accounting rules requires idealization.

(4) Producing financial statements that present a true picture of a company's financial performance requires accountants to be free of bias and self-interest.
(5) Accounting rules are too cumbersome and unmanageable to be effectively implemented without a thorough understanding of the principles from which they were derived.
(6) "We cannot be said actually to follow a rule, unless we can recognize when our own actions are in conformity with that rule; yet our successfully recognizing this is itself not contained in the rule, and it must presuppose some other disposition."

Thus, successful accounting ethics education must use the ethical reasoning tools developed in the general business ethics course to help accounting students internalize the underlying ethical principles of accounting from which specific accounting rules are derived. Such an undertaking will be aided by requiring that accounting students take an additional, accounting-specific, ethics course beyond the general business ethics course required of all business majors.

The accounting ethics course builds upon the foundation developed in the general business ethics course to address the *specific* ethical challenges and pressures faced by professional accountants. Consequently, this course should be taken after students have completed most of their required accounting courses as well as the general business ethics course. Prerequisites should ideally include both the general business ethics course and auditing, which means that the accounting ethics course would presumably be taught in the student's senior year or in graduate school.[12]

Ideally, the course should be taught by a full-time accounting faculty member with practical experience and/or significant research activity in business ethics. This is especially important for graduate-level accounting ethics courses taught at schools with AACSB accreditation (or those that are pursuing it), since the *academic qualification* requirements for graduate courses and faculty are stringent. Unfortunately, the relatively small number of accounting faculty with significant research activity in business ethics (Bernardi & Bean, 2005) may make this impossible at many schools. In that case the alternative would be to have the course taught by a *professionally qualified* colleague.[13]

An accounting ethics course should develop an understanding of the typical ethical dilemmas that one will encounter. At a minimum, students should develop an appreciation for the unique nature of the professional accounting relationship, an awareness of specific ethical conflicts one is

likely to encounter, and means of anticipating, addressing, and defusing those conflicts. Students must also recognize that different accounting fields (e.g., audit, tax, and managerial accounting) have different client relationships, different ways of specifying ethical norms, and different legal constraints. For example, a tax accountant/attorney providing legal advice faces far greater constraints on whistle blowing than a public accountant with a client who refuses to correct serious violations of SEC regulations. Thus, the accounting ethics course should *begin* with a detailed examination of the ethical codes and norms governing the major fields of professional accounting (though it should not *rest* with them).

Given recent events, much of this material will likely cover ethical issues in public accounting. Ethical issues related to public accounting are already examined in most auditing courses, and many students choose to leave public accounting at some point in their careers. Furthermore, some schools have employer markets mainly outside of public accounting. Thus, the accounting ethics course should thoroughly compare and contrast the ethical dilemmas faced by internal auditors, private accountants, tax accountants, and governmental accountants. While some of this material is available in traditional textbooks, ethical and legal requirements in many accounting areas are changing so rapidly that the instructor will need to rely heavily on recent cases, case studies, and guest speakers. This in turn reinforces our belief that the accounting ethics course must be taught by an academically or professionally qualified faculty member in the school of business.

Students should also become aware of the civil, professional, and (in some cases) criminal consequences of lapses in professional ethics. We suggest that an accounting ethics course should begin with a review of the ethics materials traditionally taught in auditing. From there, the instructor can compare and contrast the codes of ethics for other professional accounting organizations such as the Institute of Management Accountants, Financial Executives International, and the Institute of Internal Auditors. The course should also illustrate some of the typical ethical dilemmas that are faced by professional accountants in these fields. Case studies, role–playing, and other pedagogical tools can be used to help students recognize, avoid, and (if necessary) confront the aforementioned dilemmas. The goal throughout the course should be to give students an understanding of the ethical norms and dilemmas facing professional accountants in various fields, the tools for recognizing and addressing ethical dilemmas in their early stages, and the penalties for violating professional norms in the major professional accounting fields.

Learning objectives for an accounting ethics course will differ to some extent, depending on the background of the instructor and the students' likely career paths. At a minimum, however, students who pass the accounting ethics course should be able to:

- Recognize the specific ethical constraints facing CPAs auditing publicly traded companies, and how they differ from those of fields such as tax accounting, managerial accounting, and governmental accounting. Public accountants must appreciate that, unlike most other professions, their primary responsibility lies with the public at large and not with the company that pays them. This recognition is crucial if accountants are to provide useful, relevant, and reliable information to financial statement users.
- Know that there are penalties for accountants who violate legal and ethical norms in their particular fields. Accountants, such as the leaders of Arthur Andersen, who violate the profession's rules face severe criminal penalties. CPAs who exercise poor professional judgment are subject to civil liability. Sarbanes-Oxley, for example, provides significant penalties for CFOs who sign incorrect financial statements. Accounting professionals may minimize these pitfalls by understanding and adhering to accounting principles.
- Effectively communicate these constraints, norms and penalties to senior management. Senior management may not understand why an accounting treatment that is not honest but meets current accounting standards is not acceptable. Professional accountants must be able to effectively explain why providing a clear financial picture is in the long-run interest of both the company and its executives.
- Recognize and know how to address ethically questionable situations before they become crises. Enron's accounting treatment for special purpose entities arguably met Generally Accepted Auditing Standards at the time. However, they violated the principles of financial accounting because they presented a fundamentally biased picture of the company's financial position. Tremendous financial losses (not least to the accountants themselves) would have been avoided had Arthur Andersen recognized and reacted to the warning signs in a timely fashion.
- Use the tools developed in the first business ethics course to recognize and develop solutions to ethical dilemmas in accounting. Many current examples exist, including Enron, Adelphia, and Worldcom to name a few. The specific scandal examined is irrelevant, as both the accounting rules and the specific fraudulent practice will change over time. If accountants

are to avoid future ethical dilemmas it is crucial for them to quickly determine when they are entering an ethically questionable situation and how to extricate themselves from it. This in turn requires accountants to fully understand the profession's underlying principles.
- Be aware of the rights and obligations of whistle blowers in various accounting fields when a solution cannot be found. It is not enough for professional accountants to understand what should be done. If accountants are to properly uphold professional standards and protect themselves personally when faced with an ethically challenging situation, it is crucial for them to understand both what is expected of professional accountants and what protections are available to them.

An accounting ethics course should also be sufficiently flexible to allow individual instructors to pursue specialized topics or take advantage of local opportunities. For example, one professor at a large state university on the east coast used to arrange field trips to federal prison camps so his students could meet with CPAs and other business professionals incarcerated for accounting fraud. While this is not always practicable (particularly given post-9/11 security considerations), anecdotal evidence suggested that it had a profound impact on the participants.

SUMMARY AND CONCLUSION

Summary

Recent audit failures have placed the accounting profession under enormous scrutiny, and outsiders are beginning to demand that our profession do more to ensure that its members adhere to professional standards. Sarbanes-Oxley established an oversight board composed primarily of non-CPAs, and NASBA is moving to require greater ethics training for entry-level accountants. Far from receding, these pressures are likely to grow unless the accounting profession takes action to address the concerns of financial statement users.

The authors believe that one significant step would be to improve accounting majors' awareness of the professional standards and ethical dilemmas in the accounting profession. Toward this end we suggest that accounting programs require a general course in business ethics and a second course specifically devoted to accounting ethics. The requirements of each course and the strengths of each group of faculty suggest that ideally

the first course would be taught by faculty from the philosophy or religion departments, while the second course would be taught by accounting faculty.

Some weaknesses are inherent in this approach. In the general ethics course, the faculty teaching the course must have some knowledge of (and interest in) business ethics, and they should not harbor significant biases against business. As to the latter course, the relative shortage of accounting faculty with either training or research interests in ethics may create staffing problems. The issue is especially severe for business programs seeking to achieve or retain AACSB accreditation.

Limitations

We believe that the complexity and rapid change in the accounting field make the two-course model the optimal approach for teaching professional ethics to entry-level accounting students. However, such an approach will work best when students take the courses in the proper sequence and where students take the accounting ethics course after having gained relevant work or internship experience. Most importantly, the two-course approach requires strong cooperation between the school of business and the philosophy department hosting the general business ethics course. Where such cooperation is not forthcoming, the school of business may be required to teach both courses in house.[14]

A two-course solution might also cause schools of business to de-emphasize the coverage of ethics in other accounting courses. For example, it is possible that faculty members might decide to reduce or eliminate the treatment of accounting ethics in their current courses to make room for competing material, since ethics is now covered in two stand-alone courses. In the worst case scenario, ethics education might be entirely isolated from the rest of the curriculum, causing students to see it as something "outside" of normal business practices. Such a scenario could meet the letter of our proposal while violating the spirit, thus leaving students worse off than they are now.

We believe that our approach to teaching business ethics is likely to yield better prepared and more ethically sensitive entry-level accountants. However, it is important to remember that there may be equally effective means of achieving this objective. The crucial point is for the accounting community to develop clear, measurable ethics education criteria.

Accounting ethics education can make entry-level accountants more sensitive to ethical issues and may lead to more ethical organizations as these students advance in their careers. However, no ethics education regime will be successful without the support and cooperation of senior accounting practitioners. To paraphrase COSO, the tone is *still* set at the top.

Future Research Suggestions and Conclusion

As suggested by several authors (e.g., Reckers, 2006, Bernardi & Bean, 2005), the lack of emphasis on ethics research in the accounting literature leaves numerous unanswered questions. What impact do college ethics courses (especially vis-à-vis the first job) have on the moral development of future accountants? What ethics education are business programs currently offereing/requiring, how has it changed in recent years? What actions have state boards of accountancy already taken, and what steps can they be expected to take in the future? These questions are all topics for future research.

The accounting profession does not operate in a vacuum. Ultimately, all professions operate in the public interest and at its pleasure. If the accounting profession continues to ignore demands for greater ethical accountability, we can anticipate further erosion in both public support and professional autonomy. It is therefore crucial that accountants begin to address these issues, or they will be addressed for us.

NOTES

1. Examples include, but are not limited to, Haskins (1900), Wheeler (1907), Pierson (funded by the Carnegie Foundation, 1959), Gordong and Howell (funded by the Ford Foundation, 1959), the American Accounting Association (the Bedford Report, 1986), and PricewaterhouseCoopers (2003).
2. Due to the shortage of accounting professionals – a shortage that has ironically been exacerbated by the increased audit requirements of SOX – most former Andersen accountants were quickly able to find new jobs. However, Andersen's rapid collapse caused significant short-term problems for many employees, particularly the previous Fall's recruits who had to go back on the market and find new work.
3. The NASBA proposal is currently stymied due to intense opposition from the academic accounting community. However, both the NASBA and individual state boards of accountancy are likely to continue demanding increased ethics training for accounting majors.

4. See, for example, AACSB's publication, *Ethics Education in Business Schools* (2004); see esp. page 21, where Standard 15 from Section 2 of the Current AACSB Standards for Accreditation is reproduced. Although AACSB itself refuses to take a position on *how* ethics education is to be assured at both the undergraduate and graduate levels, and thus expresses a position that is in key ways weaker than the one we present, the objectives we specify for the (undergraduate-level) general business ethics course and the (graduate-level) specific accounting ethics course have been shaped by AACSB's enumeration of learning standards. Also noteworthy is AACSB's recognition of the fact that efforts to inculcate awareness and appreciation of the places of ethics in the practice of business ''may require different approaches for undergraduate, master's, and doctoral students'' (p. 9). These and other limitations are discussed in greater detail under ''limitations'' below.

5. A detailed exploration of professional socialization in the workplace is beyond the scope of this essay. However, it would appear axiomatic that newly hired accountants develop much of their view of what constitutes proper professional conduct from what they learn at the office. This limits the effectiveness of any accounting ethics education, something that is discussed in greater detail under ''limitations'' below.

6. The paucity of accounting ethics research (especially when compared to ethics research in other business disciplines such as finance and marketing) has been well documented in a number of articles by Richard Bernardi and David Bean.

7. Still, we take a different approach in the area of accounting ethics. Warren and Rosenthal (2006, p. 693) propose that (in addition to the initial business ethics course) business ethics should be inculcated throughout the curriculum. For reasons outlined below, we propose that accounting students take two ethics courses.

8. We note here that the above discussion about the importance of a broad Liberal Arts education might be taken as supporting much more than the two ethics courses we discuss in this essay as part of the training of Accounting students. Although we find even broader exposure to be desirable, we are not prepared in this essay to make the case for a requirement of anything beyond two ethics courses.

9. Some anecdotal evidence suggests that philosophers whose task it is to teach a general course in business ethics establish as a primary – though unstated – objective for the course the ''liberalizing'' of their students, where this means the inculcation of an anti-business attitude.

10. Although there is some sense in which public accountants are the ''gate keepers'' of the business world, we believe that their role as the warrantors of trust in the marketplace is in fact quite different, and is best approached by first establishing a positive picture of the place of business in society.

11. See again AACSB's *Ethics Education in Business Schools* (2004), esp. the discussion of Ethical Leadership on pages 11–12. Noteworthy is AACSB's recognition of the fact that Deans must model ethical leadership themselves.

12. Students in 45 states are currently required to complete 150 hours of course work before taking the CPA examination. New York will require 150 hours beginning with the freshman class of Fall 2005 (i.e., beginning in the Spring of 2009). The authors believe that most students will meet this requirement by earning either an MS in Accounting or an MBA with a concentration in accounting.

13. AACSB divides faculty into *academically qualified* (usually those with a terminal degree and significant recent research activity), *professionally qualified* (those with significant, recent, and relevant professional experience), or *other*. Business schools seeking or maintaining AACSB accreditation must have a significant majority of their business courses taught by *academically qualified* faculty, with a significant majority of the remainder taught by *professionally qualified* faculty. While there is no reason to assume that a professionally qualified faculty member would not teach this course at least as well as their academically qualified colleagues, the AACSB's emphasis on academically qualified faculty (particularly at the graduate level) may make them the preferred choice for business programs seeking to earn or maintain AACSB accreditation. See http://www.aacsb.edu/ for more details.

14. An additional concern with turning over the general business ethics course to non-business faculty has to do with ensuring consistency of coverage across sections, especially if each section is taught by a different faculty member. Assessment connected to previously agreed-upon common learning outcomes can insulate against this to some extent. Articulation of such outcomes is another area demanding further research.

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DO ACCOUNTING ACADEMICS HAVE THE EXPERTISE TO TEACH A DISCIPLINE-SPECIFIC ETHICS COURSE? A RESEARCH ASSESSMENT APPROACH

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ABSTRACT

Ethics is of increasing concern to many important stakeholders in accounting education. While the Association to Advance Collegiate Schools of Business (AACSB) encourages institutions to demonstrate their commitment to ethics through research agendas, the National Association of State Boards of Accountancy proposed a three-course ethics sequence – one of which was a discipline-specific accounting ethics course. The unanswered question is whether or not the accounting academy has the embedded expertise in ethics to teach a discipline-specific accounting ethics course. While there are numerous ways to establish an expertise in the area of ethics, this study documents the level of ethics research by accounting faculty who teach at institutions in North America in 26 business ethics journals and accounting's Top-40 journals. Our data indicate that 683 (546) schools or 75.9 (60.6) percent of the 900 schools

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in the United States and Canada do not have an ethics scholar if one uses a five-year (20-year) research window. The study establishes a baseline that allows stakeholders to assess the level of past, present and future accounting ethics research, and the capabilities of accounting faculty to address alternative ethics education pedagogies.

Business graduates and the press report the lack of ethics in business as a major concern (Swanson, 2005) – especially given the recent pandemic of accounting scandals. Research indicates that cheating in college, which associates with dishonesty in the workplace (Lawson, 2004; Sims, 1993), increased from 42 percent (Michaels & Miethe, 1989) to over 80 percent (McCabe, 1999).[2] Gates (2002) states that: ''*the university community cannot avert its eyes and proclaim that this is not our problem, that there is nothing we can do*''. Lysonski and Gaidis (1991, p. 148) conclude that ''*schools may be inadvertently overemphasizing technical training and ignoring ethical considerations*''.

Kennedy and Horn (2007, p. 77) note that the Association to Advance Collegiate Schools of Business (AACSB) ''*has been involved with ethics education and business schools for over 90 years*''. Indeed, ethics was emphasized (Swanson & Frederick, 2004) by AACSB's Ethics Task Force (2004, p. 14) encouraging institutions to demonstrate a currency in and a commitment to ethics ''*throughout their academic programs* [and] *research agendas*''. For many years, the importance of ethics has been addressed by faculty, AACSB and others, however, in recent years, ethics has been receiving increasing attention from many stakeholders. Certainly ethics research is essential to informing the myriad debates on ethics. A baseline for ethics research is necessary to monitor and evaluate the extent to which the accounting academy participates in publishing ethics research. Empirical evidence is essential, if we are to objectively evaluate the progress or lack thereof in ethics research.

While prior studies on ethics scholarship have: ranked individual accounting scholars (Bernardi, 2005), ranked PhD programs' by ethics scholarship (Bernardi, Bean, & Williams, 2005), the growth in accounting ethics research (Bernardi & Bean, 2006) and compared the accounting, finance and marketing disciplines ethics research (Bernardi, Bean, Melton, & Roberts, 2008), this study examines the ''so what'' question of whether the results of this research impact our capabilities with respect to curriculum challenges. The unanswered question is whether or not the accounting academy has the embedded expertise in ethics to teach a discipline-specific

accounting ethics course. While there are numerous ways to establish an expertise in the area of ethics, this study documents the level of ethics research by accounting faculty who teach at institutions in North America between 1986 and 2005. The data include ethics publications in 26 business ethics journals and accounting's Top-40 journals as defined by Hasselback, Reinstein, and Schwan (2003) between the years 1986 and 2005.[3] AACSB expects an ongoing level of research by its members. It is not surprising that our study documents a larger quantity of ethics publication by accounting faculty at AACSB accredited institutions; however, we did not anticipate that the difference would be of the order of magnitude that we found (i.e., a four to one relationship).

LITERATURE REVIEW

Background

Trapnell indicates that AACSB has always believed that ethics education is a "*very important aspect of business schools, and where we are today is a reflection of that evolution*" (Kennedy & Horn, 2007, p. 77). Under AACSB's existing standards, business ethics coverage can be satisfied by either a stand-alone ethics course or through using an "across the curriculum" approach. However, Swanson and Frederick (2004, p. 229) believe that:

> The newly approved accrediting standards suggest that ethics can be handled haphazardly and delivered by professors who have plenty to do without trying to learn practical applications of ethics in business ... In their hands, ethics could be distorted, diluted, or trivialized past recognition.

Regardless of whether schools elect to use a discipline-specific ethics course or an across the curriculum approach towards meeting AACSB's required ethics coverage, the question then becomes: "Who is qualified to teach ethics in accounting". Teaching ethics using an across-the-curriculum approach does not require the same level of ethics expertise (i.e., one would not anticipate the colleague to be involved in ethics research) as teaching a discipline-specific ethics course, which requires a measure of expertise in the area of ethics. For example, Hartman and Hartman (2004, p. 72) note that

> Teaching any subject across the curriculum or otherwise, presumes faculty competence in that subject. Contrary to what seems to be the reigning presupposition, there is no reason to believe that most faculty in other disciplines are able to teach ethics adequately, as there is no reason to believe that most ethics faculty can teach tax accounting.

One might argue that no one would tell a good intermediate accounting professor that he or she is not qualified to teach financial accounting because they do not publish research articles in this area. Consequently, why is being involved in ethics research necessary to teach ethics? First, we would note that approximately 70 percent of accounting faculty in North America hold professional certifications such as CPAs, CAs and CMAs (Hasselback, 2006).[4] We believe that these professional certifications inherently qualify an individual to teach in areas such as financial, cost, tax and auditing; however, no such certification exists in accounting for ethics. Second, we are not saying that ethics research is necessary to teach ethics. There are numerous ways to demonstrate a foundation in ethics besides being involved in ethics research (i.e., the focus of this study), such as having an ethics dissertation; taking ethics courses; attending continuing professional education on ethics, or studying the ethics literature.

This research responds to increasing stakeholder concerns about business ethics (Swanson, 2005) and consequently ethics research. Prior literature demonstrates the emphasis that accounting places on publications in Top-40 journals and the visibility that is accorded to ethics research. Much of the journal-rankings literature refers to Hasselback et al.'s (2003) Top-40 list, which is primarily based on two large survey studies by Jolly, Schroeder, and Spear (1995) and Hull and Wright (1990). While the majority of the journals in Hasselback et al.'s rankings come from these two studies, Hasselback and Reinstein (1995) indicate that the remaining six journals were ranked using a clustering procedure that considered factors such as acceptance rates and quality indicators from other sources. As an extension to this stream of literature, Bean and Bernardi (2005) modeled the Hasselback studies and nine other journal-ranking studies in accounting. Their data indicate that a journal's rank associates with quality indicators such as the journal's age, acceptance rate and audience (i.e., either professional or academic).

Ethics and Accounting's Top-40 Journals

Journal rankings are a surrogate for research quality (Jolly et al., 1995) because publications in top journals "*can be objectively quantified and measured*" (Chan, Chen, & Steiner, 2002, p. 132). This is not to say that publications in journals that are not top ranked cannot be quantified and measured. Rather, publications in top-ranked journals are weighted more than publications in other journals in the recruitment and retention processes

(Ostrowsky, 1986; Morris, Cudd, & Crain, 1990) as well as the promotion process (Campbell, Gaertner, & Vecchio, 1983). However, the dominance of economics naturalism in accounting research relegates ethics research to being uninteresting or irrelevant (see Shearer, 2002; Williams, 2000, 2004 for a detailed discussion). Schultz, Mead, and Khurana (1989) survey of deans and accounting faculty indicates that the emphasis on research will increase in academia's reward system. Consequently, it matters which standards a publication record is compared against (Morris et al., 1990).

None of the editors of accounting's Top-40 journals specify ethics as an area of interest (Bernardi, 2004) in accounting's version of Cabell's (2004). Hasselback et al. (2003) illustrate that the average total number of articles published in accounting's Top-40 journals is 545 per year between 1968 and 1997 (Hasselback et al., 2003, p. 102). In comparison, Bernardi (2005, p. 69) shows that there are a total of 546 articles in business ethics journals authored by accounting doctorates during the same 30-year period. Consequently, accounting's yearly production of Top-40 journal articles is equal to the entire 30-year production of articles authored by accounting faculty in business ethics journals.

The Top-40 journals that are used in evaluating faculty research (Hasselback et al., 2003) do not include a business ethics journal (Bernardi, 2005). Research is perceived as more than twice as important as teaching in promotion and tenure decisions (Cargile & Bublitz, 1986). As a result, Top-40 journals receive considerable attention in the promotion-tenure and rewards process. Due to their absence from the Top-40 rankings, ethics journals are not as valued and receive little attention.

RESEARCH QUESTIONS

There are insufficient published materials to develop formal hypotheses in this study. Therefore, the study is essentially descriptive and we pose research questions concerning some of the major issues confronting the accounting academy and its relationships to ethics research and ethics education. During our review of the literature, as well as conversations with those involved in ethics research, we noted that there was no empirical study that addressed the quantity of ethics research published by accounting faculty. It was essential to develop a baseline for prior ethics research by accounting faculty in order to address the research questions appearing in this study and for future assessment efforts.

For instance, Swanson and Frederick (2004, p. 229) posit one potential problem for assessing ethics coverage suggesting that: "AACSB's policy that ethics can be incorporated across a curriculum invites assessment errors favoring inadequate and inappropriate coverage". Consequently, if ethics research is being done by accounting faculty, we would expect it to be published in journals that are familiar to accounting faculty. To the extent that there has been increasing emphasis placed on ethics by stakeholders, it is reasonable to expect that this would be accompanied by an increase in ethics research output over time.

For many institutions publishing in the Top-40 journals is important for tenure and promotion decisions. Furthermore, while accounting faculty, as a group, are more familiar with journals that appear in the Top-40 ranking than other journals, others claim that the Top-40 journals are not receptive to publishing ethics research in accounting. Thus, accounting faculty that research ethics may seek out other journals that are more receptive to their efforts. Attitudes towards ethics research presumably vary over time, due to personal, internal and external variables. These may differentially impact the frequency of ethics publications in Top-40 journals versus ethics journals.

RQ1. Is the rate of ethics publications, over time, equal for Top-40 journals and ethics journals?

AACSB accredited institutions are presumably larger and have more PhD's relative to non-AACSB institutions. AACSB accreditation may be a factor in the quantity of ethics research by accounting faculty.

RQ2. Is the quantity of ethics publications equal for AACSB accredited and non-AACSB accredited institutions?

RQ3. Does the level of ethics publications indicate the capability of supporting a discipline-specific ethics course or suggest an across-the-curriculum approach to covering ethics in the accounting curriculum?

METHODOLOGY

Sample

Our sample includes ethics publications in business ethics journals (Bernardi & Bean, 2006) and in accounting's Top-40 journals (Hasselback et al., 2003). For publications in accounting's Top-40 journals, we used the

Hasselback et al. (2003) list. For the business ethics journals, we used the 25 journals identified by Bernardi and Bean (2006) plus the *Journal of Academic Ethics* (i.e., 26 ethics journals). However, five of the 26 business ethics journals are no longer published. The *International Journal of Value Based Management* and *Teaching Business Ethics* were spun off from the *Journal of Business Ethics* (*JoBE*); during their life as separate journals, both published four issues per year through 2003. In 2004, these two journals were consolidated back into the *JoBE*, and *JoBE*'s production was increased by two volumes each year. A similar situation occurred with the *Professional Ethics Journal*, which was spun off from *Business and Professional Ethics Journal*; it was also consolidated back into its parent journal in 2004. Both the *Journal of Power and Ethics* and the *Online Journal of Ethics* were online journals that were published for two years and then ceased publication.

Most of the journals on these two lists are published quarterly with the exception of the *JoBE* and *Research on Professional Responsibility and Ethics in Accounting* (*RPR&EA*). While *RPR&EA* is published annually with about 11 articles each year, *JoBE* published 220 articles (e.g., approximately eight articles per issue) in seven volumes each with four issues in 2005. The *Accounting Review* published 47 articles in four issues (e.g., about 12 articles per issue) and the *Journal of Accounting Research* published 28 articles in five issues (e.g., about six articles per issue) in 2005. This difference in the number of articles published in *JoBE* might skew the results of our comparisons; however, there is one other factor to consider. While the Top-40 journals primarily serve accounting scholars, 18 of the 20 currently published business ethics journals serve all business disciplines as well as our colleagues in liberal arts with an interest in business ethics such as philosophy, psychology and sociology. Considering the potential number of disciplines that *JoBE* services, each discipline receives less than one volume; consequently, *JoBE* is essentially a quarterly journal for each discipline.

While our research compares the two sets of journals for ethics research between 1986 and 2005, two factors should be considered: (1) there are 40 top (Top-40) journals in accounting compared to 26 business ethics journals and (2) in 1986, 32 of the Top-40 journals existed versus only four business ethics journals. Of the 20 years each journal could have been published during the timeframe of this study, the average life of the Top-40 (business ethics) journal was 18.6 (10.7) years. Consequently, if one adjusts for each journal's age, this study compares the output of 13.4 business ethics journals with 37.2 of accounting's Top-40 journals over the 20 years.

Search Procedures

The *first* step in the data gathering process was to identify which journals to include in the study. The area-specific journals the authors include are accounting's Top-40 journals (Hasselback et al., 2003) (Panel A of Exhibit 1). We also include 26 business ethics journals (Bernardi & Bean, 2006) (Panel B of Exhibit 1).

The *second* step in the data gathering process was to identify subject areas that relate to ethics research in these two groups of journals. To avoid introducing "*substantial subjectivity into the analysis*" (Cooley & Heck, 2005, p. 51) in identifying ethics articles, the subject areas counted in the two groups of journals must be comparable. Consequently, any accounting area included in ethics journals was initially identified as a possible ethics article in accounting's Top-40 journals. To this end, a list of "key words" was developed (Exhibit 2) using all of the ethics articles that were published in the 26 business ethics journals by accounting authors between 1986 and 2005 (i.e., the 20-year timeframe of this study).

The *third* step was to identify ethics articles written by accounting faculty between 1986 and 2005. While the business ethics journals could be searched for accounting authors, accounting's Top-40 journals were individually searched using this list of 120+ key words as an initial screen for ethics articles. For identified articles, the abstract (and at times the article itself) was reviewed to determine the presence of a significant ethical component. The following classification procedures were employed:

(1) Article counts consist of original journal articles. Book reviews, comments, discussions and rejoinders were not included.
(2) Ethics articles consist of articles that address the issues and behavior associated with ethics, codes or professional responsibilities. In order to be classified as such, the article's title and/or abstract/description must address one of these topics.
(3) The index in Hasselback's (2006) *Accounting Faculty Directory* was used to identify the institutions of authors in the United States and Canada at the end of 2005.

After an initial identification and classification by one of the authors, a second author subsequently reviewed the classification for validation purposes. All differences in assessment were resolved in discussion among the authors. For example, while the key words "agency theory" initially identified quite a few articles, most of these articles did not have an ethics component. Additionally, about two-thirds of the articles we initially

Exhibit 1. List of Journals Used in this Research.

Panel A: Accounting's Top-40	Panel B: Business Ethics
1. Abacus	Business and Professional Ethics Journal
2. Accounting and Business Research	Business and Society
3. Accounting and Finance	Business and Society Review
4. Accounting Educators' Journal	Business Ethics Quarterly
5. Accounting Horizons	Business Ethics: A European Review
6. Accounting Organizations and Society	Electronic Journal of Business Ethics and Organization Studies
7. Accounting, Auditing and Accountability	
8. Advances in Accounting	Ethical Theology and Moral Practice
9. Advances in International Accounting	Ethics and Behavior
10. Advances in Taxation	Ethics and Critical Thinking
11. Auditing: A Journal of Practice and Theory	Ethics and Information Technology
12. Behavioral Research in Accounting	Ethikos
13. Contemporary Accounting Research	International Business Ethics Review
14. Critical Perspectives in Accounting	Global Virtue Ethics Review
15. Financial Analysts' Journal	Journal of Academic Ethics
16. International Journal of Accounting	Journal of Accounting Ethics and Public Policy
17. Issues in Accounting Education	
18. Journal of Accountancy	Journal of Business Ethics
19. Journal of Accounting and Economics	Journal of Business Ethics Education
20. Journal of Accounting and Public Policy	Markets and Morality
21. Journal of Accounting Education	Organizational Ethics: Healthcare, Business and Policy
22. Journal of Accounting Literature	
23. Journal of Accounting Research	Research on Ethical Issues in Organizations
24. Journal of Accounting, Auditing and Finance	Research on Professional Responsibility and Ethics in Accounting[c]
25. Journal of Business[a]	
26. Journal of Business Finance and Accounting	International Journal of Value Based Management[a]
27. Journal of Finance	
28. Journal of Finance and Quantitative Analysis	Journal of Power and Ethics[a]
29. Journal of Financial Economics	Online Journal of Ethics[a]
30. Journal of Information Systems	Professional Ethics Journal[a]
31. Journal of Management Accounting Research	Teaching Business Ethics[a]
32. Journal of Taxation	
33. Journal of the American Taxation Association	
34. Management Science	
35. National Tax Journal	
36. Research in Government and Not-for-Profit Accounting	
37. Research on Accounting Regulation	
38. Strategic Finance[b]	
39. The Accounting Review	
40. The CPA Journal	

[a]These journals are no longer published.
[b]Formerly Management Accounting.
[c]Formerly Research on Accounting Ethics.

Exhibit 2. Key Words Used in Search Process.

Accountability	Ethical	Moral Problem
Affirmative Action	Ethical Behavior	Moral Reasoning
Agency Theory	Ethical Development	Morality
Arthur Andersen	Ethical Dimensions	Non-Audit Services
Behavior	Ethical Failure	Non-Compliance
Bias	Ethical Intensity	Personal Accountability
Bribery	Ethical Lapses	Personal Values
Cheating	Ethical Perceptions	Plagiarism
Codes	Ethical Training	Pressure
Coercive	Ethics	Professional Responsibility
Compromise	Extortion	Professional Skepticism
Conduct	Failure	Reasonable Doubt
Confidentiality	Failure To Disclose	Red Flag(s)
Conflict(s)	Fairness	Remediation
Conflict of Interest	Faking	Reputation
Confrontation	Fiduciary Duty	Responsibility
Conscience	Fraud	Risk Assessment
Consequence(s)	Fraudulent	Sarbanes Oxley
Corp Social Responsibility	Gender	Selection Socialization
Corrupt	Harassment	Sensitivity
Corruption	HealthSouth	Social Desirability Resp Bias
Creative Accounting	Honor Code(s)	Social Responsibility
Credibility	Image Management	Social Influence
Criminal	Independence	Social Justice
Crisis	Injustice	Stakeholder(s)
Critical Thinking	Insider Trading	Tax Avoidance
Defalcation	Integrity	Tax Evasion
Deficient	Intrusion	Taxpayer Compliance
Defining Issues Test	Justice	Taxpayer Non-Compliance
Demise	Legitimacy	Tone at the Top
Deterrence	Machiavellianism	Transparency
Dilemma	Manipulation	Treadway Commission
Disclosure	Materiality	Trust
Discreditable	Minority	Underreport(ing)
Discrimination	Misappropriation	Unethical
Dishonest (y)	Misleading	Values
Diversity	Misrepresentation	Violations
Duty(ies)	Moral	Virtue
Earnings Management	Moral Autonomy	Whistle Blowing
Enron	Moral Development	WorldCom
Environmental	Moral Intensity	Wrongdoing(s)
Epicureanism	Moral Judgment	Wrongful

identified had some form of the word ethics in the title or abstract (i.e., the authors identified it as an ethics article).

The *fourth* step in the process was to identify the accounting authors for each of the articles having a significant ethical component. We used Hasselback's (2006) *Accounting Faculty Directory* to identify the names of graduates from doctoral programs who teach at universities and colleges in North America. All authors who published article(s) in either the 26 business-ethics journals or in any of the Top-40 journals were included in the article counts used for data analysis provided they were teaching at an institution in the United States or Canada. Even after using Hasselback's directory, we still had between 300 and 400 unidentified authors. We identified the affiliation of these authors using a variety of procedures. We looked for other articles written by the same author that cited the author's institution or employer (i.e., this was often the case for practitioners). We also did web searches using combinations of the author's name and accounting; as a last resort, we inquired about the author from a coauthor.

Variables

In the analysis, we use the very liberal full-credit articles rather than the more conservative coauthor-adjusted articles as ways of counting publications. Full-credit article count gives each author on an article ''full credit'' for the authorship (i.e., no adjustment is made for the number of authors). Coauthor-adjusted article count adjusts the credit for the number of authors (i.e., two authors – half credit for each author, three authors – one-third credit for each author). When evaluating our research question of whether the number of authors is large enough to cover an across the curriculum to teaching ethics, we use the full-credit count method (i.e., more liberal method). We elected to use full-credit articles so that the one article requirement was free from the controversy that might result when considering the order of authors. Additionally, the use of full-credit articles is also the current norm of AACSB teams when determining academic qualification.

Accreditation Status

One would anticipate that most doctoral faculty would choose to be at an AACSB accredited institution as a matter of esteem (i.e., *US News & World Reports* college rankings) and the fact that these institutions generally offer better salaries (AACSB, 2007). Consequently, in order to capture the impact

of AACSB on ethics research, this study controls for the AACSB accreditation status of an institution. There are 448 AACSB accredited institutions (AACSB, 2005) in North America – 431 (17) in the United States (Canada); there are 452 institutions that are not AACSB accredited (Hasselback, 2006) – 426 (26) in the United States (Canada). For the authors' education level, we relied on the data in Hasselback's *Accounting Faculty Directory 2006–2007* (2006). We counted the number of accounting faculty with PhD's and DBA's to use in the analysis. This search revealed that 84 (16) percent of the 4,632 accounting PhDs/DBAs in North America are at institutions that are (not) accredited by AACSB. On average, the 448 AACSB accredited institutions have 8.7 PhDs/DBAs compared to 1.6 PhDs/DBAs at the 452 institutions that are not accredited by AACSB. While the institutions with a higher number of PhDs/DBAs dominate the AACSB accredited category, there are 84 (18.3 percent) AACSB accredited institutions that have three or fewer PhDs/DBAs on their faculty.

ANALYSIS

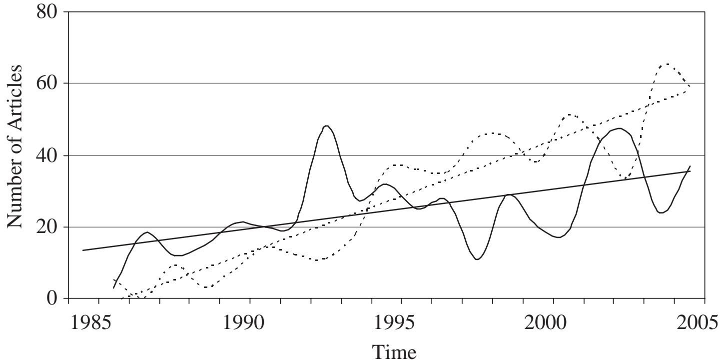
Overview

Our analysis section follows our three research questions. The first section examines the level of ethics research in both accounting's Top-40 journals and business ethics journals between 1986 and 2005. This part of the analysis was undertaken to determine whether colleagues who are not familiar with the content of ethics journals are exposed to a similar level of accounting ethics research in accounting's Top-40 journals as colleagues who are familiar with both sets of journals. The second section compares the level of ethics research between AACSB accredited institutions and those institutions that are not accredited by AACSB. Finally, the third section assesses the level of ethics research to determine whether there is sufficient ethics research to support a discipline-specific ethics course or whether the level of ethics research suggests an across-the-curriculum approach to covering ethics in the accounting curriculum.

Level of Ethics Research (RQ1)

Panel A of Fig. 1 shows the changes in ethics publications for accounting faculty members for the 20-year window in accounting's Top-40 (solid line)

Panel A: Between 1986 and 2005



Panel B: Between 1996 and 2005

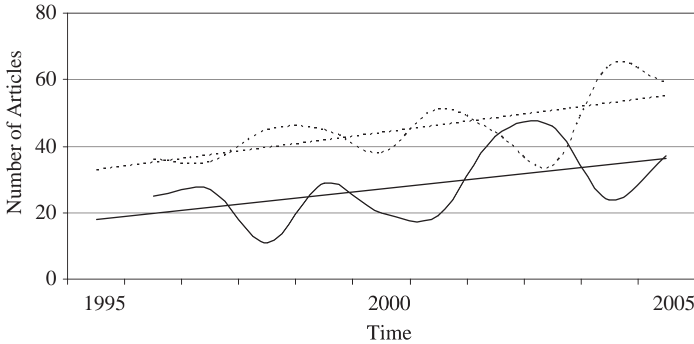


Fig. 1. Ethics Publications. (A) Between 1986 and 2005, and (B) Between 1996 and 2005. Solid Lines, Publications in Top-40 journals; Dotted Lines, Publications in the 26 business ethics journals; Straight Lines, Regression Lines.

and business ethics (dotted line) journals between 1986 and 2005. The statistically generated trend lines (straight lines) indicate the rate of increase for ethics publications in both groups of journals across the 20-year period. The number of ethics publications in Top-40 accounting journals between 1986 and 2005 increase from 3 to 37 articles over the 20 years – a rate of 1.7 articles per year. In contrast, the number of ethics publications in business ethics journals increased from 5 to 59 articles over the same 20 years – a rate of 2.7 articles per year. The growth rate for accounting ethics articles in business ethics journals increase by a full article per year faster than accounting's Top-40 journals.

Panel B of Fig. 1 shows the changes in ethics publications for accounting faculty members between 1996 and 2005.[5] Accounting's Top-40 journals published an average of 28.1 ethics articles during this 10-year period. Business ethics journals published an average of 45.1 ethics articles during the same ten-year period (i.e., 56.8 percent higher than the Top-40+ journals). The statistically generated trend lines also indicate that approximately 63 percent of the ethics research between 1996 and 2005 was published in business ethics journals.[6]

Number of Ethics Authors (RQ2)

As of year end 2005, there were 448 AACSB accredited institutions in North America (AACSB, 2005) – 431 (17) in the United States (Canada). In addition, there were also 452 institutions that were not AACSB accredited (Hasselback, 2006) – 426 (26) in the United States (Canada). To determine the authors' education level, data were provided by Hasselback's *Accounting Faculty Directory* (2006). We can examine the data from either the perspective of an author's location at the end of 2005 (Panel A of Table 1) or in discrete five-year periods (Panel B of Table 1) (i.e., the author's location at the end of each of four periods). The data in Panels A and B provide a baseline for determining whether institutions respond to AACSB's (2004) call for ethics research in the future.

While some would argue for a liberal 20-year envelope for counting ethics research, others could argue for a more conservative period such as 15 or 10 years (or even the 5-year window used by AACSB). Consequently, Panel A provides data in four different time increments: 1986–2005 (20 years), 1991–2005 (15 years), 1996–2005 (10 years) and 2001–2005 (5 years). The data in Panel A indicate that 63.6 percent AACSB accredited institutions in the United States and Canada had at least one accounting faculty member who has authored an ethics article in the past 20 years (1986–2005). This proportion decreases to 41.3 percent if one limits the research window to the corresponding five-year period (i.e., 2001–2005). This data also indicate a 22.3 percent decrease (i.e., from 63.6 percent or 285 institutions to 41.3 percent or 185 institutions) occurs when the research envelope is decreased from 20 to 5 years. For those institutions that are not AACSB accredited, 15.4 percent have an accounting faculty member who has authored an ethics article in the past 20 years (1986–2005).[7]

One might also wish to examine the data in five-year time periods to determine whether the level of ethics research has increased over time. Consequently, Panel B provides data in discrete five-year increments

Table 1. Ethics Authors Teaching at Institutions in the United States and Canada.

Category Timeframe	Number of Ethics Authors at Institutions in the United States and Canada					Percent of Schools	
	One	Two	Three	Four	Five or more	With authors	Without authors
Panel A: Twenty, Fifteen, Ten and Five Year Research Window							
AACSB accredited							
1986–2005 (448)	121	80	39	21	24	63.6	36.4
1991–2005 (448)	115	79	39	15	16	58.9	41.1
1996–2005 (448)	112	70	29	15	15	53.8	46.2
2001–2005 (448)	113	48	13	9	2	41.3	58.7
Remaining schools							
1986–2005 (452)	52	14	2	1	0	15.4	84.6
1991–2005 (452)	50	12	2	1	0	14.5	85.5
1996–2005 (452)	50	11	1	1	0	14.1	85.9
2001–2005 (452)	29	2	1	0	0	7.1	92.9
Panel B: Five-Year Research Windows: 1986–1990, 1991–1995, 1996–2000 and 2001–2005							
AACSB accredited							
1986–1990 (269)	46	14	2	1	0	23.4	76.6
1991–1995 (313)	77	33	7	3	1	38.7	61.3
1996–2000 (380)	94	47	15	5	8	44.5	55.5
2001–2005 (448)	113	48	13	9	2	41.3	58.7
Remaining schools							
1986–1990 (631)	26	2	3	0	0	4.9	95.1
1991–1995 (587)	29	6	1	0	0	6.1	93.9
1996–2000 (520)	43	6	1	0	0	9.6	90.4
2001–2005 (452)	29	2	1	0	0	7.1	92.9

Note: Data in parentheses, Number of institutions in that category (total is 900 institutions).

1986–1990, 1991–1995, 1996–2000 and 2001–2005. The Panel B data indicate that twice as many AACSB accredited institutions had a faculty member who had authored an ethics article in the 2001–2005 timeframe as in the 1986–1990 timeframe (i.e., 23.4–41.3 percent). During the same period, the number of accredited institutions increased from 269 to 448. For those institutions that are not AACSB accredited, the same relative increase occurred between the two periods (i.e., 4.9–7.1 percent).[8]

The data indicate that, while the number of schools with ethics authors increased by 15.3 percent (23.4–38.7) between the earliest two groups in Panel B, the increase decreased substantially after 1995. The increase (decrease) was only 5.8 (−3.2) percent between the 1991–1995 and 1995–2000 (1995–2000 and 2001–2005) groups.

Table 2. Regression Models.

Model	Adjusted R^2	F Factor	Significance	Term	Coefficient	T Stat	P-value
Panel A: Regression for 2001–2005 (5 years)							
Regression	.235	92.84	<0.001	NumPhds	0.06	10.80	<0.001
				Accreditation	0.09	3.09	0.002
Panel B: Regression for 1996–2005 (10 years)							
Regression	.323	119.97	<0.001	NumPhds	0.10	14.31	<0.001
				Accreditation	0.12	3.03	0.002
Panel C: Regression for 1991–2005 (15 years)							
Regression	.364	170.31	<0.001	NumPhds	0.12	15.42	<0.001
				Accreditation	0.15	3.61	<0.001
Panel D: Regression for 1986–2005 (20 years)							
Regression	.396	206.14	<0.001	NumPhds	0.13	16.83	<0.001
				Accreditation	0.15	3.43	<0.001

Note: NumPhds, Number of PhDs and DBAs on faculty; Accreditation, AACSB accredited (1) not accredited (0).

The data in Table 2 Panels A through D show the regression models for an increasing window for ethics research (i.e., 5, 10, 15 and 20 years). As anticipated in our second research question, we found that, as the number of faculty members with doctorates on faculty increased, the estimated number of ethics authors at an institution in all four models ($p<0.001$). We also anticipated a difference in the level of ethics research between accredited and non-accredited institutions in research question three; each of the four models in Table 2 confirms this. Even after controlling for the number of doctorates on faculty, an institution's accreditation status was significant ($p = 0.002$ in Panels A and B, and $p<0.001$ in Panels C and D). While the number of faculty associates with the number of authors who have written an ethics article for all four time periods ($p<0.001$), 13 (9) of the 63 AACSB accredited institutions with 15 or more accounting faculty do not have (have only one) an accounting ethics author – 20.6 (14.3 percent) percent. This proportion decreases to 9.7 percent when the research envelope is decreased from 20 to 5 years.

Approach to Covering Ethics in the Curriculum (RQ3)

The data in Table 3 Panels A and B convert the data in Table 1 for the 2001–2005 timeframe to a percent of schools basis. While we chose this

Table 3. Percent of Institutions with Ethics Authors in the United States and Canada.

PhDs on Faculty	Number of Ethics Authors					
	None	One	Two	Three	Four	Five or more
Panel A: Percent of AACSB Schools 2001–2005 Research Window						
21+ (18)	22.2	16.7	22.2	22.2	11.1	5.6
16–20 (29)	55.2	17.2	13.8	10.3	3.4	0.0
11–15 (84)	50.0	33.3	7.1	3.6	4.8	1.2
6–10 (173)	54.9	26.6	15.6	1.7	1.2	0.0
1–5 (144)	73.6	21.5	4.9	0.0	0.0	0.0
None (0)	na	na	na	na	na	na
Panel B: Percent of Remaining Schools 2001–2005 Research Window						
21+ (0)	na	na	na	na	na	na
16–20 (2)	0.0	100.0	0.0	0.0	0.0	0.0
11–15 (2)	50.0	0.0	50.0	0.0	0.0	0.0
6–10 (15)	80.0	6.7	13.3	0.0	0.0	0.0
1–5 (131)	91.4	8.6	0.0	0.0	0.0	0.0
None (302)	0.0	0.0	0.0	0.0	0.0	0.0

Note: Data in parentheses, Number of institutions in that category (total is 900 institutions).

timeframe because AACSB uses a five-year window for publications, it is important to remember that we are using a one publication standard (i.e., schools are counted if one of their faculty members has at least one coauthored ethics publication). The Table 3 data indicate that the largest accounting programs (i.e., those with 21 or more PhDs) have a smaller percentage in the none-to-two author categories and a proportionally larger percentages in the three-to-five or more categories. Programs with 6-to-20 PhDs on faculty have very similar percentages in all categories, while 73.6 percent of the programs with one-to-five PhDs have no ethics scholars on their faculties.

For the AACSB accredited schools, the data indicate that 41.3 percent (Table 1) have a faculty member with one or more ethics publications; consequently, our data indicate that only these schools are capable of delivering a discipline-specific ethics course if one uses publications as the only assessment tool. While the number of faculty with ethics publications increases with the number of PhDs on faculty, it is important to remember that additional faculty lines is a surrogate for enrollment and majors in accounting. Consequently, the proportion of ethics authors to students may not differ by category.

Our data support an across-the-curriculum approach to ethics coverage for AACSB accredited schools. Similar to the data in Table 1, the data in Table 3 indicate that only about seven percent of the schools that are not AACSB accredited could offer a discipline-specific ethics course. Using a five-year research window, this still does not address the 58.7 percent of the AACSB schools and 92.9 percent of the remaining schools without an ethics scholar to act as an ethics coordinator – 683 schools (75.9 percent) of the 900 schools in the United States and Canada.[9]

Additional Analysis

To test whether the results change for varying journal sets (Bonner, Hesford, Van der Stede, & Young, 2006), we dropped the top five and bottom five from the total article counts shown in Panel A of Fig. 1 for the Top-40 journals. Dropping the top-five journals created an average decrease in the trendline of 3.8 articles per year. However, when the bottom five journals were dropped, the trendline decreased by an average of 10.5 articles per year (i.e., nearly three times more than the top-five journals). Consequently, a disproportionate share of the ethics articles were published in the bottom five journals: *Research on Accounting Regulation*, *The CPA Journal*, *Management Accounting/Strategic Finance*, *Accounting and Finance* and the *Accounting Educators' Journal*.

DISCUSSION

This research is descriptive and enables future researchers to measure and assess the extent of ethics research by establishing a baseline. It can also be used to evaluate activities whose purpose is to encourage future ethics research. A judgment on the impact of AACSB's encouragement for institutions to demonstrate both a teaching and research emphasis on ethics and NASBA's proposal to require ethics courses as part of the accounting curriculum is premature at this time.

Although the data in Panel B of Fig. 1 indicate similar rates of increase in ethics research between 1996 and 2005, the data also suggest that about 63 percent of the ethics research between 1996 and 2005 appears in business ethics journals that are typically out of the mainstream of most colleagues' readings. Consequently, many of our accounting colleagues are unaware of 63 percent of accounting's ethics research. While some might attribute this

to researchers reading only journals and articles in their own areas of interest, in reality, there are areas of research that are important to auditors (and thus those who teach auditing) that are not included in any Top-40 journal. For example, the area of confidentiality is not questioned in Top-40 journals, whereas considerable research has been done in this area in ethics journals (Arnold, Bernardi, Neidermeyer, & Schmee, 2005; Farrell & Cobbin, 2000; Adams, Malone, & James, 1995; Claypool, Fetyko, & Pearson, 1990). Would anyone maintain that debate in this area is not cogent or that these confidentiality articles were not submitted to at least one Top-40 journal prior to being submitted to an ethics journal?

While the data indicate an increased level of accounting ethics scholarship as demonstrated in publications, the data also indicate a shortfall in the number of ethics scholars if one considers a discipline-specific ethics course to covering ethics. Specifically, the data indicate an average of one or two ethics scholars per school for 41.3 percent of the AACSB accredited schools. This level of expertise should be sufficient to provide adequate expertise if schools adopted a stand-alone ethics course as their methodology to covering ethics. However, when discussing the level of ethics scholarship at AACSB accredited schools (Table 1), faculty size should also be considered. In this regard, one should also remember that larger accounting faculty sizes typically correspond to more undergraduate students that are accounting and other business majors. Consequently, larger faculties should have a higher number of ethics scholars to maintain a set proportion. Given this, our data suggest a rather uniform proportion of ethics scholars throughout AACSB accredited schools. The data suggest that, while this proportion may be sufficient to cover a discipline-specific accounting ethics course, it is probably insufficient to ensure adequate across the curriculum coverage of ethics if one were to require all colleagues to have ethics publications. Consequently, our data suggest that AACSB accredited schools might consider having accounting faculty member(s), who can demonstrate a foundation in ethics scholarship, act as a coordinator for ethics. This coordinator(s) would be responsible for training accounting faculty, developing curriculum standards and assessing outcomes in ethics (i.e., not all instructors at a school need to be published in ethics if an ethics coordinator system is adapted). However, 683 (546) schools or 75.9 (60.6) percent of the 900 schools in the United States and Canada do not have an ethics scholar if one uses a 5-year (20-year) research window.

The authors believe that if there was a required course(s) devoted entirely to accounting ethics, the likelihood of having accounting faculty who

specialize in ethics would increase, which would probably increase the level of ethics research in accounting. Fostering ethics research might also be accomplished by including an accounting ethics journal in our Top-40 list. The second suggestion reflects the need to have incentives for doctoral candidates to consider ethics as the focus for their dissertation and future stream of research. While doctoral programs typically require at least two statistics courses, how many of these programs require our future educators to take at least one ethics course? Finally, the renewal, tenure and promotion process should value ethics scholarship not just publications in Top-40 journals.

With respect to the issue of why the bottom five journals on accounting's Top-40 list published three times as many articles as the top-five journals, economic naturalism dominates the preferred methodology in accounting's top-five research journals, which relegates ethics research to being uninteresting or irrelevant (see Shearer, 2002; Williams, 2000, 2004). It is important to note that the journals most open to publishing ethics research (i.e., an area of research that might have made the profession more sensitive to the potential of fraud and thus avoided scandals such as Enron, WorldCom etc.) are ranked at the bottom of accounting's Top-40 journal-rankings list. One can only speculate the effect these publications might have had had they been published in accounting's top-five journals.

The primary limitation of our research is that we only consider ethics articles appearing in business ethics journals and in accounting's Top-40 journals. Two potential areas for future research are evident from this study. First, research could examine how publication rates per faculty member in ethics compare to publications in other accounting sub areas. Second, future research could also survey accounting department chairs to investigate whether or not there is a link between publishing ethics and their reward structure.

NOTES

1. The authors are involved in several research projects and alternate lead author responsibilities; the authors contribute equally to all of their published work.

2. While these are self-reported data, the literature in social desirability response bias indicates that these percentages are most likely understated.

3. Three practitioner journals are on accounting's Top-40 list: the *Journal of Accountancy*, The *CPA Journal*, and *Strategic Finance/Management Accounting*.

4. From an actual count of the North American faculty members with ampersands (CPA or CA) and asterisks (CMA) in Hasselback's *Accounting Faculty Directory 2006–2007* (2006).

5. A possible explanation for the 2002–2003 is that the Top-40 journals may have been more open to ethics articles in the wake of Enron and Arthur Anderson, and *Research on Professional Responsibility and Ethics in Accounting* was not published in 2003.

6. In Fig. 1 (Panel B), note that the publication trendline for Top-40 (business ethics) journals goes from 20 (35) publications in 1996 to 35 (60) publications in 2005 – or about 63 percent:

$$1996 : 35/(20 + 35) = 63.6 \text{ percent}$$
$$2005 : 60/(35 + 60) = 63.2 \text{ percent}$$

7. The number of faculty associates with the number of authors who have written an ethics article for all four time periods ($p < 0.001$). However, 13 (9) of the 63 AACSB accredited institutions with 15 or more accounting faculty members do not have (have only one) an accounting ethics author – 20.6 (14.3 percent) percent.

8. While one might attribute this increase to the increased number of AACSB accredited schools, the data in Fig. 1, which does not discriminate between accredited and non-accredited schools, indicate a real doubling of the level of ethics research.

9. If a 20-year research window is used, the data change by about 15 percent overall. For example, 36.4 percent of the AACSB schools and 84.6 percent of the remaining schools are still without any ethics scholars (i.e., about 546 schools or 60.6 percent of the 900 schools in the United States and Canada).

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