

THE ACCOUNTING ETHICS COURSE RECONSIDERED

William Miller

College of Business
University of Wisconsin, Eau Claire
Eau Claire, Wisconsin
USA

D'Arcy Becker

College of Business
University of Wisconsin, Eau Claire
Eau Claire, Wisconsin
USA

Aimee Pernsteiner

College of Business
University of Wisconsin, Eau Claire
Eau Claire, Wisconsin
USA

ABSTRACT

The debate on the effect of teaching ethics to accounting students has continued for decades. Prior studies on the effects of covering specific types of content on student ethics, including ethics theory and professional codes with accounting-specific cases and examples, have produced mixed results. This study examines the impact of a semester long accounting ethics course which incorporates a formal 'Ethics Education Framework and associated Toolkit' on students' ethical development

The authors would like to acknowledge the students from UWEC who participated in the study, Dennis Blin (editor), and the reviewers, for their helpful comments that greatly improved this paper.

(whether the students' know what is ethical), sensitivity/awareness (whether the students' recognize ethical issues) and intent (whether the students' would take ethical actions). This research differs from other research in this area in that it appears to be the first to measure the benefits of a complete framework, rather than the benefits from just one or two specific types of content. Senior accounting majors completed an accounting ethics course after completing many courses with some integrated ethics content. If integrated ethics content had sufficiently developed students' ethical development, sensitivity/awareness and intent, completion of this ethics course would not impact students' measures in these areas. Using a pre-test, post-test design, we found that this ethics course had a statistically significant impact on students' ethical development, sensitivity/awareness and intent. We find incremental value from an accounting ethics course like this for students in an accounting program with integrated ethics content. The question may not be whether we improve student ethics more by integrating ethics or teaching a stand-alone accounting ethics class, but what ethics content needs to be included in the curriculum to consistently and positively promote ethical action.

Key words: Accounting ethics, multi-dimensional ethics scale (MES), defining issues test (DIT), teaching ethics

Data availability: Data are available upon request from the first author

INTRODUCTION

The current business and economic climates seem to have strengthened interest in accounting student ethics by those outside of accounting (e.g. Korn, 2013). While we may tend to see this as a 'sign of the times', Roberts (2010) points out that the 1930s were also marked by economic crisis, governmental regulatory response and significant accounting and audit failures. A concern over ethics is nothing new to accounting; there has long been a strong interest in ensuring that ethics permeates all aspects of the profession.

Accounting research has addressed many issues related to teaching accounting ethics. Investigations in this area have addressed a continuum of interlocking questions. Broadly considered, those questions are: should / can ethics be taught, what are the best methods of teaching ethics, and how / can we measure the impact of teaching ethics.

There are no consistent answers to any of these questions. The variability in prior research results, and lingering doubts about the propriety and feasibility of making significant changes to ethics training for accounting students, have contributed to the general lack of progress in advancing the training. It seems that for every study showing one method or piece of content improving student

ethics there is a counter-balancing study poking holes from either a methodological or a practical point of view.

Our study proposes a slightly different answer to some of the questions raised in prior research. We use a pre-test, post-test design to investigate effects of a semester-long accounting ethics course, modeled after the Ethics Education Framework (EEF) and Toolkit created from the work of the International Accounting Education Standards Board (IAESB), on the ethical development (do you know the ethical thing to do), ethical sensitivity/awareness (do you know when an ethical dilemma exists) and ethical intent (would you take the ethical action) of students. While previous studies have looked to measure the benefits of teaching ethics in general, or to coverage of specific ethical content, this study appears to be the first of its kind to try and measure the efficacy of following a complete framework like the EEF. We find a significant positive impact to student ethical development, sensitivity/awareness and intent. Our findings provide support to researchers who have previously suggested that ethics education needs to incorporate theory, values, professional responsibilities, awareness and judgment in order to promote actual ethical action (Dellaportas, 2011; Cooper et al., 2008). We link our methods to prior research, and believe our method poses a strong test of the efficacy of a stand-alone accounting ethics course which covers the EEF.

The next sections of the paper examine the underlying accounting ethics literature, propose hypotheses, explain our methods and results, discuss our conclusions, and identify study limitations and opportunities for future research.

PRIOR LITERATURE

Why Teach Ethics

Interest in accountants' ethics education comes from many parts of society, and this interest is heightened each time there is a new discovery of a financial fraud. After all, one of the only commonalities among all people who commit fraud is that they have gone to school (Ryan and Bisson, 2011). Therefore, school seems to be a logical place to turn to address ethics problems. Education has been shown to have a consistent and positive impact on ethical development of future accountants (Dellaportas, 2006). There is a general supposition that if accountants were better educated about ethics, there would be less fraud (Earley and Kelly, 2004). We believe this is true to some degree, although the extent to which it is true cannot be precisely known since many frauds occur outside the watchful eye of auditors or accountants.

Kohlberg (1969) provided a theoretical foundation for a significant body of ethics education research when he theorized that cognitive development occurs in stages and implied that ethics training could move students further along the ethics continuum. That is, students' ethical development need not be considered complete upon their entry into college. That same year, the Association to Advance Collegiate Schools of Business International (AACSB) added ethics training to its common body of knowledge requirements for all accredited business schools (Madison and

Schmidt, 2006). These events provided both the incentive to conduct research on teaching ethics in accounting and a theoretical focus for this work.

Over the past 40 years, there has been controversy about whether ethics can (or should) be taught. Some people believe ethics need not be taught because students who learn the applicable laws for their profession will know what actions to take; others believe we must teach ethics to help ensure students learn to act within the intent of those laws (Bishop, 1992). Proponents of ethics education appear to be winning this battle; over 90% of U.S. business programs provide some type of ethics instruction (Stark, 1993).

Ethics: What Should be Taught and How?

Another major theme in accounting ethics education is ‘what should be taught?’ Should we cover only the AICPA Code of Professional Conduct and similar sets of rules, or should we also cover ethical and moral theories (e.g. Dellaportas, 2006)? Should ethics training consist of classroom training alone or should it include supplemental, practical training (e.g. Liu, Yao and Hu, 2012)? These two are among many papers in this area.

Another much-debated issue is whether the training should include integrated coverage (across the curriculum) or stand-alone ethics courses. The AACSB and National Association of State Boards of Accountancy (NASBA) allow ethics to be covered through an integrated program of content across the accounting curriculum. Integration creates less drag on the accounting curriculum than standalone courses; ethics content can be added this way without displacing significant amounts of accounting content. There have been periodic discussions about NASBA requiring separate ethics course(s) as a CPA exam requirement (e.g. Bean and Bernardi, 2007), but they were met with strong opposition from both the profession and university accounting programs and failed to gain traction (e.g. Madison and Schmidt, 2006). In fact, Madison and Schmidt (2006) surveyed accounting department chairs and found that very few felt they could afford separate accounting ethics courses (less than 10% of AACSB schools in their survey had an accounting ethics course requirement); integration was implemented by default.

Accounting program willingness aside, the effectiveness of stand-alone ethics courses in accounting has been the topic of many studies. For example, one possible way to provide a separate ethics course while causing relatively little disruption to a curriculum is to offer a short course (a course lasting less than one full semester). For example, Ritter (2006) investigated the impact of a short-term ethics course and found little impact. A short course may be unable to cover ethics in sufficient depth. The marginal impact of full-semester ethics courses has also been studied; results have been mixed. The impact of these courses has been found to be positive in some studies (e.g. Klimek and Wenell, 2011) and not in others (e.g. Earley and Kelly, 2004; Shawver, 2009).

Measuring the Impact of Ethics Education

Regardless of whether the training method is integrated or not, the ultimate goal is to help all accounting students obtain a high level of ethical decision making and incorporate that knowledge into their future profession (Jagger, 2011). A major obstacle to overcome in reaching this goal is identification of the right measures to use to determine training's impact. Care must be taken to ensure students receive the right messages; research has shown that limited ethics content in accounting texts may imply that ethics is an unimportant topic for accounting students (e.g. Puxty et al., 1994). As with all curriculum initiatives, it is a challenge to prove ethics training adds value, and to show the educational methods are valid by creating ways to quantify them (Korn, 2013).

For many years, measurement of the impact of ethics training centered on the Defining Issues Test (DIT) of Rest (Rest, 1986). The DIT is comprised of a series of questions to address six ethically challenging scenarios; the higher the DIT score, the higher the level of moral reasoning (via Kohlberg's six stages of moral development). Kohlberg's theory is that an individual's cognitive moral development progresses through a series of stages from childhood onward: moving from egoistic concerns through considering the needs of others, following societal norms and finally thinking in terms of the greater good. Individuals are influenced by all of these factors throughout their lives, placing more emphasis on some than others. The DIT measures which factors (from Kohlberg's stages) the respondent is using to answer the questions.

The DIT is well-respected and highly reliable. However, it may not be sensitive to cognitive development changes in all instances. Specifically, the DIT may not be able to capture the level of cognitive moral growth that occurs within a course (Shawver and Sennetti, 2009). If the DIT is most effective in measuring longer term (beyond the length of one course) cognitive development, studies purporting to show little impact of ethics training may simply have been unable to measure the effects of the training fully if they relied only on DIT results alone.

Fogarty (1995) proposed moving beyond the DIT as the only measure of ethics training outcomes. Rest et al. (1999) recommended measuring the impact of ethics training using more than one measure to ensure all aspects of the effect are captured. They addressed the benefits of combining moral development theory with schema theory. For example, when effects on changes in moral development as measured by the DIT (what students know) are marginal, effects on students' general schema for ethical decision making (what they would do) may be present. In such an instance, the effect of the training would be beneficial.

The Multidimensional Ethics Scale (MES) adds the ability to measure changes in or differences between both an individual's or a group's ethical sensitivity/awareness and ethical intent (awareness of ethical issues within a dilemma and whether they intend to 'do the right thing') (Cohen et al., 1996). The DIT and the MES capture different outcomes of ethics training. While the DIT measures general (non-situation specific) moral development, the MES measures relative levels of awareness and intent in regard to situation-specific outcomes (Shawver and Sennetti, 2009). So while the DIT results might be used to determine where an individual falls along Kohlberg's ethical

development scale (an absolute measure), the MES measurement of sensitivity and intent do not have a scale to compare to (a relative measure): the MES scores need to be compared with other MES scores (differences between individuals or groups, or changes between the same individual or groups- over time or the result of some intervention). Interventions that impact ethical sensitivity/awareness may be critical as a foundation for development of moral judgment (Jagger, 2011).

Impacting Ethical Development, Sensitivity/Awareness and Intent

The form the training should take to include effects on Development, Sensitivity/Awareness and Intent is unclear. Previous studies on the impact of numerous types of ethics training have shown inconsistent results. Fleming et al. (2009) found students' ethical reasoning improvements from ethics training tend to be in the same discipline area as the training. Additionally, professional, situation-specific ethics training have been shown to improve student ethics (e.g. Frank et al., 2010). This implies that situation-specific ethics training in accounting would have a desirable impact on students.

However, ethics interventions limited to auditing courses and a pedagogy that emphasizes the Professional Code of Conduct are not always conducive to increases in moral judgment development (Dellaportas, 2006; Lampe and Finn, 1994). Indeed, the most ethical action may not always conform to the relevant Code section (Mele, 2005; Scribner and Dillaway, 1989).

Many studies have investigated whether the use of cases on ethics provide the perfect medium for conveying professional, situation-specific ethics training that moves beyond the Professional Code of Conduct. Interestingly, these studies fail to consistently show significant improvements in DIT scores when using cases. For example, Wilhelm and Czyzewski (2006) found no significant improvement in DIT measures when accounting textbook case studies with ethical content were used in an introductory accounting course. In addition, Shaub (1994) criticized overreliance on ethics cases when teaching ethics; and, Armstrong (1993) argued, that cases without the tools for theoretical analysis do not consistently enhance students' ability to reason ethically.

If situation-specific materials, the Code of Conduct and cases are not enough, what is missing? Scribner and Dillaway (1989) proposed that limiting coverage of ethics to cases or codes of conduct fails to expose accounting students to the broad ethical dimensions of accounting practice. Further, simply introducing an ethical decision-making framework in addition to case studies may not be enough to address both theoretical and situation-specific ethics (Wilhelm and Czyzewski, 2006). Direct instruction on theoretical ethical analysis may also be needed to achieve a full range of ethics outcomes.

Ethics Education Framework and Toolkit

The 2004 AACSB Ethics Education Task Force (AACSB, 2004) and the International Accounting Education Standards Setting Board (IAESB), a standard setting body of the International

Federation of Accountants (IFAC) did ground-breaking work that led to a new approach to teaching ethics called the Ethics Education Framework (EEF). Cooper et al. (2008) developed an ethics toolkit and the EEF more fully; this framework was expanded in Dellaportas (2011).

The EEF is based on structural development theory and Rests' (1986) four component model of ethical development. This model proposes that ethics content address these four areas: Ethical Sensitivity/Awareness; Development; Motivation; and Character. The EEF enables students to move from acquisition of ethics knowledge to a broader understanding of ethics that includes awareness, judgment and behavior. That is, it should impact students' ethical development, ethical sensitivity and ethical intent. At the core of Rest's model is the theory that the four components work together to result in moral action. All four of these areas must be covered in order to result in moral behavior (Dellaportas, 2011). This relationship as depicted by Dellaportas can be seen in Figure 1. This may be part of the reason for mixed results in previous studies looking at whether a given approach to ethics teaching was successful in promoting ethical development of any kind or not: the interventions tested did not include all four parts of the EEF.

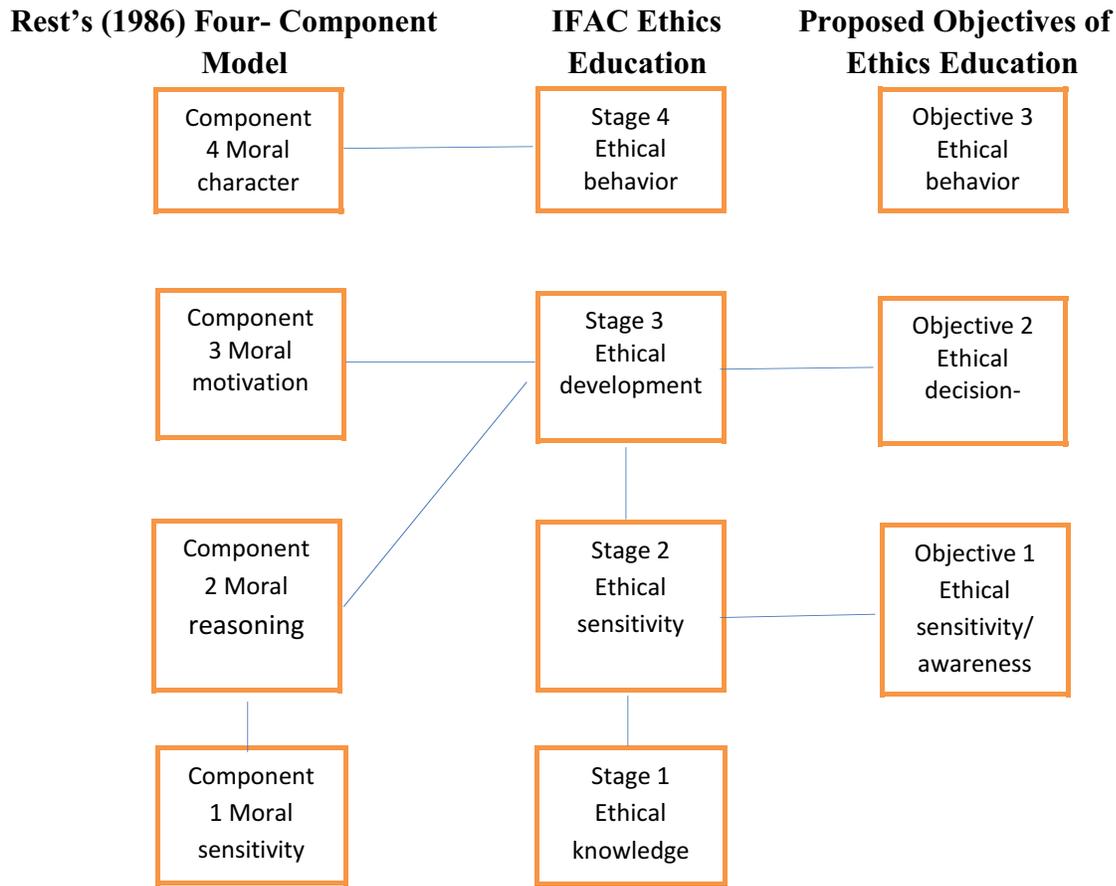
So far, few U.S. accounting programs appear to follow this model. In a study of U.S. accounting programs at 97 universities from 44 states, Miller and Becker (2011) found that most programs have very little coverage of ethical foundational topics including terminology, theory and decision-making models. Further, as explained in Tweedie et al. (2013), when theories are included they tend to be western culture-centric, leaving non-western culture ethics out. This study looks to determine whether a course designed around all four elements of the EEF will garner the benefits espoused by the IAESB, the AACSB, and others.

HYPOTHESES

Bampton and Cowton (2013) suggest ethics education in accounting move beyond the simple question of whether there is an impact and begin to help clarify the nature of ethics interventions that can have an impact: what sorts of interventions, in what combinations, under what circumstances and what sorts of people can be impacted. The EEF provides a basis for course design that makes both theoretical and academic sense. Prior research investigating the benefits of including some of the individual categories or elements within the EEF has found mixed results, but there does not appear to be any research which tests the validity of the benefits claimed by following a complete model like the EEF. This study appears to be the first to try to test the efficacy of the full EEF.

We implemented a course consistent with the EEF in a semester-long accounting ethics course. The topical coverage of this course includes all the topics suggested by Sadowski and Thomas (2012) as prescribed by the EEF. It also clearly covers each of the four stages of the EEF as described by Dellaportas (2011). Therefore, this course provides a test of whether a course that integrates the four components of the EEF will result in increases in a students' ethical development, ethical sensitivity/awareness and/or ethical intent.

FIGURE 1
Depiction of how the proposed objectives of ethics education are linked to the EEF and Rest's Four Component Model (Dellaportas, 2011)



Established measures were used to evaluate the impact of this ethics intervention. Using pre-and-post intervention measurements of both the DIT-1 and the MES, we measured the change in ethical development, sensitivity/awareness and intent to test the following hypotheses:

- H1:** Overall ethical development (Both P and N2 scores) as measured by the DIT-1 will increase as a result of ethics interventions in a one semester accounting ethics course.
- H2:** Ethical sensitivity as measured by the Composite MES for Sensitivity (Aggregate score for items 1-12) will increase as a result of ethics interventions in a one semester accounting ethics course.

- H3:** Ethical intent as measured by the MES for Intent (Items 13 & 14 individual and peer intent) will increase as a result of ethics interventions in a one semester accounting ethics course.

METHOD

Implementing the EEF: Course Design

In the Fall of 2009, this course was developed in a manner consistent with the four stages proposed by the EEF. The course is an elective that is completed at the end of an accounting curriculum that integrates ethics coverage across many accounting courses. The EEF provided guidance on the types of theoretical and rules-based information needed to help students progress in overall ethical development, ethical sensitivity/awareness, and intent.

There are benefits to offering an accounting ethics class near the end of a student's curriculum. The integrated ethics content prior to this ethics course may provide students with a pre-disposition to learn more sophisticated ethics content, allowing them to advance further than would be possible earlier in their careers. Further, since the course is taken late in the accounting curriculum, complex accounting topics with somewhat subtle ethical dilemmas can be addressed. See Appendix A for a complete listing of prerequisite courses.

Using an entire course to cover the EEF helps ensure there is enough exposure to the elements of the EEF to have the desired impact. Prior research on short ethics interventions has been mixed. Jones (2009) showed it is possible to impact student ethics in a shorter period of time, but Wilhelm and Czyzewski (2006) found no impact from a shorter ethics intervention. This semester-long ethics intervention provides maximum impact on students and has more promise for finding impacts on student ethics because there is time to cover theory, decision-making models, professional standards and cases.

Nearly all students in this semester-long course are fifth year accounting majors (the course is only open to accounting majors) who are within one or two semesters of fulfilling the 150 credit hours required for the CPA exam. The course content goes well beyond that of a typical audit or fraud course, utilizing the 'Ethical Obligations and Decision Making in Accounting' text by Steven Mintz and Roselyn Morris. In addition to the text, case studies (individual and group), articles from the financial press and various other readings were used (a detailed course schedule is available upon request). Among the other readings were the five suggested cases and six supplemental readings outlined in Jennings (2004) as seminal works that could be used to help future accountants and auditors understand dilemmas they will face and how to resolve them.

The course starts with coverage of the foundational knowledge suggested by Stage 1 of the EEF: defining ethics and the three primary genres of ethical theories – Virtue Based, Duties/Rights Based and Desire based. Some basic morally problematic cases are used to illustrate and discuss the theories. Supplemental readings are used to provide context and help facilitate a deeper understanding of the concepts. This includes a discussion of virtues embedded in accounting, including integrity as the cornerstone of all of our work. The course builds on that knowledge while applying it and referring back to it throughout the semester.

Next the course introduces EEF Stage 2 topics related to ethical sensitivity: Kohlberg's Stages of Moral Development and Rest's Four-Component Model of Morality (moral sensitivity, judgment, motivation and character). Supplemental readings are used to cover Kohlberg's Theory

of Moral Development in more detail, and the importance of the role of accounting in society. The concept of accountants as keepers of the public trust is also introduced.

Coverage includes the Professional Code of Conduct of the AICPA; AICPA ethics rules; the role of an audit and auditor; and, the role of accounting in society. Cases are used to promote students' ability to recognize ethical issues. Prior research has shown that coverage of accounting ethics without profession-specific coverage is unlikely to result in improved ethical development (e.g. Fleming et al. (2009); Frank et al. (2010)).

The course then shifts to the introduction of EEF Stage 3 content of Ethical Decision Making: several ethical decision-making models are introduced. While similar in content, the models vary somewhat in emphasis. For example, the model of Enomoto and Kramer (2007) emphasizes tensions between duties, desires and virtues of different stakeholders while Mintz and Morris (2008) emphasizes core values that apply to all stakeholders.

In stage 3, students analyze cases from the perspective of the theories from each of the three ethical genres introduced in Stage 1 and models from Stage 2. They consider the facts through the lens of various stakeholders, or stakeholder groups. As previously cited, prior research has shown that having students analyze cases without providing them with the tools for theoretical analysis is less likely to enhance their ability to reason ethically (e.g. Armstrong, 1993). It is the application of the theoretical genres that provides the efficacy of the decision making models. The objective at the conclusion of the Stage 3 material, is for students to know, understand and be able to apply ethical theories, be more sensitive to ethical issues and know how to analyze ethical issues they encounter.

Stage 4 of the EEF provides the motivation to actually do the right thing: to have the courage to act ethically. Students apply the concepts of the first 3 stages in increasingly complex accounting cases which include legal and regulatory obligations including SOX and other laws, and corporate governance issues. The coverage of typical ways in which accountants get themselves into trouble and specific real-life ethical failures from the accounting industry are important elements in this stage, as well.

It is through repeated analysis of accounting cases, integrating the application of the ethical theories and identifying ethical issues that students become motivated to do the right thing. Therefore, EEF stages 1-3 are introduced in the first half of this course but are revisited frequently throughout the integrative cases used in stage 4. This is an iterative process, not a linear one. The EEF does not imply sequential coverage of stages but rather a gradual build of one type of ethics knowledge upon the next. Further, (Dellaportas, 2011) states that practical implementation of the first 3 stages is needed for students to achieve maximum ethical development.

The course material is modified slightly every fall. While the core topics remain the same, the supplemental materials are expanded and refreshed to some degree. The introduction of the most current and relevant accounting related topics are chosen from the headlines for inclusion. In addition, this last semester each student had to bring in and share three accounting related ethical issues they had found in the news or in real life.

Participants

This study was conducted over three years at a large mid-western university; accounting ethics class enrollment varied from 19-30 students, resulting in 72 total participants (see Table 1). Participation in the study was voluntary; in the third year, the students received extra credit if they

TABLE 1

Participant Description

<u>Semester</u>	<u>Sample Size</u>	<u>Gender Mix (F/M)</u>	<u>Average Age</u>
Fall 2009	23	8 / 15	24.10
Fall 2010	19	12 / 7	24.05
Fall 2011	30	12 / 18	22.80

completed both the pre-course and post-course measures. The extra credit given amounted to less than 1% of total course points. This was done because the size of the testing instrument had grown and the instructor felt the time required to complete the survey might inhibit the willingness of the participants to complete it: 100% of the students in the class participated in each of the three years.

During the first two years of the study, only Hypothesis 1 was tested, in the final year all three Hypotheses were tested. While the DIT has been used for many years as a standardized testing instrument for ethical development, the idea of combining that measure with other measures only started to gain support around the time the course was originally developed. Therefore, additional measures were added in the final year of the study.

Measures

A pre-test, post-test design was used to look for impacts from this ethics course. Prior research showing students at the end of an accounting ethics course having higher levels of ethical reasoning (e.g. Klimek and Wenell, 2011) was unable to prove that the higher level of reasoning was due to the ethics course. It could simply be that the students had higher levels of ethical reasoning (for unknown or unidentified reasons) at the start of the ethics course. The use of a pre- and post-test design allowed us to focus on the change in the measures from the start until the end of the semester. While each student may be at a different place at the start of the course, it is the change which each of our hypotheses are testing.

To maintain anonymity, each student provided their own unique four digit code which they used when taking both the pre- and post-tests. This allowed us to match the pre-and post-survey results on a respondent-by-respondent basis, and yet protect the students' identities.

To investigate the full impact of an EEF-based ethics course, impacts on ethical development (knowing the right thing to do), ethical sensitivity (do you know when an ethical issue exists) and ethical intent (do you intend to take ethical actions) should be evaluated. The DIT-1 P and N2 were both used to measure changes in moral development. The MES was used to measure changes in both ethical sensitivity/awareness (items 1-12) and ethical intent (items 13 & 14). No correlation exists between the DIT and MES scores; that is, a given score on the DIT does not correlate to a particular score on the MES (Shawver and Sennetti, 2009).

The first section of the survey included the DIT-1, which calculates both a P-score and an N2 score for each participant. Both the P-score and N2 scores measure the "the relative importance a subject gives to principled moral considerations in making a decision about moral dilemmas" (Rest, 1986, Rest et al., 1997). For both measures, the higher the score, the more the subject relies on moral principles to make their decisions, than singular considerations like duties, desires, or social approbation. If a student's P and N2 scores have increased, their ethical development has increased.

Both the P and N2 scores were used to test Hypothesis 1: A student's ethical development will increase from taking this course. The N2 score is a newer score than the P score. Also developed by Rest, N2 is generally considered more accurate than the P score in measuring the importance given to moral considerations (Rest et al., 1997). For example, the P Score has been criticized in the past for its exclusion of data from lower stage responses. The N2 score is an improved index which incorporates this previously excluded data. While the P score measures only the acquisition of new thinking, the N2 also measures the systematic rejection of simplistic thinking (Rest et al., 1997). We used both the P and N2 scores to provide comparability of our results with those studies conducted prior to the creation of the N2, and to add reliability to our results. The responses collected for the DIT-1 (both the pre- and the post-results) were sent to the Office of the Study of Ethical Development at the University of Alabama in Tuscaloosa for scoring, who calculated the P-score and N2 score by respondent.¹

The second section of the survey contained the MES, which is comprised of three business vignettes validated through prior accounting ethics studies. The three vignettes include situations involving laying off a new hire or a long-term employee, shipping product early to meet a quarterly bonus, and loaning money to a friend. Appendix B contains all three vignettes. Appendix C contains the survey questions. Students evaluated the actions taken in each vignette according to five philosophical constructs (Justice, Relativism, Egoism, Utilitarianism and Deontology) by answering 14 questions rated on a seven point scale.

Decreases in the composite score for items 1 through 12 between pre- and post-tests indicate increased awareness that the situation contains ethical issues. Consistent with prior research, (e.g.; Shawver et al., 2006; Sennetti et al., 2004; Cohen et al., 2001), we used the Composite Score for MES-Sensitivity (items 1-12) to measure changes in ethical awareness in our analysis to test Hypothesis 2.

The MES also asks questions about students' Ethical Intent: whether they would take the action (item 13), whether their peers would take the action and whether they consider the action ethical or not (item 14). As the intent to act ethically increases, a student's scores for MES-Intent will increase. Consistent with the prior studies noted above, we use the results of these two items measuring MES Intent in our analysis of overall intent to test Hypothesis 3.²

The third section of the survey included one question regarding the students' ratings of their interest in the course content at the start and at the end of the course. The question was included to determine if students' interest in course content changed over time (we compared ethical development over 3 years of teaching this course). The question was ranked on a 5-point Likert scale (where 1 indicated Strongly Agree and 5 indicated Strongly Disagree). We compared the aggregate pre- and post-course scores for the course to determine if there was any significant variation in student level of interest in course content which might have skewed the answers they gave in taking

¹The scores are calculated from the students' responses to six vignettes. The six vignettes include the ethical dilemmas of stealing a drug to save the life of a dying spouse, turning in an escaped prisoner who appears to be a benefit to society, a principal's decision to stop the publication of a school newspaper, a doctor's decision as to whether to help a dying patient die or not, making of a hiring decision based upon race, and justifying breaking of the law by students protesting.

²Note that the MES-Intent questions 13 & 14 move in the opposite direction as the MES-Sensitivity Scores; lower MES-Sensitivity indicates more ethical sensitivity/awareness while higher MES-Intent indicates more ethical intent.

the surveys. We also used the post-course score as a co-variate in the analyses and found no impact on the results.

The last section of the survey included demographic information about the respondents including their gender, age, race, and political views. For purposes of this study, we will be focusing on the students' gender and political views as potential influences to the answers given.

RESULTS

In each of the results sections below, we did pre-test / post-test comparisons of the DIT-1 (P and N2 scores) for the 72 students who took the accounting ethics course over the three semesters studied (n of 19, 23 and 30 respectively). In addition, we compared the DIT, MES-Sensitivity/Awareness and MES-Intent results for the 30 students in Accounting Ethics in the final semester studied. We present the results for each of the 3 years (3 times teaching the course). In addition, as a part of a wider study, 60 other senior level accounting majors took this same survey in the third year of the study (during the same semester that the ethics class participants were surveyed). We compare the pre-test results of these other senior accounting students with the pre-test results of the accounting ethics students to determine if there is any significant difference in their starting points, given that the accounting ethics course is an elective course. This comparison was done to dispel any concerns that students choosing to take the elective ethics course are at a higher starting level of ethics than other fifth year accounting majors in this program. If they were, we would expect to find that their pre-test results would have shown them having higher ethical development, sensitivity/awareness and intent than other accounting students (since ethics is integrated throughout the accounting curriculum for these students).

There are many ways to judge changes in the DIT-1. Dellaportas (2006) proposed that a change of a mere 5 points in the score is indicative of a positive impact from a discrete ethics course. We used the average pre- and post-test DIT-1 P and N2 scores, and the average composite MES scores for Sensitivity/Awareness (questions 1-12) and individual question averages for Intent (questions 13 & 14) in our analysis.

TABLE 2

Results for Hypothesis 1 - DIT Ethical Development (Testing P Score)

<u>Measurement</u>	<u>Pre-Test P</u>	<u>Post-Test P</u>	<u>p-Value</u>
Fall 2009 (n=23)	29.42	47.74	.000
Fall 2010 (n=19)	32.86	45.68	.000
Fall 2011 (n=30)	34.28	44.17	.003

TABLE 3

Results for Hypothesis 1 - DIT Ethical Development (Testing N2 Score)

<u>Measurement</u>	<u>Pre-Test N2</u>	<u>Post-Test N2</u>	<u>p-Value</u>
Fall 2009 (n=23)	32.66	46.80	.000
Fall 2010 (n=19)	39.14	45.39	.010
Fall 2011 (n=30)	38.66	47.71	.001

TABLE 4

Results for Hypothesis 2 - MES Ethical Sensitivity

<u>Measurement</u>	<u>Pre-Test MES</u>	<u>Post-Test MES</u>	<u>p-Value</u>
Fall 2011	121.70	107.27	.006

Result for Hypothesis 1: Increased Ethical Development Using DIT-1

This hypothesis was tested in all 3 years. Separate DIT-1 analysis was completed for the P and N2 scores. In each of the three years, the overall P-Scores show statistically significant increases; see Table 2. The DIT-1 N2 score analysis yielded similar results; see Table 3. Students' level of overall ethical development was significantly higher at the end of this course than it was at the start of this course. Therefore, hypothesis 1 is supported for each of the three years.

Result for Hypothesis 2: Increased Ethical Sensitivity/Awareness Using MES

This hypothesis was only tested in 2011. The MES-S (items 1-12) went from 121.70 at the start of the semester to 107.27 at the end of the semester, which is a statistically significant improvement in ethical sensitivity ($p=.006$); see Table 4. Therefore, hypothesis 2 is supported.

Result for Hypothesis 3: Increased Ethical Intent Using MES

This hypothesis was only tested in 2011. Rather than using a composite score, each of these questions was evaluated separately for consistency with prior research. Question 13 'individual intent' went from 14.20 at the start of the semester to 16.13 at the end of the semester, which is a statistically significant improvement ($p=.023$); see Table 5. Question 14 'peer intent' went from 12.73 at the beginning of the semester to 14.13 at the end of the semester, which is also a significant improvement ($p=.029$). Therefore, hypothesis 3 is supported.

TABLE 5

Results for Hypothesis 3 - MES Ethical Intent

<u>Measurement - Fall 2011</u>	<u>Pre-Test</u>	<u>Post-Test</u>	<u>p-Value</u>
I would undertake the same action	14.20	16.13	.023
My peers would undertake the same action	12.73	14.33	.029

Sensitivity Analysis

We investigated the impact of two variables on the results reported above to determine if there could be alternative reasons for the results. The two variables we considered are student gender and student political views.

The potential impact of gender is important. For example, a significant body of research on student cheating has found gender effects. Generally, women are reported as more ethical in this regard (e.g. Becker and Ulstad, 2007). We added student gender to each of the ANOVAs reported above to determine if gender had a significant impact on these results. Results of that covariance analysis showed that gender was not significant for any of the results reported above.

Some researchers have suggested that political views of respondents can influence the results. Students with different political views may interpret the ethics training in different ways, impacting their ethical development, sensitivity and intent. We used a five point Likert-scale asking respondents 'In terms of your political views, how would you characterize yourself: Very Liberal, Somewhat Liberal, Neither Liberal nor Conservative, Somewhat Conservative or Very Conservative. Roughly 1/3 of the respondents viewed themselves as neither liberal nor conservative, with an even split of the remainder falling into either a conservative or liberal viewpoint. Less than 10% of all respondents viewed themselves as either very liberal or conservative. We used this self-rating as an indication of political views, and added this variable to the ANOVA on the DIT-1 scores as well as the MES-S and the two MES-I scores. Results of that covariance analysis showed that political view is not significant for any of the results reported above.

Finally, we compared pre-test ANOVA for P, N2, MES-S and two MES-I measures from the ethics students with those of the 60 other senior level accounting students who did not take the ethics course. Results showed that there was no significant differences in starting scores between the Ethics Class students and the Non-ethics Class students.

CONCLUSIONS AND FUTURE RESEARCH

This study showed that an accounting ethics course designed to cover the four stages of the Ethics Education Framework can be effective in increasing students' ethical development (knowing the right thing to do), ethical sensitivity/awareness (ability to recognize ethical components in a given scenario), and ethical intent (intention to do the right thing). A course designed to cover the four stages of the EEF must cover ethical theory, ethical decision making models, accounting specific practice standards and laws, while at the same time requiring the student to apply that knowledge to progressively more complex accounting specific morally problematic scenarios over an extended period of time.

We believe the course outcomes we achieved were caused by the course design. Not only were all 4 stages of the EEF included, they were studied iteratively over a period of time. Prior research has looked at the impact of ethics courses on student ethics, but those courses did not have content that addressed all four stages of the EEF. Further, we believe that ethical intent develops as a result of students gaining an increasingly sophisticated understanding of ethics as they are exposed to deeper and deeper challenges. Many prior studies on the impact of ethics training provided very little iterative practice and limited training periods.

The course in our study was taken by accounting seniors within two semesters of graduating with 150 credits; students had learned some ethics content throughout their required accounting curriculum. Our study implies that stand alone accounting ethics courses can successfully increase students' ethical development, sensitivity/awareness and intent beyond that received from the prevalent ethics integrated model.

However, we acknowledge that this is not a pure test of the integrated versus stand-alone accounting course controversy. The students in this course learned ethics under both methods; they took the stand-alone course after having had a typical level of integrated ethics coverage in their accounting curriculum. It would be interesting to test the impact of this course on students late in their accounting studies who have had no integrated ethics coverage. That would provide a more pure test of the impact of the EEF. As mentioned earlier, previous studies have shown that it is unlikely that accounting students' ethics could be impacted significantly by an ethics course they take before they learn a substantial amount of accounting. Therefore, we cannot recommend simply

adding an EEF-based ethics course to the start of an accounting curriculum and comparing results with students who learned ethics via the integrated method.

Another contribution of this paper is that it provides support for the EEF as a means of determining ethics course content for accounting students. Previous studies have had mixed results in regard to the efficacy of the typical ethics integration method: case studies without the requisite coverage of ethical theories or methodologies for analyzing the issues they highlight. While the AACSB does not mandate specific ethics-related content to include in the accounting curriculum, they do suggest the coverage of ethical theory and other foundational topics as important (AACSB, 2004). Our study provides support for this AACSB suggestion.

Further research into the length of time needed to have an impact on student decision-making may be necessary to determine the best course of action. For example, how much theory do instructors need to include in their courses in order to have a positive impact? How many cases should be assigned and analyzed? We did not manipulate various amounts of theory content nor the number of cases analyzed.

Similarly, we did not investigate whether one specific aspect of the theoretical content had the desired effect, or if it was the cumulative impact of the theory and case examples that had the desired effect. Future research could experiment with different elements of theoretical content to try to make strides in determining which theoretical content seems most effective, and why. For example, if only two of the three ethical genres were covered, would that have impacted the results?

Future research could also try to determine if the theoretical content needs to be in the same course with specific accounting cases. For example, can we introduce topics related to ethical sensitivity/awareness in one course and those related to ethical development in another? Can we achieve a high level of ethical intent in a capstone course when sensitivity/awareness and intent are taught in earlier courses? The answer to these questions would help accounting programs determine if results similar to ours could be found if students complete a non-business course that covers the theory of ethics, and a discipline-specific course that covers the situation-specific topics for their discipline.

Since this research was limited to ethics in accounting, additional research across other courses (business and nonbusiness) may provide insight in how to improve the impact on student decisions when the ethics training is integrated across several different courses. Could a general ethics course supplemented by an accounting course which covered the professional code of conduct produce similar results?

Financial reporting fraud did not end with the passing of the Sarbanes-Oxley Act of 2002; new cases arise almost every day. However, this study shows that it is possible to have a positive impact on a student's ethical decision-making process if the curriculum combines theory with professional codes including accounting-specific cases and examples in line with the EEF.

STUDY LIMITATIONS

Dellaportas (2006) proposes that teaching the DIT introduces contamination in the post-test DIT, but exposing students to Kohlberg's theories does not cause this contamination. This course did not teach the DIT, but did teach Kohlberg's theories, so this potential limitation was avoided.

A limitation to the study is the sample size. The sample size is relatively small, so the comparability of the study may be limited. This limitation is minimized to a degree by the consistency of the findings in relation to ethical development from semester to semester. Perhaps, the small *n* provides an opportunity for further studies in this area.

Another limitation is our inability to determine whether students answered the final ethics measures with social desirability response bias. That is, did the students know the answers we wanted them to give or did they provide answers that truly reflect their improved ethical understanding? We will measure this and include it in a future iteration of this course.

We are also aware that ethics courses based on models other than the EEF could yield similar results to those we found. We believe the comprehensive nature of the EEF is important, but there could be other ways to incorporate the elements in a course.

It is also possible that students who took this elective course had above average interest in the course content, making them more receptive to the lessons of the course. This concern is mitigated to a degree by our results showing that the starting scores of ethics students in the study did not differ from those of non-ethics class students at similar points in their accounting education. While we did not measure predisposition to ethics training (we are not aware of an existing scale that measures this), it seems logical that a predisposition would have resulted in a difference between these starting scores if one existed.

APPENDIX A

Prerequisite Courses to Accounting Ethics

College of Business Admission and Core:

- Accounting 1 and 2 (Introductory Financial/Managerial Accounting)
- Information Systems
- Micro and Macro Economics
- 4 Professional Development workshops
- Principles of Marketing
- Organizational Behavior
- Operational Management
- Business Law
- Diversity in the Workplace

Accounting Specific Coursework:

- Intermediate Accounting 1 and 2
- Cost Accounting
- Tax Accounting 1 – Individual Taxation
- Auditing

APPENDIX B
The Three Multidimensional Ethics Scale Vignettes

Vignette 1: A firm has been hard hit by recessionary times and the partners realize that they must scale back. An analysis of productivity suggests that the person most likely to be terminated is a longtime employee with a history of absenteeism due to illness in the family.

Action: instead, the partner in charge lays off a younger, but very competent, recent hire.

Vignette 2: A manager realizes that the projected quarterly sales figures will not be met, and thus the manager will not receive a bonus. However, there is a customer order which if shipped before the customer needs it will ensure the quarterly bonus but will have no effect on the annual sales figures.

Action: the manager ships the order to ensure earning the quarterly sales bonus.

Vignette 3: A promising start-up company applies for a loan at a bank. The credit manager at the bank is a friend of and frequently goes golfing with the Company's owner. Because of this company's short credit history, it does not meet the bank's normal lending criteria.

Action: the credit manager recommends extending the loan.

APPENDIX C
The MES Questions

- | | | |
|---|---------------|---|
| 1. Unjust | 1 2 3 4 5 6 7 | Just |
| 2. Unfair | 1 2 3 4 5 6 7 | Fair |
| 3. Not morally Right | 1 2 3 4 5 6 7 | Morally Right |
| 4. Not acceptable to my family | 1 2 3 4 5 6 7 | Acceptable to my family |
| 5. Culturally Unacceptable | 1 2 3 4 5 6 7 | Culturally Acceptable |
| 6. Traditionally Unacceptable | 1 2 3 4 5 6 7 | Traditionally Acceptable |
| 7. Not self-promoting for me | 1 2 3 4 5 6 7 | Self-promoting for me |
| 8. Not personally satisfying for me | 1 2 3 4 5 6 7 | Personally satisfying me |
| 9. Produces the least utility | 1 2 3 4 5 6 7 | Produces the greatest utility |
| 10. Minimizes benefits while maximizes harm | 1 2 3 4 5 6 7 | Maximized benefits while minimizes harm |
| 11. Violates an unwritten contract | 1 2 3 4 5 6 7 | Does not violate an unwritten contract |
| 12. Violates an unspoken promise | 1 2 3 4 5 6 7 | Does not violate an unspoken promise |
| 13. The probability that I would undertake the same action is: | | High 1 2 3 4 5 6 7 Low |
| 14. The probability that my peers would undertake the same action is: | | High 1 2 3 4 5 6 7 Low |
| 15. The action described above is: | | Ethical 1 2 3 4 5 6 7 Unethical |
| 16. Please specify why you feel this action is either ethical or unethical. _____ | | |

REFERENCES

- Armstrong, M. B. 1993. Ethics and Professionalism in Accounting Education. *Journal of Accounting Education* (Vol. 11) 77-92.
- Association to Advance Collegiate Schools of Business (AACSB) International. 2004. *Ethics Education in Business Schools: Report of the Ethics Education Task Force to AACSB International's Board of Directors*. (St. Louis, MO:AACSB).
- Bampton, R., and C. Cowton. 2013. Taking Stock of Accounting Ethics Scholarship: A Review of the Journal Literature. *Journal of Business Ethics* (Vol. 114, No. 3) 549-563.
- Bean, D. F., and R. A. Bernardi. 2007. Accounting Ethics Courses: Do They Work? *The CPA Journal* (Vol. 77) 64-68.
- Becker, D., and I. C. Ulsstad. 2007. Gender Differences in Student Ethics: Are Females Really More Ethical? *Plagiarism: Cross-Disciplinary Studies in Plagiarism, Fabrication & Falsification* (Vol. 2, No. 3) 40-49.
- Bishop, T. R. 1992. Integrating Business Ethics into an Undergraduate Curriculum. *Journal of Business Ethics* (Vol. 11, No. 4) 291-299.
- Chan, S., and P. Leung. 2006. The Effects of Accounting Students' Ethical Reasoning and Personal Factors on their Ethical Sensitivity. *Managerial Auditing Journal* (Vol. 21, No. 4) 436-457.
- Cohen, J. R., L. W. Pant, and D. J. Sharp. 1996. Measuring the Ethical Awareness and Ethical Orientation of Canadian Auditors. *Behavioral Research in Accounting* (Supplement) 98-119.
- _____, _____, and _____. 2001. An Examination of Differences in Ethical Decision-Making between Canadian Business Students and Accounting Professionals. *Journal of Business Ethics* (Vol. 30, No. 4) 319-336.
- Cooper, B. J., P. Leung, S. Dellaportas, B. Jackling, and G. Wong. 2008. Ethics Education for Accounting Students – a Toolkit Approach. *Accounting Education: An International Journal* (Vol. 17, No. 4) 405-430.
- Dellaportas, S. 2006. Making a Difference with a Discrete Course on Accounting Ethics. *Journal of Business Ethics*. (Vol. 65, No. 4) 391-404.
- _____. 2011. Developing an Ethics Education Framework for Accounting. *Journal of Business Ethics Education*. (Vol. 8) 63-82.
- Earley, C. E., and P. T. Kelly. 2004. A Note on Ethics Educational Interventions in an Undergraduate Auditing Course: Is There an Enron Effect? *Issues in Accounting Education* (Vol. 19, No. 1) 53-71.
- Enomoto, E. K., and B. H. Kramer. 2007. *Leading Through the Quagmire: Ethical Foundations, Critical Methods, and Practical Applications for School Leadership*. (Maryland, Rowman & Littlefield).
- Fleming, D., R. Romanus, and S. Lightner. 2009. The Effect of Professional Context on Accounting Students' Moral Reasoning. *Issues in Accounting Education* (Vol. 24, No. 1) 13-30.
- Fogarty, T. J. 1995. Accountant Ethics: A Brief Examination of Neglected Sociological Dimensions. *Journal of Business Ethics* (Vol. 14, No. 2) 103-115.
- Frank, G., E. Ofobike, and S. Gradisher. 2010. Teaching Business Ethics: A Quandary for Accounting Educators. *Journal of Education for Business* (Vol. 85, No. 3) 132-138.
- Jagger, S. 2011. Ethical Sensitivity: A Foundation for Moral Judgment. *Journal of Business Ethics Education* (Vol. 8) 13-30.
- Jones, D. 2009. A Novel Approach to Business Ethics Training: Improving Moral Reasoning in Just a Few Weeks. *Journal of Business Ethics* (Vol. 88, No. 2) 367-379.

- Klimek, J., and K. Wennell. 2011. Ethics in Accounting: An Indispensable Course? *Academy of Educational Leadership Journal* (Vol. 15, No. 4) 107-118.
- Kohlberg, L. 1969. Stage and Sequence: The Cognitive-Developmental Approach to Socialization. In D. A. Goslin (Ed.), *Handbook of Socialization Theory and Research*. (Chicago, Rand McNally).
- Korn, M. 2013. Does an 'A' in Ethics Have Any Value? *Wall Street Journal*. (Feb. 6, 2013) B4.
- Jennings, M. 2004. Incorporating Ethics and Professionalism into Accounting Education and Research: A Discussion of the Voids and Advocacy for Training in Seminal Works in Business Ethics. *Issues in Accounting Education* (Vol. 19. No. 1) 7-26.
- Lampe, J. C., and D. W. Finn. 1994. Teaching Ethics in Accounting Curricula. *Business and Professional Ethics Journal* (Vol. 13, No. 1/2) 89-128.
- Liu, C., L. J. Yao, and N. Hu. 2012. Improving Ethics Education in Accounting: Lessons from Medicine and Law. *Issues in Accounting Education* (Vol. 27. No. 3) 671-690.
- Madison, R. L., and J. J. Schmidt. 2006. Survey of Time Devoted to Ethics in Accountancy Programs in North American Colleges and Universities. *Issues in Accounting Education* (Vol. 21, No. 2) 99-109.
- Mele, D. 2005. Ethical Education in Accounting: Integrating Rules, Values and Virtues. *Journal of Business Ethics* (Vol. 57, No. 1) 97-109.
- Miller, W., and D. Becker. 2011. Ethics in the Accounting Curriculum: What is Really Being Covered? *American Journal of Business Education* (Vol. 4, No. 10) 1-10.
- Mintz, S., and R. Morris. 2008. *Ethical Obligations and Decision Making in Accounting: Text and Cases*. (McGraw Hill Irwin: 1st Edition).
- Puxty, A., P. Sikka, and H. Wilmott. 1994. (Re)forming the Circle: Education, Ethics and Accountancy Practices. *Accounting Education: an International Journal* (Vol. 3, No. 1) 77-92.
- Rest, J. R. 1986. *Moral Development: Advances in Research and Theory*. (New York, Praeger Publishers).
- _____, D. Narvaez, M. Bebeau, and S. Thoma. 1999. A Neo-Kohlbergian Approach: The DIT and Schema Theory. *Educational Psychology Review* (Vol. 11, No. 4) 291-324.
- _____, S. Thoma, D. Narvaez, and M. Bebeau. 1997. Alchemy and Beyond: Indexing the Defining Issues Test. *Journal of Educational Psychology* (Vol. 89, No. 3) 498-507.
- Ritter, B. A. 2006. Can Business Ethics be Trained? A Study of the Ethical Decision Making Process in Business Students. *Journal of Business Ethics* (Vol. 68) 153-164.
- Roberts, D. H. 2010. Changing Legitimacy Narratives about Professional Ethics and Independence in the 1930's Journal of Accountancy. *Accounting Historians Journal* (Vol. 37, No. 2) 122-128.
- Ryan, T. G., and J. Bisson. 2011. Can Ethics Be Taught? *International Journal of Business and Social Science* (Vol. 2, No. 12) 44-52.
- Sadowski, S., and J. Thomas. 2012. Toward a Convergence of Global Ethics Standards: A Model from the Professional Field of Accountancy. *International Journal of Business and Social Science* (Vol. 3, No. 9) 14-20.
- Scribner, E., and M. P. Dillaway. 1989. Strengthening the Ethics Content of Accounting Courses. *Journal of Accounting Education* (Vol. 7) 41-55.
- Sennetti, J., T. Shawver, and P. Bancroft. 2004. The Moral and Cultural Reasoning of IPO Accounting and Those Assumed Likely to Manage Earnings: A Small Sample Study. *Research on Professional Responsibility and Ethics in Accounting* (Vol. 9) 101-128.

- Shaub, M. K. 1994. Limits on the Effectiveness of Accounting Ethics Education. *Business & Professional Ethics Journal* (Vol. 13, No. 2) 129-145.
- Shawver, T. J. 2009. Can Ethics and Professional Responsibility be Taught to Accounting Students? *Journal of Business Disciplines* (Vol. 10, No. 2) 1527-1553.
- _____, and J. Sennetti. 2009. Measuring Ethical Sensitivity and Evaluation. *Journal of Business Ethics* (Vol. 88, No. 4) 663-678.
- _____, _____, and P. Bancroft. 2006. Can the “Clan Effect” Reduce Gender Sensitivity to Fraud? The Case of the IPO Environment. *Journal of Forensic Accounting* (Vol. 7) 185-208.
- Stark, A. 1993. What’s the Matter with Business Ethics? *Harvard Review* (Vol. 71, No. 3) 38-45.
- Tweedie, D., M. Dyball, J. Hazelton, and S. Wright. 2013. Teaching Global Ethical Standards: A Case and Strategy for Broadening the Accounting Ethics Curriculum. *Journal of Business Ethics* (Vol. 115, No. 1) 1-15.
- Wilhelm, W. J., and A. B. Czyzewski. 2006. A Quasi-Experimental Study of Moral Reasoning of Undergraduate Business Students Using an Ethical Decision-Making Framework in a Basic Accounting Course. *Delta Pi Epsilon Journal* (Vol. 48, No. 3) 129-143.