RESEARCH ON PROFESSIONAL RESPONSIBILITY AND ETHICS IN ACCOUNTING

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RESEARCH ON PROFESSIONAL RESPONSIBILITY AND ETHICS IN ACCOUNTING VOLUME 20

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EDITED BY

CYNTHIA JEFFREY
Iowa State University, Ames, IA, USA

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LIST OF CONTRIBUTORS

Vicky Arnold	Kenneth G. Dixon School of Accounting, University of Central Florida, Orlando, FL, USA
Charles D. Bailey	College of Business, James Madison University, Harrisonburg, VA, USA
Richard A. Bernardi	Gabelli School of Business, Roger Williams University, Bristol, RI, USA
Susan M. Bosco	Gabelli School of Business, Roger Williams University, Bristol, RI, USA
Tracy R. Brower	Independent Researcher, College Station, TX, USA
Lynn H. Clements	Barney Barnett School of Business & Free Enterprise, Florida Southern College, Lakeland, FL, USA
Alexandra L. Ferrentino	Gabelli School of Business, Roger Williams University, Bristol, RI, USA
Dann G. Fisher	Department of Accounting, Kansas State University, Manhattan, KS, USA
Dale L. Flesher	Patterson School of Accountancy, University of Mississippi, Oxford, MS, USA
Andy Garcia	Department of Accounting & MIS, Bowling Green State University, Bowling Green, OH, USA
Amy M. Hageman	Department of Accounting, Kansas State University, Manhattan, KS, USA
Brian K. Laird	College of Business, Arkansas State University, Jonesboro, AR, USA

James C. Lampel[†]	College of Business, Missouri State University, Springfield, MO, USA
Meghan L. Maliga	Gabelli School of Business, Roger Williams University, Bristol, RI, USA
Gary John Previts	Department of Accountancy, Case Western Reserve University, Cleveland, OH, USA
Diane H. Roberts	School of Management, University of San Francisco, San Francisco, CA, USA
Andrew D. Sharp	Division of Business, Spring Hill College, Mobile, AL, USA
Tara J. Shawver	Department of Accounting, King's College, Wilkes-Barre, PA, USA
Katherine T. Smith	College of Business, Murray State University, Murray, KY, USA
L. Murphy Smith	College of Business, Murray State University, Murray, KY, USA
Steve G. Sutton	Kenneth G. Dixon School of Accounting, University of Central Florida, Orlando, FL, USA
Kerri L. Tassin	College of Business, Missouri State University, Springfield, MO, USA

[†]Deceased, January 16, 2016.

EDITORIAL INFORMATION

IN MEMORIAM TO PROFESSOR JAMES C. LAMPE, PH.D., CPA, A SCHOLAR, MENTOR, AND FRIEND: JULY 14, 1943–JANUARY 16, 2016

On January 16, 2016, the accounting academic community lost an outstanding scholar, James C. Lampe. Over a career spanning 47 years, Jim established himself as a prolific writer, inquisitive researcher, and strong voice on ethics and professionalism in the accounting and auditing profession. Jim represented what is unfortunately a dying breed of accounting scholars – he sought the difficult questions facing the accounting and auditing profession, whether they be areas for improving practice or fulfilling the traditional academic role of being a conscious for society promoting the public interest, and attacked these questions with professionalism and academic rigor. The goal was not to simply "get a publication" or "publish in the right journal," the goal was to take on an interesting, contemporary issue and to have a voice in how the profession could or should address the issue. The importance of the issue and the research question drove the researcher, not administrators' counting of journals or padding of rankings.

Jim established himself as a researcher first in the 1970s when he was at the forefront of the integration of general audit software into the auditing process. Such systems were relatively new to the profession and Jim investigated how use could supplement and improve audit quality. He also developed fully working software and made this software along with cases available to other audit academics in order to promote state-of-the-art practices and understanding. He was similarly at the front end of the next shift in the mid-1980s to using personal computers to support audit practice – converting Price Waterhouse's audit practice support system into a form that could be used by audit educators in their classroom.

During this time period, Jim recognized that many of the public accounting firms' national offices viewed the technology as a way of structuring audit practice and seeking efficiency gains, with audit effectiveness seemingly not a great concern. This drove a shift in Jim's research as he began to focus on understanding auditors' ethical decision making, the effects of organizational culture on employees' ethical behavior, and the diminishing role of audit firms in promoting professional behavior and fulfilling the profession's role in protecting the public interest.

This work first led to what is considered one of the seminal works in accounting ethics, Jim's 1992 article on auditors' ethical decision making processes that appeared in *Auditing: A Journal of Practice and Theory*. Around this same time, Jim produced two less visible pieces on organizational culture and the effect on ethical decision making within organizations that are still foundational theory pieces widely used in ethics research studies, particularly in tax ethics research.

To understand Jim as a scholar and academic professional, one also needed to observe how he brought his research findings back into the classroom to his students and pushed the research findings out to the practice community. Ethics became an integral part of his auditing courses at both the undergraduate and graduate level, and he willingly took opportunities to speak to local professional chapters. The efforts to reach the practice community was furthered by also becoming one of a handful of people in the State of Texas at the time that were certified to deliver the required annual ethics continuing professional education courses.

Jim also treasured the ironic moments and had an intensely dry sense of humor. Perhaps one of the most interesting discussions we have observed is Jim walking into an advisory board meeting for the Department of Accounting and telling the advisory board members he was not convinced that they really wanted to hire high moral reasoning students. The problem, he noted, was that these high moral reasoning students would be inclined to ask too many questions and perhaps be more skeptical than they wanted their staff to be. This could have a deleterious effect on time budgets. It was classic Jim, able to lay out the issue and create a discourse without offending, but while prodding hard.

If you were fortunate enough to be one of Jim's Ph.D. students or an early career researcher working around him, you realized quickly that, as the cliché goes, he not only talked the talk, he walked the walk. While he oft lamented the deprofessionalization of the accounting profession, he respected and lived as a caring, active member of the academic profession. He preached integrity in research and exemplified such in his own work. He was incredibly well-read on his subject matter any time he entered an academic discourse, and he demanded the same of his students. "Know the body of research, know what is happening in practice and our world, and question not only the assumptions that have been adopted by others, but also the assumptions that may be biasing your own work." He helped many around him to adopt similar values for research – the value in research is doing something interesting that matters. As we would often talk about over a glass of red wine, the joy in research did not come from the acceptance letter, but rather it came when the paper was submitted the first time and it symbolized extensive creative effort executed thoroughly and presented in a form that the *artist* wanted to present it. Sometimes the paper got better, sometimes the paper got worse as it progressed through the review process, but the first time was what was treasured most as it represented the *artist's* interpretation and presentation. Research was about the scholarly endeavor, not counting publications. It was a passion. Those of us that worked with Jim hope that we live those same ideals, the same passion, the same desire for quality, and the same attention to detail that an *artist* desires.

In the current decade, Jim found that passion in examining the professionalization, or sadly the deprofessionalization, of the accounting profession. He was very distressed by his observations that the profession in which he had set out in his early career and for which he prepared students, was no longer exemplary of a profession – of a group of professionals that put society and the public interest first. His concerns over the deprofessionalization of accounting and auditing have been well-documented in several volumes of this journal, and his prior work has been highlighted with awards for its quality and leading edge nature from the publisher. His trepidation over deprofessionalization was the driving force behind the last decade of his academic career.

One of the most difficult decisions for Jim academically was when he made the decision to walk away from a University with a Ph.D. program to develop a Center for Excellence in Business Ethics at Missouri State University while serving as the COBA Dean's Distinguished Professor of Ethics. He viewed it as an opportunity to take on one more major challenge as his career waned. Could he develop educational programs that taught ethics differently to accounting and business students? Could he actually find a way to instill a stronger sense of ethics in students as they entered their careers, and could he help them to understand the vital role of professions in society and the need to focus on professionalism in their accounting and auditing careers? He never fully got the resources to implement his plan, but that did not stop him from doing what he could.

In the Spring semester of 2015, as Jim continued to teach his accounting ethics and professionalism course, he fought to get his message of the importance of ethics and the failing professionalism of an accounting profession that now forsook even a hint of pretending to be a profession and referred instead to itself as an "industry." His body was failing him as the cancer took his stamina and strength, but his passion and drive kept him going and each day his wife Jean wheeled him into class, helped him get wired with a microphone to support his only faint voice, and yet he delivered a strong message with an intense sense of urgency. He needed to reach one more group of future accountants and auditors.

His passion and knowledge were not lost on the students. In the Spring of 2015, the College of Business students voted Dr. James C. Lampe the Teacher of the Year and in the nomination letter it was noted, "Dr. Lampe's knowledge and passion for the subject matter and his strength of belief in the need for professionalism in the accounting profession is simply amazing. He had a major impact on all of us."

In January we lost a great scholar who exemplified what an academic scholar should be. He cared about both his research and teaching, and he served extensively both his practice profession and his academic profession. There are not many true scholars left among us who believe in having a voice, supporting the public interest, and doing research that is in society's best interest. Jim will be sorely missed as a scholar, a tremendous human being, and the strongest of friends to us, as well as to many others.

Steve G. Sutton and Vicky Arnold

A POST-SOX HISTORY OF U.S. PUBLIC ACCOUNTANCY. THE HISTORY OF DEPROFESSIONALIZATION IN U.S. PUBLIC ACCOUNTANCY: PART III

James C. Lampe[†], Andy Garcia and Kerri L. Tassin

ABSTRACT

This article is the third in a trilogy of articles that discuss the professionalism (or deprofessionalism) of the accounting profession. The first examines the slow uphill climb of accounting and auditing practice to the level of being recognized as a highly trusted profession. The second examines the stagnation in professionalism leading to deprofessionalization of the accounting profession. This third article looks at the resulting directionless efforts of accounting and auditing firms in the wake of major deprofessionalization events. The interest in this study is the time period immediately following the passage of the Sarbanes–Oxley Act (SOX) of 2002 which is described in this paper as the "Post-SOX" history of public accountancy in the United States. During this time period, nearly equally mixed

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activities of professionalism and deprofessionalism have resulted in a status quo with directionless efforts doing little if anything to reverse decline in professionalism. Public accountants continued to experience conflict with the Securities and Exchange Commission (SEC) over independence rules. The large Certified Public Accountant firms generated controversies and squabbles concerning "auditing and consulting," while at the same time they faced questions regarding the marketing and selling of aggressive tax shelters. In addition, most of the self-regulating aspects of the profession declined dramatically following passage of SOX. While initially both tax fees and audit fees of CPA firms increased during this time period, concerns are again arising as the large CPA firms more recently have renewed the emphasis on advisory services. While revenues have both increased and changed in composition during the post-SOX era, public opinion has maintained a status quo. The post-SOX era has also seen a weakening in the Code of Conduct, providing more liberties for CPAs to maximize self-interest. Meanwhile, the PCAOB faced constitutional challenges, while at the same time the AICPA experienced strong divisions in its membership. To provide some sense to these directionless efforts, this study, similar to the prior two articles in this trilogy, concludes with a summary analysis based on the nine SOCRECELIST criteria, and the question whether public accountants have learned their history lesson.

Keywords: Professionalization; public interest; accounting history, organizations, & theory; structural functionalism; interactionism; critical theory

This is the third article in a trilogy that presents the history of public accountancy in the United States from the perspective of professionalism. The articles each look at a distinct phase in the professionalization/deprofessionalization of public accountancy in the United States. The first considers the long effort to achieve professional recognition during a 100-year period from the mid-19th century to a transition occurring somewhere between 1975 and 1985 (Garcia & Lampe, 2011). The second article considers the relatively quick loss of professional status amidst a series of deprofessionalization actions among the public accountancy firms that came to a head with the substantial regulatory changes enacted in the Sarbanes–Oxley Act (SOX) in 2002 that stripped much of the public accountancy professions' ability to self-regulate (Lampe & Garcia, 2013).

This third article examines the period after the passage of SOX up to the point of this writing – more than a decade of directionless actions and behaviors that have done little to reverse either the lost self-regulatory powers or the negative public perception of public accountancy. Immediately following the passage of SOX, the leaders in public accountancy made bold statements that the "profession" (industry) would make the restoration of public confidence the number one objective. However, the history of public accountancy actions and events from 2002 through the current date tells a different story. This study presents evidence that nearly equally mixed activities of professionalization and deprofessionalization have simply resulted in a status quo.

This decade plus of directionless actions and behaviors arguably began with the demise of the Public Oversight Board (POB) which was formed by the American Institute of Certified Public Accountants (AICPA) in 1977. The POB was created as an independent body overseeing and reporting on the activities of the SEC Practice Section (SECPS) and comprised all member firms that audited an SEC registrant. In 2001, a charter for the POB substantially increased the strength of oversight for the approximate 18,000 audits performed on SEC-registrant entities in an effort to improve the strength of professional self-regulation. Additionally, the AICPA and the Big Five CPA firms started planning an alternative oversight approach that may well have forestalled governmental intervention. However, when it was clear that the POB would be replaced, the Board passed a resolution in January of 2002 to terminate its existence. The resolution, initially to become effective March 31, was extended to May 31, 2002. The termination of the POB was a clear mark of public accountancy losing self-regulation of audit performance.

The remainder of this study focuses on (1) understanding public accountancy changes in light of this lost self-regulation and (2) understanding how these changes undermined its professional status. The analysis revolves around the nine societal recognition of elite status (SOCRECELIST) criteria related to the alternative theories on professions, which are discussed extensively in the earlier papers of this trilogy.

As described in the following sections, the actions and behaviors exhibited by professional accountancy indicate an interest and desire to re-develop an image of professionalism, yet the desire for increased profits appears to once again overtake the true focus and drive the majority of actions taken. Even the major public accountancy players, including the firms, began to refer to themselves as an "industry" rather than as a "profession."

STATUS QUO IN U.S. ACCOUNTANCY – POST-SOX

The years from the mid-1980s through 2001 for public accountancy have been described as mixed, but are primarily and increasingly dominated by deprofessionalization activities. In July 2002, SOX was signed into law and represented the lowest point of professionalism in U.S. public accountancy since the Great Depression and subsequent passage of the 1933 Securities Act and the 1934 Securities Exchange Act. July 2002 is technically the start of the "Post-SOX" era of maintaining status quo in U.S. public accountancy. Immediately following passage of SOX and the creation of the Public Company Accounting Oversight Board (PCAOB), members of the POB resigned and monitoring activities were transferred to the PCAOB. The combined impact of the POB cessation with monitoring powers granted to the PCAOB dealt a deathblow to the SECPS of the AICPA.

A new and voluntary membership center, the Center for Public Company Audit Firms (CPCAF) was established by the AICPA. Leadership in the large CPA firms immediately began seeking an alternative structure by which to communicate with one another and restore the confidence that users of audited financial statements had lost. This led to the creation of the Center for Audit Quality (CAQ). The CAQ was not under the auspices of the AICPA, but did include the AICPA membership. Virtually all leadership in the AICPA, state societies of CPAs, and state boards of accountancy recognized both the loss of professional prestige of CPAs and the distrust of financial statements by investors.

Barry Melancon, President and CEO of the AICPA, delivered a speech about the passage of SOX to media personnel and business executives at the Yale Club on September 4, 2002 (Melancon, 2002). Excerpts from the speech were indicative of what most other accountancy industry leaders were espousing.

> … We will work to implement it (SOX) and to rebuild the faith of investors who depend on us for information critical to the capital markets. … We must reassert the heritage that made the accountant the professional in whom most Americans confide their most confidential information and to whom they turn for honest advice. … The business scandals have been painful to members of our profession because it is made up of honest people. But hundreds of thousands of good apples do not excuse the behavior of a few bad ones. … Make no mistake about it, our profession was part of the problem. … It came to embody the public's perception of the problem. For executives of Enron, WorldCom, and yes, for some auditors, part of the problem was simple greed or arrogance. We can afford no tolerance for those who strayed from the commitment to put public interest first. …
>
> What is needed is not just reform of the accountancy laws, it is a rejuvenated accounting culture, both internally in corporate finance offices and externally in audit firms. … We're looking forward to reclaiming our profession's heritage as a bedrock of business integrity and continuing our historic role as trusted business advisors and protectors of the public interest. …

Many of the words and thoughts were true and hopefully indicative of efforts to return to the heritage that made public accountancy a profession. The preceding quote also indicates that a "few bad apples" were the fault of the Enron and WorldCom fraudulent financial statements. A further implication was that zero tolerance was demonstrated by sanctions for a few Enron and WorldCom executives and a few Arthur Anderson auditors to rid the industry of its few bad apples. On the other hand, the quote focused on the historic role of CPAs as providing advisory services to audit clients rather than independent auditing. The remainder of the *Status Quo* section examines what has happened and how the public has perceived it.

The other two articles preceding this trilogy, however, indicated that history has not interpreted the nearly perfect storm of challenges to the accountancy profession as the actions of a "few bad apples" that suddenly came to light in 2001 and 2002. History has indicated that public trust was lost steadily over a period of more than 25 years in which leadership of the AICPA and the large CPA firms lost sight of the public interest and showed greed and self-interest as the tone at the top. Another way of asking the research question is whether the "aught" years (2002, 2003, ..., 2011) following SOX: (1) have been filled with what accountancy leaders said "ought" to be done, or (2) have continued to provide more "smoke and mirrors" intended to fool most of the people most of the time?

Continuing Conflict with the SEC

After numerous and lengthy skirmishes over independence issues (primarily CPAs performing consulting and auditing services for the same client), the SEC, under the strong leadership from Chairman Arthur Levitt, proposed a "modernization of ethics" that would apply to all auditors of SEC-registered organizations. Before and after the SEC's formal proposal to change the independence rules in mid-2000, Arthur Levitt pointed out problems generated by the consulting/auditing mix. The AICPA leadership and three of the Big Five firms responded that consulting resulted in improved auditing rather than a lack of independence and attempted to skirt around the SEC arguments by obtaining Congressional support via the well-established high-dollar Political Action Committee activities. In December 2001, the SEC felt compelled to agree to a much softened compromise proposal. Subsequent to the passage of the softened compromise proposal, key personnel in the SEC leading this battle resigned from, or were forced out of, the SEC.

Chairman Levitt, the SEC's longest-serving Chairman, retired from the SEC after the battle with the AICPA and the large accounting firms, but has since written a book titled *Take on the Street*[1] in which he described problems that had arisen in corporate governance, broker compensation, the accuracy of financial disclosures, and investor attitudes. Although much of the book described the market and its machinations, some portions placed the responsibility for recent corporate scandals on indifferent legislators, special interest groups (e.g., the AICPA and Big Five accounting firms), greedy CEOs, and lazy investors.

Advisory Services and Tax Shelters

Amidst the conflict with the SEC, "auditing and consulting" controversies and squabbles about consulting were also generated within the large CPA firms. In 2000, one of the Big Five firms Ernst & Young split off its formal consulting arm as Cap Gemini. Arthur Andersen Consulting was split from Arthur Andersen LLC and took on the new name Accenture. KPMG divested its separate consulting branch which became known as Bearing Point, Inc. In 2002, PricewaterhouseCoopers sold their consultancy division to IBM. Only Deloitte & Touche retained a formal consultancy group in a separate entity called Deloitte Consultancy.

All of the Big Five firms, however, continued to perform substantial "advisory" (non-audit and non-tax) services within the assurance and/or advisory sections of each respective firm. In 2001, all of the Big Five firms received greater revenues from such advisory services than from audit services. In spite of this underlying reality, then AICPA Chairman of the Board James Castellano, AICPA CEO Barry Melancon, and three Big Five partners all testified before Congress that the large firms no longer provided consulting services to their audit clients after the year 2000. This claim was based on the divestiture of the consulting arms of the large firms. However, publicly available data showed that the firms (without their consulting arms) still derived greater revenues from advisory services than from audit services. Remarks by Congressional committee members to whom such testimony was provided indicated that the testimony was not well received.

During this same time period, large accounting firms were also being questioned about the marketing and selling of very aggressive tax shelters for wealthy clients and large multinational corporations. Clients paid fees based on a certain percentage of "tax losses" generated by bizarre transactions carried out for the sole purpose of sheltering income. KPMG alone realized fees of about $100 million on such transactions in the late-1990s and the early 2000s based on a November report by a Senate subcommittee investigating tax shelters (Cassel, 2004). After lengthy tax court challenges, KPMG was required to pay a $456 million fine to the IRS in 2000. These tax shelters and other questionable tax advising provide additional evidence of large accounting firms acting in the best interests of their clients and against the interests of the general public following the passage of SOX. All of the Big Five CPA firms were involved in developing tax shelters during the post-SOX years.

Enron

In November 2001, the SEC required Enron to restate the prior three years earnings, and on December 2, 2001, Enron was forced to file for bankruptcy. Both Enron and the auditors, Arthur Andersen, came under intense daily scrutiny in the press.

In early 2002, the SEC under Chairman Harvey Pitt was forced into a position to sanction Arthur Andersen and to place numerous other questionable audits of SEC registrants under investigation. Sweeping reforms for the accounting profession were advocated. Congressional sentiment (including many of the strong accountancy supporters from November 2001) was that there was a clear and obvious need for large-scale reform in the practice of public accounting (considering the public to be the primary customer to serve). While major changes were anticipated, the changes developing in the House under the Oxley committee appeared to be limited to IT consulting services – until WorldCom left everyone stunned and public opinion, the press, and regulators all demanded much more, including many of the regulatory changes then former SEC Chairman Levitt was advocating to the Sarbanes committee in the Senate (Canada, Kuhn, & Sutton, 2008).

It became obvious that changes (reforms) to the standard setting and practice of auditing were underway. Academics and practitioners were predicting that events in 2002 and 2003 would have more monumental impact on public accountancy than did the 1933 Securities Act and the 1934 Securities Exchange Act. The most obvious of the many serious actions were the passage of the *Sarbanes–Oxley Public Company Accounting Reform and Investor Protection Act of 2002* (SOX) and related establishment of the PCAOB.

On July 30, 2002, SOX, also referred to as the Auditor Reform Act, was passed by the Congress and signed by President Bush. The PCAOB was given ultimate authority to adopt, amend, modify, repeal, and/or reject any and all rules, standards, and principles of the accounting profession as applied to the preparation of audit reports of public companies. In one fell swoop, most of the self-regulating aspects of the profession were drastically diminished. The actions effectively made a group comprising a majority of non-accountants (primarily lawyers and politicians) responsible for setting auditing, quality control, ethics, independence, and other standards relating to the preparation of audit reports prepared by auditors of SEC-registrant audits. Many believe that these rules have trickled down to firms performing virtually all other audits of non-SEC clients and motivated the risk assessment (SAS # 04–#111) suite of SASs promulgated by the AICPA in 2006.

Due to controversies raised after the passage of SOX, both SEC Chairman Harvey Pitt and Chairman Webster of the PCAOB felt compelled to resign (Chairman Webster held the post for less than one month). Beyond the commonly mentioned Enron and Worldcom frauds, numerous other large publicly held corporations including Dynegy, Tyco, Adelphia, Cendant, Lucent, and Xerox (this list includes clients audited by all the Final Four CPA firms) were under SEC scrutiny and were required to restate their financial statements along with hundreds of other Fortune 1000 companies. Nearly all these actions were viewed as both financial reporting and auditing failures in the press.

Changes in Large CPA Firm Structure and Revenues

The numbers of CPA members of the AICPA, the revenues of the large CPA firms, and the composition of the revenues are presented in Tables 1 and 2. Tables 1 and 2 indicate that substantial changes in firm revenues have continued in U.S. public accountancy to date. Revenues have continued to increase and by 2011 were about $33.6 billion – more than double that of the pre-SOX period. Tax fees went up substantially in 2002–2004 when the large firms were very active in tax shelters, but dropped significantly in 2005 and 2006 following the KPMG indictments and PCAOB restrictions. Audit fees jumped substantially in 2002 and 2003 when large fees for SOX/PCAOB internal control consulting and installation were very large moneymakers classified as "other audit services" since consulting was no longer allowed for SEC audit clients. In 2005 and 2006, fees for audit services dropped because the PCAOB cracked down on CPA firm services that were being referred to as "other audit" by the firms but were considered to be prohibited consulting by the PCAOB. Starting in 2007 and continuing through the current date, the large CPA firms have again started emphasizing advisory (management consulting) services, although not for

Table 1. AICPA Membership and Revenues of Largest Firms Post-SOX.

Year	No. of AICPA Members	Largest Firm Revenues
2001	360,000	\$15,365,000,000 (PAR, February 2006)
2002	N/A	\$18,300,000,000 (PAR, August 2003)
2003	N/A	\$19,990,000,000 (PAR, August 2004)
2004	N/A	\$20,414,000,000
2005	N/A	\$16,088,000,000 (PAR, May 2006)
2006	N/A	\$16,915,962,940 (PAR, December 2007)
2007	N/A	\$31,129,000,000 (PAR, April 2008)
2009	342,490	N/A
2010	N/A	\$31,639,000,000 (PAR, August 2011)
2011	355,000[a]	\$33,644,000,000 (PAR, July 2012)

Source: AICPA (N/A means data not made available).
[a]Includes non-CPAs.

Table 2. CPA Firm Revenue Composition Post-SOX.

Year	Auditing (%)	Tax (%)	MAS (All Non-Tax and Non-Audit)
2002	55	32	12% (PAR, August 2003)
2003	59	33	7% (PAR, August 2004)
2004	61	30	8% (PAR, February 2005)
2005	88	10	2% other, not MAS (PAR, May 2006)
2006	90	8	2% other, not MAS (PAR, December 2007)
2007	62	25	13% MAS and other (PAR, April 2008)
2010	51	29	20% MAS, and other (PAR, August 2011)
2011	41	27	32% other (PAR, July 2012)

Source: Public Accounting Report (PAR), for the dates indicated.

their SEC audit clients. From virtually nil in 2005, non-attest and non-tax service fees have risen to almost one-third of the overall \$33.6 billion of revenue in 2011.

An interesting observation when comparing pre-SOX AICPA membership in 2001 with post-SOX membership in 2011 is that there was a drop in overall membership through 2011 even though membership has been expanded to include non-CPAs. At least a portion of the answer to why the drop has occurred was creation of the CAQ and its beginning operations in January 2007. The CAQ is affiliated with the AICPA, but governed by an autonomous Board comprising leaders from the large auditing firms, the AICPA, and three members outside the public accountancy industry. The large CPA firms that account for auditing nearly all SEC registrants had started earlier, inside the governance of the AICPA, a CPCAF to address concerns that had previously been the purview of the SECPS. The CAQ was subsequently formed informally by six CPA firms but has since been growing rapidly in firm membership. Since beginning formal operations in January 2007, the CAQ has grown to membership of about 700 firm members – both CPA firms registered with the PCAOB and associate firm members who do not perform audits of SEC-registrant companies. The fact that firm memberships include all of the largest CPA firms, in terms of performing SEC-registrant audits, means that the number of individual CPAs employed by these firms also comprise the majority of the public practice membership of the AICPA. It appears apparent to these researchers that as the CAQ operations, budget, and required firm member fees all continue to increase, AICPA membership by CPAs from these firms may be falling more rapidly. This is due to the financial resources and support of employee membership by all the large SEC-registrant audit firms moving away from the AICPA general operations.

The future viability of the AICPA is being questioned. The vote in 2010 to expand membership of the AICPA to non-CPAs is considered to be a financially driven tactic that further diminishes public opinion of the CPA designation. Of an approximate membership of 355,000 in 2011, over 20,000 are estimated to be non-CPAs. The definition, by the AICPA, of a qualifying non-CPA associate is:

> Anyone who has not passed the CPA Exam and meets one of the following: owners or professional staff of public accounting firms; financial professionals in business, government, not-for-profit organizations or in consulting or law firms; or full-time business or accounting educators.

Changes in Public Opinion

While there have been substantial changes in the amount and composition of revenues, there has been relatively little change in public opinion during the post-SOX period of maintaining status quo. Tables 3 and 4 provide data from various polls, including some Harris and Gallup polls, for several pre-SOX years and the Harris and Gallup polls for the post-SOX

Table 3. Public Opinion Pre-SOX.

Year	Source	Subjects Polled	% Assigning Professional or "Prestigious" Status	Positive Qualities/ Traits Honesty/ Reliability/ Ethics (%)
1947	Psychological Corp. Survey for AICPA[a]	216 business leaders	27[a]	N/A
1961	AICPA[b]	262 bankers/lawyers	54[b]	N/A
1961	AICPA[b]	1000 general public	25[b]	N/A
1971	Solomon[c]	1000 general public	54[c]	N/A
1981	*Wall Street Journal*[d]	800 chief executives	100[d]	90
1983	Chemical Bank[e]	Bank executives	N/A	91
1986	Harris Poll data	General public	100	86
1992	Harris Poll data	General public	43	40
1998	Harris Poll data	General public	50	39
2000	Gallup Poll[f]	General public	43	38
2001	Gallup Poll[f]	General public	42	35

[a]Rockwood (1960).
[b]Ashworth (1963).
[c]Solomon (1971).
[d]Practical Accountant, 1981 (the highest of 17 comparison professions/occupations).
[e]Williams (1983).
[f]Gallup Poll (the lowest of 17 comparison professions in 2000 and third lowest of 24 comparison professions/occupations, April 2001).

period 2002–2011, respectively. The public's perceptions of accountants' honesty/ethics have increased slightly from the low in 2002, but have remained less than half of similar measures in the late-1970s and early 1980s.

In comparing Table 3 data (pre-SOX public opinion) with Table 4 (post-SOX public opinion), it becomes obvious that, from the glory days of the late-1970s to the mid-1980s when accountants were perceived as the most prestigious profession and 90% of the public believed that accountants had the highest honesty and ethical standards of all white collar professions, public opinion fell drastically through the time of passage of SOX (2002) to accountants being rated as the least prestigious of 17 comparison occupational groups; 65% of respondents believed that accountants had average or below honesty/ethics. As can be seen from the rankings in Table 5,

Table 4. Post-SOX Public Opinion – Harris and Gallup Poll Data.

Year	Harris Poll-Prestige		Gallup Poll-Honesty/Ethics	
	% Rated "Very Great"	% Rated "Considerable"	% Rated "Positive"	Honesty/Ethics "Very High" or High (%)
2002	13	23	31	35
2003	15	25	45	N/A
2004	10	32	35	N/A
2005	13	27	42	N/A
2006	17	30	N/A	38
2007	11	25	N/A	39
2008	15	22	N/A	38
2009	11	23	N/A	N/A
2011	N/A	N/A	N/A	42

Table 5. Harris Poll Data – Accountants and Prestige.

Year	Ranking	Percentile
2002	17 of 17	100th
2003	18 of 22	82nd
2004	20 of 22	91st
2005	20 of 22	91st
2006	16 of 23	70th
2007	20 of 23	87th
2008	20 of 23	87th
2009	22 of 23	96th

public opinion has not changed substantially since 2002, resulting in maintaining the status quo of much lower prestige and trust.

Accountancy activities engaged in during the pre-SOX era through 2002 indicated a trend of constant and substantial deprofessionalization. Regardless of the rhetoric and standards put forth by the AICPA and other leaders in public accountancy, events since the year 2002 have apparently not worked in restoring public trust and respect. Maintaining a status quo of low prestige and low trust is not a strong statement of regaining professional status. One hypothesis that has been put forth for why accountants suffered the huge loss in public trust has been that there were no interesting wars being fought in 2002 and 2003 with the result that newspaper, journal, radio, and television journalism concentrated on problems of the accounting industry. Many of the accounting events of the early 21st century were widely publicized in the *Wall Street Journal* (WSJ), *Business Week*, *Time*, and virtually all other widely distributed news sources including national television broadcasts. Several widely read newspapers including the *New York Times* and the *Chicago Tribune* had ongoing series of articles chronicling the problems and decline of public accountancy. The *Chicago Tribune* series of articles ended in the conclusion that *hubris* (excessive arrogance) of the leaders of Arthur Andersen, the other large CPA firms, and the accountancy industry in general led to the fall of a once proud profession. It appears that after a decade, as well as several wars and terrorist acts later, the public has not substantially changed its mind.

Changes in the Code of Conduct

During the post-SOX time period, the AICPA code of conduct has continued to be further weakened by changes in definitions, rule interpretations, and rulings. Because the AICPA Council has the authority to make such changes based on recommendations of the Professional Ethics Committee without vote by the members, mostly minor changes have been made regularly throughout the post-SOX period. Substantial changes, however, were made in 2001, 2003, and 2006.

After an SEC investigation determined that many partners in large CPA firms had financial interests in companies audited by the CPA firms, a major change in the critical issue of independence was accomplished by a new definition of a *covered member* revised in 2001.

Definition .06 – A covered member is:

a. An individual on the attest engagement team;
b. An individual in a position to influence the attest engagement;
c. A partner or manager who provides non-attest services to the attest client beginning once he or she provides ten hours of non-attest services to the client within any fiscal year and ending on the latter of the date (i) the firm signs the report on the financial statements for the fiscal year during which those services were provided or (ii) he or she no longer expects to provide ten or more hours of non-attest services to the attest client on a recurring basis.

The definition of a close relative was changed to *a parent*, *sibling*, or *non-dependent children*. Immediate family members have been defined as *spouse*, *spousal equivalent*, or *dependent*. These changes in definitions have resulted in the allowance of some type of family ownerships of audit client stock by virtually everyone in a CPA firm whether on the audit team or not.

Interpretation 101-3 was modified in 2003 and again in 2006 to read:

> The client must agree to perform the following functions in connection with the engagement to perform non-attest services:
>
> a. Make all management decisions and perform all management functions;
> b. Designate an individual who possesses suitable skill, knowledge, and/or experience, preferably within senior management, to oversee the service;
> c. Evaluate the adequacy and results of the services performed;
> d. Accept responsibility for the result of the services; and
> e. Establish and maintain internal controls, including monitoring ongoing activities.

To most large CPA firms, this change has been interpreted to allow any non-attest service for a non-SEC client as long as the client agrees that the specified functions have been performed. Nearly all advisory service representation letters signed by clients have been changed to include the exact wording referenced in Interpretation 101-3. If the general statement was not enough, Interpretation 101-3 has provided specific examples of services that do not impair independence to include:

- Install or integrate a client's financial information system that was not designed or developed by the member (e.g., an off-the-shelf accounting package).
- Assist in setting up the client's chart of accounts and financial statement format with respect to the client's financial information system.
- Design, develop, install, or integrate a client's information system that is unrelated to the client's financial statements or accounting records.
- Provide training and instruction to client employees on an information and control system.

Changes to the code of conduct such as those listed above have been hard to interpret as sincere efforts to restore public trust in the independence of U.S. public accountants. Instead they seem to have allowed CPAs to maximize self-interest unfettered by the code of conduct.

Constitutional Challenge of the PCAOB

Many of the large corporations, particularly accelerated filers with the SEC, have voiced displeasure with the PCAOB due to its association with increased compliance costs related to Section 404 of the SOX of 2002. The PCAOB's Auditing Standard 2, later replaced by Auditing Standard 5, required significantly more audit work resulting in higher audit costs to auditees. Section 404 required company management, including CEOs and CFOs, to report annually on the system of internal control. Critics placed blame for all the increased costs and time requirements on the PCAOB. While critics associated the increased audit cost directly with the PCAOB, most of the additional costs of compliance with Section 404 are directly associated with Congress. Consequently, these costs would remain even if the PCAOB were abolished.

In 2009, the Free Enterprise Fund (FEF) and accounting firm Beckstead and Watts, LLP (Beckstead) presented their complaint against the PCAOB before the Supreme Court of the United States. In the complaint, the FEF and Beckstead argued that the provision in SOX that established the PCAOB violated both the separation of powers doctrine and the Appointments Clause of the U.S. Constitution which requires that powerful officials be selected by the U.S. President and confirmed by the Senate. The members of the PCAOB are selected collectively by the members of the SEC and could only be removed if it were determined a member had engaged in serious wrongdoing. As a remedy for the offending provision, the FEF and Beckstead sought the abolishment of the PCAOB and SOX (*Free Enter. Fund v. Pub. Co. Accounting Oversight Bd.*, 2010). Three different groups with substantial knowledge of and influence on the public accounting industry filed *amici curiae* briefs in support of the PCAOB.

One of those groups to file a brief was the National Association of State Boards of Accountancy (NASBA). NASBA was formed over 100 years ago and claims that its mission is to, "[e]nhance the effectiveness and advance the common interests of the Boards of Accountancy." Members of the organization include boards of accountancy of all 50 states, the District of Columbia, and the territories of Guam, the Northern Mariana Islands, Puerto Rico, and the Virgin Islands (NASBA, 2014). The public accounting industry is controlled by the respective state boards and adopted public accountancy acts.

In its brief to the Supreme Court, NASBA advised, "The PCAOB is vital to the protection of the U.S. financial markets, and its abolishment would leave a serious regulatory void. In its absence, the responsibility for regulating the accounting industry would fall largely to the SEC and state boards of accountancy" (*Free Enter. Fund v. Pub. Co. Accounting Oversight Bd.*, 2010). According to NASBA, the SEC lacked the mandate to fill the void; and, in the absence of the PCAOB, state boards would be called upon to oversee the accounting firms and accountants. The state boards, however, relied upon investigations and discipline of certified public accountants conducted by the PCAOB.

NASBA appealed to the Court for the continued existence of the PCAOB with the following statement:

> In short, the PCAOB, like state boards, is an integral component of accountancy regulation in the United States. It plays a vital role in regulating accounting firms and accountants who audit publicly traded companies. Any decision by this Court to judicially abolish the PCAOB would leave this segment of the accounting profession largely unregulated. (*Free Enter. Fund v. Pub. Co. Accounting Oversight Bd.*, 2010)

The Council of Institutional Investors (the Council), along with other interested parties, also filed its brief with the Supreme Court in support of the PCAOB. The Council is a non-profit organization formed in 1985 that advocates for strong corporate governance and shareholder rights. Its voting membership consists of 125 pension plans, other employee benefit plans, endowments, and foundations. Non-voting membership includes over 130 members from an extensive variety of industries (Council of Institutional Investors, 2014). Eleven other organizations joined the Council in filing the *amicus curiae* including the California Public Employees Retirement System, the California State Teachers' Retirement System, the Comptroller of the State of New York, and the Teachers Insurance and Annuity Association-College Retirement Equities Fund to name a few.

In the opening summary of its argument, the Council described the erosion of investor confidence by 2001 as a result of "… massive corporate scandals involving prominent companies with household names." The scandals involved extensive audit failures and wrongdoing by corporate executives and accountants. According to the brief, auditors failed to uncover management fraud because "… no one was watching the watchers." These events signified that accountants' self-regulation was insufficient, so reform was necessary. The Council described the PCAOB as "… the serious, industry-independent, SEC-accountable regulator that the accounting industry had long needed and always lacked" (*Free Enter. Fund v. Pub. Co. Accounting Oversight Bd.*, 2010).

The Council reiterated that SOX and the PCAOB "… incorporate the lessons learned through decades of experience with a deficient system of self-regulation in the accounting profession." The Council recited a history of the accounting industry through the 1900s. In this history lesson, the Council discussed the stock market crash of 1929 and described the failures of the accounting industry's system of self-regulation developed in the

1930s, and the subsequent revamping of the regulatory structure in the 1970s. The Council also cited in its brief how the AICPA created the POB in 1977 and that the POB was responsible for oversight of the SECPS activities and the peer review process. The POB, however, relied upon its funding from voluntary dues paid by AICPA members. In addition, the POB lacked the necessary authority to sanction auditors for audit deficiencies or incompetence discovered in the course of a quality control review. Not surprisingly, from 1977 to 2002 the peer review program reported no major audit deficiencies. In its argument, the Council also quoted Dean Joel Seligman of the Washington University School of Law regarding failures of the POB: "The POB … is notable for having never sanctioned a major accounting firm in its 25 years of existence, even when peer reviews have uncovered serious shortcomings in a firm's audit procedures" (*Free Enter. Fund v. Pub. Co. Accounting Oversight Bd.*, 2010). During this period, according to the brief, audit standards appeared to reflect the members' own interests rather than those of the investing public.

The Council's brief explained that the PCAOB filled the role of an independent regulator, overseen by the SEC, and accountable to investors. The Council explained that, "The PCAOB is independent from the accounting industry it regulates and firmly under the control of the SEC." At the same time, "Both because the PCAOB starts its rulemaking process from a position of independence from the regulated industry and because that process invites participation by affected shareowners and other stakeholders, the outcome is likely to be standards that better protect investors' interest in the accuracy of financial statements" (*Free Enter. Fund v. Pub. Co. Accounting Oversight Bd.*, 2010).

Finally, the Council defended the extant structure of the PCAOB and its relationship to the SEC. In defense of the structure, the Council stated, "In creating the Board, Congress sought not to make the PCAOB independent of the SEC but, rather by *enhancing* SEC oversight of the PCAOB, ensuring the Board's independence from the accounting profession." The Council asked the Court to preserve the PCAOB stating, "Preserving the PCAOB fulfills the intent of the people's elected representatives to enhance investor protection" (*Free Enter. Fund v. Pub. Co. Accounting Oversight Bd.*, 2010).

The CAQ also filed a brief in support of the PCAOB. At the time the CAQ filed its *amicus curiae* it consisted of approximately 700 member firms, including nine of the largest auditors of SEC registrants with about 7,100 audits performed between them. CAQ membership also included nearly all of the 50 largest firms in terms of SEC-registrant audits, so its *amicus curiae* brief represented nearly all the CPA firms performing audits under the direct regulation of the PCAOB.

Like NASBA and the Council, the CAQ criticized the weaknesses in financial reporting resulting from the lack of regulation of the accounting industry prior to passage of SOX and creation of the PCAOB. In its brief the CAQ referred to the "… scandals that exposed serious weaknesses in the financial reporting required by publicly held companies." The CAQ also described regulation of the accounting industry prior to the passage of SOX as "decentralized," and it depicted the system of self-regulation of the accounting industry prior to the adoption of SOX and creation of the PCAOB as one "… in which Congress and the investing public had lost confidence" (*Free Enter. Fund v. Pub. Co. Accounting Oversight Bd.*, 2010).

The CAQ offered evidence that SOX and PCAOB had enhanced audit quality and investor confidence. The CAQ cited surveys regarding investor confidence, including a 2007 survey it conducted, and stated that the survey responses indicated that, "Investor confidence has increased since the establishment of the PCAOB and the implementation of other SOX reforms, and the PCAOB's inspection process has contributed to improved audit quality." The CAQ went on to state that, "… the increased investor confidence supports the conclusion that the Act is working, and that the PCAOB's vital role in the administration of that law has been successful" (*Free Enter. Fund v. Pub. Co. Accounting Oversight Bd.*, 2010). The CAQ further explained that the responses given in a 2008 survey it conducted with audit committee members showed that, "Significantly, audit committee members – to whom Congress gave an enhanced role in reviewing audit quality under the Act – have stated that audit quality has improved under the PCAOB" (*Free Enter. Fund v. Pub. Co. Accounting Oversight Bd.*, 2010).

Finally, the CAQ argued that maintenance of the PCAOB would yield predictability and stability in audit regulation, resulting in benefits to the investing public and the auditing profession. This predictability and stability could only be maintained under the PCAOB. The CAQ warned what could happen if the Court decided to abolish the PCAOB in its current form: "Were the Court to find the PCAOB as established to be constitutionally impermissible, the uncertainty surrounding the effect of past regulations, and the question of what form future regulation would take, would have negative consequences for investors, the profession, and the markets generally" (*Free Enter. Fund v. Pub. Co. Accounting Oversight Bd.*, 2010).

On June 28, 2010, the U.S. Supreme Court held that the Congress overstepped constitutional limits by granting the PCAOB expansive powers to govern without the ability of the Executive branch to hold the Board accountable. The Court, however, left the PCAOB intact and did not curtail any of its power or functions. Prior to the ruling, the SEC could not remove a Board member at will, but could remove a Board member only "for good cause shown" after a formal hearing and SEC order subject to judicial review. Because the President can remove SEC Commissioners only "for cause," the Court concluded that the Executive branch lacked the ability to hold the Board members fully accountable, thereby effectively relegating the President to a "cajoler in chief" with respect to the Board. To remedy this constitutional defect, the Court invalidated the provisions of the law restricting removal of Board members while leaving intact the remainder of the SOX regulatory framework, including the other provisions relating to Board operations and oversight.

Additional Conflicts within the Profession

One choice of words used to describe events in the early 21st century was "heavily publicized controversies." Alternatively, the words "scandals" and "fraudulent reporting" were in the news virtually every day from the beginning of the 21st century through 2003. While not stated as often, reports about accountants and/or financial presentations have been more negative than positive.

Additionally, strong differences of opinion between CPAs generated strong divisions within the membership of the AICPA. Strong and bitter rifts between (1) individual CPAs, (2) individual CPAs and the AICPA, (3) state societies, (4) state societies and the AICPA, and (5) CPA firms and the AICPA were aired under public scrutiny.

Two issues that pitted many CPAs against one another were the Cpa2biz portal and the XYZ/Cognitor/SBP professional credential pushed by AICPA leadership. Cpa2biz is a for-profit separate organization associated with the AICPA. Critics have claimed it to be a drain on AICPA resources from which AICPA leaders have reaped great profits and has resulted in making critical resources more difficult for CPAs to obtain and use. Advocates have believed it to be a convenient electronic portal that has allowed CPAs to compete effectively in the changed business environment.

Further, the SBP credential was not approved by the membership of the AICPA. Advocates believed an extended credential to be an inevitable result and needed extension of the professional CPA designation which had a primary emphasis on attest and tax compliance services. Critics believed it to be a serious bludgeoning of professional reputation as well as a large and unnecessary expenditure of AICPA funds. Through the time of this writing, the AICPA has been developing additional designations of credentials for members whether or not a CPA. Additional credentialing by the AICPA includes:

- Accredited in Business Valuation (ABV)
- Certified in Financial Forensics (CFF)
- Certified Information Technology Professional (CITP)
- Personal Financial Specialist (PFS)
- Chartered Global Management Accountant (CGMA)

As a result of the number and diversity of the AICPA activities in the late 20th and early 21st century, the AICPA has most often been referred to as a "trade organization" in the *WSJ* and other business periodicals.

During the status quo era, a number of well-known accountants have questioned the professional status of public accountancy. Many academics and practitioners have questioned whether public accountants still accept most of the responsibilities commensurate with professional status (May, 1992). Gerald Searfoss, retired partner of Deloitte & Touche, has made questioning observations:

> CPAs were once regarded as possessing a very high level of integrity. … Beginning in the late-1970s, CPAs were thrust into a realm of competition and began to look for something to differentiate themselves from one another. … By the early-1980s audits were not perceived to be as valuable as before and became the loss leader in order to win other business. … Today with major business failures, audits and the role of auditors has been questioned. There has been a question of whether auditors are serving the public interest or their self-interest. … The credibility of financial reporting is being questioned. (Searfoss, 2002)

In an article based on an address to the AAA annual meeting in Honolulu, Hawaii on August 4, 2003, Arthur Wyatt described a gradual cultural change in accounting firms from a focus on professionalism to a focus on revenue growth and increased profitability (Wyatt, 2004). In a two-part paper published in *Accounting Horizons*, Stephen Zeff (2003a, 2003b) described the history of the accounting profession from the 1940s to 2002 including a transformation of the large accounting firms from "professional firms that happened to be in business into businesses that happen to render professional services." Both Wyatt (2004) and Zeff (2003a, 2003b) have described an increasing role of consultants in the nation's largest accounting firms that has led to a gradual cultural change in how the firms operate. Over a 30-year period, the change has been substantial and has resulted in a different image for accountants and auditors perceived by persons both inside and outside the public accounting industry. Decades earlier, the accounting profession was recognized as "the epitome of trust, honesty, and decency" (Wyatt, 2004), but that image has been lost and most non-accountants continue to perceive accountancy as an occupation that no longer merits professional status.

SUMMARY AND CONCLUDING QUESTION

The nine SOCRECELIST criteria discussed in Lampe and Garcia (2013) are presented in Table 6a.

Socrecelist Model[2]

A very brief summary of the model in Table 6a is that a major dichotomy of professionalization theories is recognized as: (a) functionalists (including structural functionalism and interactionism) versus (b) monopolists (adherents to critical theory). Functionalists and critical theorists obviously have incompatible and competing beliefs about the underlying motives of the members of a profession. The reader should note that (1) structural functionalism is primarily concerned with positive traits or attributes of individual members of an occupational group, (2) interactionism is concerned

Table 6a. Components (Conditions/Criteria) of Professional Status.

Structural functionalism – Structured to achieve an altruistic functional end
• SF-1: Skills based on theoretical knowledge
• SF-2: Code of ethical conduct (including monitoring and sanctions)
• SF-3: Advanced education and training
Interactionism – Structured to recognize the consequences of interaction with society
• IN-1: Differentially recognizable from the laity
• IN-2: Services needed by society
• IN-3: Perceived to improve overall good of society (public service)
Critical theory – Structured to achieve monopolistic political power
• CT-1: Organized by one or a few large organizations
• CT-2: Practice restricted by entrance exam and licensure
• CT-3: Entrance and practice standards self-regulated – no government intervention

about societal recognition of positive consequences derived from the occupational group's services, and (3) critical theory emphasizes the self-interest actions of one or a few large groups or organizations, within the total occupation membership, that strive to forestall government intervention and achieve monopolistic power and rents.

"There is no universally accepted theory of the professions" (West, 2003, p. 13). Instead there are several theories, some compatible and overlapping and some competing, that have been posited in the sociology of the professions literature and have received substantial recognition as plausible theories. The SOCRECELIST model is not a different theory of the professions, but instead is a delineation of three different occupational group actions that are observable by members of society within each of the three most recognized theories of professionalism. The model does not attempt to make the competing views of functionalist and critical theories compatible, but rather places emphasis on the activities of an occupational group that society is able to observe and thereby make judgments about professional status. The simple overview is that the greater the number of conditions recognized by society, the greater the number of society that assign professional status. This is regardless of the specific theory that most impacts an individual. In Table 1a, use of skills based on theory and attainment of advanced education are listed as two of the primary observable actions that most structural functionalists believe must be present to confer professional status on an occupation. While critical theorists do not view these components to be primary, neither do they consider them to be incompatible with professional status. When critical theorists insist on practice restricted by licensure and no governmental intervention to be primary requirements to achieve monopolistic goals, functionalists also see these as desirable activities, but not for the same end. It is doubtful if very many members of society are aware of or think about which of the three theories they are following. Instead, the sociology of the professions literature asserts that each of the three theories describes what many members of society believe without specific knowledge of the competing theories. The SOCRECELIST model is based on the belief that the greater the number of all nine listed (or other similar, but unlisted) activities observed by society, the greater the number of persons assigning professional status to the occupational group.

The impacts of professionalization and deprofessionalization in terms of the nine components of the SOCRECELIST model are described in Table 6b.

In short, the substantial changes in public accountancy are that the occupation no longer meets the criteria specified in recognized theories of

Table 6b. Components (Conditions/Criteria) of Professional Status – SOCRECELIST.

Structural functionalism – Most of the public no longer believe that accountants work for an altruistic goal of public service

- SF-1: *Skills based on theoretical knowledge* – It appears that most public accountants have switched from theory-based best presentation of financial results to selection of anything that looks like GAAP and achieves client desires.
- SF-2: *Code of ethical conduct (including monitoring and sanctions)* – The code has been seriously reduced and diminished. The primary activities for ethics, generating monitoring and sanctioning now come from the non-accountant based PCAOB.
- SF-3: *Advanced education and training* – The primary education remains at the university level and training via CPE is now mandatory. Substantial manipulation of university education and practitioner CPE is apparent.

Interactionism – Most of the public no longer believe that accountants put public interest ahead of client and self-interest

- IN-1: *Differentially recognizable from the laity* – Nearly all professions, including accountancy, are less distinguishable due to: (1) increased education of the general public, (2) wide use of the internet, (3) increased use of paraprofessionals in practice, and (4) less formal dress codes.
- IN-2: *Service needed by society* – The investors and general public in the United States are in greater need of reliable and relevant information than ever before in history, but question if it is being provided.
- IN-3: *Perceived to improve overall good of society (public service)* – The public opinion polls show decreased belief in the integrity and trustworthiness of accountants as well as reduced value to the overall good to society.

Critical theory – Most of the public agree that the orientation of accountancy is toward reaping monopolistic profits

- CT-1: *Organized by one of few large organizations* – The power and prestige of the AICPA has been diminished. The large CPA firms are organized by Management by Objectives (MBO) with the primary objective of profit maximization.
- CT-2: *Practice restricted by entrance exam and licensure* – Still equally valid, but CPA activities are much less oriented to traditional audit and tax services.
- CT-3: *Entrance and practice standards self-regulated (no government intervention)* – Most standard setting in auditing, ethics and quality control as well as monitoring and sanctioning are done by the PCAOB.

professionalism and has lost the public's respect and trust. The conclusion when using *structural functionalism* as an indicator of professionalism is that the general orientation of public accountancy is no longer structured toward the altruistic public interest. The three specific components in the SOCRECELIST model have been manipulated for self-interest rather than public interest. Applying *interactionism* it is apparent that the public no longer recognize accountants as a group perceived to improve the public good. The overall and critical aspect of *critical theory*, that the motivation of professional groups is to achieve political power and monopolistic rents, does appear to have guided public accountancy since the mid-1980s. The other characteristics that leadership via one or few organizations (firms) is able to prevent governmental intervention and maintain self-regulation are no longer supportable. Analysis of all three of the most often cited theories of professionalism leads to the conclusion that public accountancy does not display sufficient characteristics to claim professional status.

The second theme of assessing professional status in this paper is public opinion. The poll results presented indicate that the great majority of U.S. society did not ascribe to high amounts of prestige and trust until the late 1970s and early 1980s (professionalization era). During the mid-1980s through 2002 (deprofessionalization era) public opinion about accountants' prestige and trustworthiness dropped both constantly and substantially resulting in the loss of professional status. Since SOX of 2002 there is little evidence of substantial efforts by public accountancy to change their mode of operation and little evidence of recreating the trust and prestige once assigned.

Barry Melancon has stated that:

> The CPA profession has quickly rebounded from the concerns of recent years. Once again our profession sits atop the list of most trusted professions. (Moehrle, Previts, & Reynolds-Mohrle, 2006)

Comparisons of data in Tables 1–5 do not support the assertion that the accountancy profession has rebounded to its position of glory in the late-1970s through the mid-1980s.

We believe accountancy to be the shortest-lived profession in history. It has required virtually all professions long periods of time (typically over 100 years) to achieve recognition of elite professional status from society. Public accountancy, almost immediately after about 130 years of effort to attain elite status, began an era of deprofessionalization that took approximately 30 years to lose the very status it had worked so hard to attain. While all white collar professions appear to have lost some of their previous prestige and elite status, it appears that only public accountancy has completely lost it. The change in large CPA firm and AICPA leadership to a corporate orientation in mentoring and monitoring activities, ethical decision-making, and MBO with profit maximization via non-attest services as the nearly sole objective has been recognized by the Congress, regulators, practitioners, academics, and the public.

In order for an individual, organization, or occupational group to rebuild trust that has been lost, consistent and sustained efforts are required (Covey, 2006). The number of years required to rebuild public trust in public accountancy and again achieve professional status will likely depend on the efforts and activities of the entire occupational group of accountants. An obvious tautology is that if an occupational group wants to be recognized to possess elite professional status, then its members should act like professionals. Abraham Lincoln long ago recognized that neither individuals, nor organizations, nor occupational groups can fool all the people all the time.

One model of business organization trust that has received numerous citations (Mayer, Davis, & Schoorman, 1995) indicates that a trustee organization or group wishing to generate greater trust must build three layers of trust with the persons or groups (trustors) who interact with the organization or occupational group:

1. The first, or base level, is ability trust. The trustor believes that the organization (group) is competent within its domain of activity.
2. The second level is integrity trust. The trustor perceives that the organization (group) has a social mission and holds needed values such as honesty, reliability, and predictability when providing goods or services within its domain of activity.
3. The third step or layer in building organizational trust is benevolence. Benevolence trust is that the trustors perceive that the organization (group) has the intent to do good for the trustors specifically and for society in general based on concepts or principles such as fairness, commitment, cooperation, dependability, loyalty, and transparency.

The model builds each layer of trust on top of the preceding layer. The thicker the total of the three layers, the greater the trust in the organization. The top level of benevolence trust is the most difficult to achieve, the easiest to lose, and most difficult to restore.

Immediately after passage of SOX and a ruling by the PCAOB that CPA firms could not consult for audit clients, nearly all the large CPA firms reaped massive fees from helping their clients install systems to assess and report on internal control in compliance with SOX section 404 and AS2 from the PCAOB. The large CPA firms received large fees from such services and classified them as "other audit" work. The PCAOB immediately said such services were consulting. The AICPA and the firms replied by saying that engagements that were already started must be finished. Similarly, the PCAOB stated that aggressive tax planning would impair the independence of audit firms. The large firms responded by aggressively promoting tax shelters.

The public accountancy industry now faces a similar situation. Most SEC-registrant organizations would gladly accept their auditor's help in setting up systems to convert accounting to whatever portion or version of IFRS is made available for use by U.S. registrants of the SEC. Will public accountants who prepare financial statements take advantage of fewer rules in order to improve earnings and reduce liabilities or seek and employ the best principles providing the most transparency? Will the large CPA firms that audit nearly all SEC registrants carefully and independently demand application of the accounting principles that best present economic reality to readers of the financial statements or will "other audit" work be performed to help clients obfuscate financial statements to their clients' benefits and to their own revenue enhancement? Another way to phrase the question is: have public accountants learned their history lessons?

NOTES

1. Levitt (2002).
2. Lampe and Garcia (2013).

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THE INFLUENCE OF CLIENT ATTRIBUTES AND ORGANIZATIONAL CLIMATE ON TAX PROFESSIONALS

Amy M. Hageman and Dann G. Fisher

ABSTRACT

Tax professionals in public accounting firms must meet professional standards in working with their clients, but may also face pressure from both their clients and firms when making ethical decisions. The purpose of this study is to examine the influence of client factors on tax professionals' ethical decision-making. Furthermore, we also investigate how client service climate and different ethical climate types affect these ethical decisions. Based on an experimental design with 149 practicing tax professionals, results indicate that tax professionals are not swayed by client importance or social interaction with the client when making ethical decisions. However, tax professionals are more likely to engage in ethical behavior when their own accounting firm monitors and tracks the quality of client service, whereas unethical behavior is more common when public accounting firms emphasize using personal ethical beliefs in decision-making. The results of the study suggest the importance of

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strong policies and procedures to promote ethical decision-making in firms.

Keywords: Tax professionals; client service climate; public accounting firms; ethical climate

INTRODUCTION

Tax professionals in public accounting firms must strike a delicate balance. On the one hand, professional standards require that tax professionals serve as advocates for their clients. On the other hand, tax professionals still have the responsibility of objectively evaluating evidence and working with their clients in an unbiased, ethical manner (Bobek, Hageman, & Hatfield, 2010). Tax professionals are subject to external environmental pressures in making client decisions, including pressures from both the client as well as their own accounting firm. These pressures create an incentive to exploit ambiguous reporting situations for personal self-interest (i.e., financial gain and maintaining a positive relationship with the client). Roberts (1998) argues that external environmental factors constitute an important influence on the decision-making process of tax professionals. The Statements on Standards for Tax Service (AICPA, 2009, p. 11) frame this professional dilemma by stating, "In addition to a duty to the taxpayer, a member has a duty to the tax system. However, it is well established that the taxpayer has no obligation to pay more taxes than are legally owed, and a member has a duty to the taxpayer to assist in achieving that result." Unlike auditors, who are primarily charged with exercising independence from their client and in displaying professional skepticism in evaluating evidence, tax professionals striving to engage in ethical behavior must carefully balance external demands in meeting their professional responsibilities.

The purpose of this study is to examine the influence of client factors on tax professionals' ethical decision-making within accounting firms. Furthermore, we also investigate how client service climate and different ethical climate types affect these ethical decisions. Specifically, we are interested in examining whether client characteristics or elements of firm culture may encourage or discourage ethical behavior. Tax professionals should not be influenced by these external factors in working to fulfill their professional responsibilities, but theory and prior literature both suggest that client characteristics

(Jones, 1991) and client service climate (Schneider, 1980) may have an influence on organizational members. We conduct a 2×2 between-subjects experimental design with 149 practicing tax professionals who were asked to evaluate a hypothetical ethical scenario (Yetmar & Eastman, 2000). Our experimental design manipulates client importance and social interaction with the client and measures participants' perceptions of their own firm's service climate (Schneider, White, & Paul, 1998).

The results of the study indicate that while our client factor manipulations were strong, they did not influence tax professionals' evaluations of what others within their firm would do in a similar situation. Thus, tax professionals do not appear to be biased by client factors in making ethical decisions. However, results showed that client service climate strongly influenced tax professionals' behavior, and that results were strongly related to the degree of monitoring and tracking of client service quality that the accounting firm engaged in. Furthermore, client service climates were stronger among ethical climates that emphasized following rules and codes of law as well as those with an emphasis on benevolence or doing what is best for others – and weaker among ethical climates that emphasized profits or efficiency. These findings suggest that a positive service climate – where the employees perceive that the firm's practice, procedures, and behaviors that are expected, supported, and rewarded contribute toward service excellence (Schneider et al., 1998) – can have a strong influence on tax professionals' behavior. Finally, results also demonstrate that unethical behavior is *more* likely when the firms' ethical climate emphasizes individual decision-making as guided by employees' own sense of personal morality.

Our findings have important theoretical and practical implications. First, the study introduces the construct of "client service climate" to the accounting literature (Schneider, 1990), which we find has a strong influence on encouraging ethical behavior. Although prior studies have examined the influence of a strong ethical environment on encouraging ethical making in an accounting context (Booth & Schulz, 2004), ours is one of the first accounting studies to introduce another facet of organizational climate. Second, this study shows that while tax professionals recognize the pressures raised by different client characteristics (such as social interaction), these client pressures do not appear to influence behavior. Overall, our results demonstrate that while tax professionals are not necessarily swayed by client characteristics, it is truly important for firms to have appropriate policies and monitoring mechanisms in place to encourage ethical decision-making. We also offer feedback to firms on the negative consequences of ethical climates that emphasize firm interests and/or efficiency, given that firms with ethical climates emphasizing these attributes had weaker client service climates.

The remainder of this paper proceeds as follows. The second section presents a literature review and develops the study's hypotheses and research question. The third section explains the research method, while the fourth and fifth sections present the results and conclusions, respectively.

PRIOR LITERATURE, HYPOTHESES, AND RESEARCH QUESTION DEVELOPMENT

Ethical Decision-Making in Organizations

Simply stated, an "ethical decision" may be defined as "a decision that is both legal and morally acceptable to the larger community" (Jones, 1991, p. 367; see also Kelman & Hamilton, 1989). The ethical decision-making process therefore involves the selection of a course of action in which a moral component is present (see Jones, 1991; Rest, 1983, 1986).

Several theoretical perspectives offer models of the ethical decision-making process which emphasize both individual and environmental factors that influence ethical decision-making. Hunt and Vitell (1986) developed a model in which both teleological factors (the probability and desirability of consequences to shareholders) and deontological factors (the innate "wrongness" or "rightness" of the behavior, based on personal ethics or morals) are considered. The Hunt and Vitell model views both environmental (cultural, professional, industry, and organizational) and personal characteristics (such as personal beliefs or cognitive moral development) as indirectly influencing the teleological and deontological evaluation that in turn influences ethical judgments, behavioral intentions, and actual ethical behaviors. Treviño (1986) provides a person-situation interactionist perspective in which both individual and situational elements jointly influence ethical decisions. Treviño, Weaver, and Reynolds (2006) extend this model to emphasize the importance of organizational factors in ethical decision-making. In particular, they assert that ethical decisions are influenced by overt job pressures such as unmet organizational goals, reward and punishment structures, employees' perceptions of the firm's ethical climate and culture, the attitudes and behaviors of peers, and firm leadership. Jones (1991) presents an issue-contingent model of ethical decision-making, in which the degree of "moral intensity" of the issue itself influences the decision-making process. Moral intensity is in turn influenced by the magnitude of consequences, social consensus, probability of effect, temporal immediacy, proximity, and concentration of effect. Jones (1991) also acknowledges that organizational factors (such as socialization or group processes) can influence behavioral intentions and actual behavior. Jones and Hiltebeitel (1995) extend this model to emphasize that professional (e.g., being a CPA) and organizational expectations (e.g., policies, procedures, and beliefs that encourage a high level of ethical conduct) influence the ethical decision processes of accountants. A consistent theme through these models of ethical decision-making is that situational and organizational factors influence the process.

Hypotheses Development

Based on the theoretical perspective that facets of the organization and other external factors may influence ethical decision-making, we focus on and develop hypotheses for three particularly salient elements that may be of critical importance to tax professionals working within accounting firms: the importance of the client, social interaction with the client, and the accounting firm's client service climate. Rest (1986) suggests that in making ethical decisions, the evaluation of a third-party's behavior may be a more accurate representation of an individual's ethical decision-making process than his or her own behavioral intentions by reducing potential social desirability bias (see also Fisher, 1993). Thus, we develop all hypotheses to predict tax professionals' judgments of the likely behavior of others in their firms.

Client Importance

Tax professionals in an accounting firm are responsible both for advocating for their clients and objectively evaluating evidence when making recommendations. Prior research has ascertained that clients who are seen as "important" within a firm are those that have a greater economic influence on the firm (such as constituting a larger source or percentage of overall firm revenue). Reckers, Sanders, and Wyndelts (1991) establish that tax professionals are more likely to give aggressive tax advice to important clients. In interviews, Milliron (1988) also finds that tax professionals admit that aggressive advice is more likely when the client is more important to the firm. Bobek et al. (2010) establish that, although client importance does not influence the level of client-specific advocacy that a tax professional brings to the table, tax professionals are more likely to weigh evidence favorably and allow a beneficial tax treatment for a more important client than for a less important tax client.

Literature from the auditing domain has also examined how client importance may influence decisions. Hunt and Lulseged (2007) examined whether Big 4 and/or non-Big 4 auditors were influenced by client importance in their reporting decisions; results showed that neither group was likely to show "favoritism" to their larger and hence more important clients. Similarly, Li (2009) did not find that auditors were more likely to favor their more important clients in either the pre- or post-SOX period in their issuance of going concern opinions. Similar to our study, Kerler and Brandon (2010) manipulated client importance as either high (40% of office revenue) or low (2% of office revenue), finding no relationship between client importance and a willingness to accept a client-preferred accounting treatment. Taken together, the results of these studies suggest that client importance does not adversely affect auditor independence, suggesting that professional accountants will not be swayed by the demands of important clients. The role of auditor, however, differs markedly from that of the tax professional. Whereas auditors are charged with serving as independent, professional skeptics, tax professionals are engaged to be advocates for their clients. Thus, it is conceivable that tax professionals may be influenced differently by client demands.

Although tax professionals, normatively, should not allow client features to influence their decisions, prior research has established that tax professionals may exhibit a bias when client importance is present. We predict that the same relationship will be present for tax professionals making an ethical decision which involves deciding whether to concur with the client or not. Our first hypothesis is therefore:

> **H1.** Tax professionals in an accounting firm will be more likely to concur with the client when the client is viewed as more important.

Social Interaction

Tax professionals in accounting firms may interact with their clients socially outside of work. Such interactions enrich the connections between the parties, but may also make it easier to condone engaging in unethical behavior to satisfy the client's wishes. According to Jones (1991), the construct of social proximity holds that individuals tend to intrinsically care more about others who are close to them socially than those who are not. A similar relationship is present within the legal profession, with the idea that "Our [the legal profession's] propensity to prefer the interests of those who are close to us is in fact perfectly reasonable because we are more likely to be able to benefit those people" (Fried, 1976, p. 1067).

Although we are not aware of any existing research examining the impacts of social interaction between tax professionals and their clients, research presented in the auditing literature provides an insight. Bamber and Iyer (2007) present evidence that auditors identify with their clients. This relationship is stronger when the importance of the client is greater and auditor/client association is longer. Moreover, Bamber and Iyer report that auditors who identify with a client are more likely to agree with aggressive reporting positions preferred by the client. Other studies (Iyer & Rama, 2004; McCracken, Salterio, & Gibbins, 2008) suggest that auditors may have trouble maintaining skepticism during negotiations with clients. Ohlman, Hackner, and Sorbom (2012) found a negative relationship between auditor skepticism and client satisfaction with the audit. Taken together, these results suggest that close relations between the auditor and the client may impair judgment.

Similarly, we would expect that tax professionals who form a close relationship with their clients are also more likely to support their clients' interests. This closeness of social interaction may make it particularly difficult to resolve an ethical dilemma when their clients' own interests are at stake. We therefore predict that:

> **H2.** Tax professionals in an accounting firm will be more likely to concur with a client with whom they have a higher degree of social interaction.

Client Service Climate

One particularly salient external factor for individuals embedded within an organization is the organization's climate. Schneider et al. (1998, p. 151) define service climate as "employee perceptions of the practices, procedures, and behaviors that get rewarded, supported, and expected with regard to customer service and customer service quality." The client service climate indicates to employees what the firm values, as well as what behaviors are desired, expected, and what actions will be rewarded (Schneider, Bowen, Erhart, & Holcombe, 2000). A positive service climate exists when excellent service is an important theme in an organization (Deitz, Pugh, & Wiley, 2004). Mechinda and Patterson (2011) suggest that excellent service has two key ingredients: (1) concern for customers and (2) concern for employees. Excellent service is more likely to result when all practices and policies are customer oriented and when employees believe they are treated well and supported by management. Prior research has linked service climate with both external and internal outcomes.

A positive service climate is related to higher levels of customer satisfaction (Bowen & Ford, 2002; Crotts, Dickson, & Ford, 2005). Schneider and Bowen (1995) assert that, because of the close physical and psychological proximity, employees in and the customers of service organizations share perceptions of their interactions. Employees in positive service climates view service quality as important and in need of their attention. Customers witness and experience the employee behavior and draw conclusions about the quality of service they have received and how satisfied they are. Prior research has linked positive service climate with customer satisfaction across a wide range of industries, including auto service stores (Sowinski, Fortmann, & Lezotte, 2008), bank branches (Schneider, 1980; Schneider & Bowen, 1985; Schneider et al., 1998), hairstylists (Payne & Webber, 2006), insurance company offices (Schneider, Ashworth, Higgs, & Carr, 1996), restaurants (Liao & Chuang, 2004; Salanova, Agut, & Peiro, 2005; Wall & Berry, 2007), and supermarket departments (Mayer, Ehrhart, & Schneider, 2009; Schneider et al., 1996). More recently, Schneider, Macey, Lee, and Young (2009) confirmed the link between service climate and customer satisfaction in a three-year longitudinal study of *Fortune 200* companies from diverse service industries.

A positive service climate has also been associated with market and financial performance (Dean, 2004; Tsai, Chaung, & Chin, 2008). Cable (2007) claims that a positive service climate is associated with higher levels of customer satisfaction, higher cash flows, and improved market value. Schneider, Ehrhart, Mayer, Saltz, and Niles-Jolly (2005) suggest that service climate mediates the relationship between customer satisfaction and performance outcomes, a hypothesis confirmed by Schneider et al. (2009) in their longitudinal study of *Fortune 200* companies. In describing the importance of the service climate as a mediating factor, Schneider et al. (2009, p. 11) assert, "Interventions by organizations to increase the alignment of their internal processes with the world of the customer may prove a unique strategy for competitive advantage."

Furthermore, a positive service climate also creates internal benefits for the organization. Yoon, Beatty, and Suh (2001) report a relationship between positive service climate and employee satisfaction. Bendapudi and Bendapudi (2005) and Schneider and Bowen (1995) find that employees report less positive experiences when they believe that their organizations are not fully committed to a customer orientation. Little and Dean (2006) assert that service climate is positively correlated with an employee's service quality capability. Deitz et al. (2004) find that employee perceptions of service climate have a strong, positive association with customer-oriented behaviors. This relationship holds for interpersonal behaviors as well as technical work.

Although a paucity of research has examined the relationship between service climate and ethical behavior, it appears a strong connection exists. It is not hard to fathom that the means for handling ethical issues stemming from customer interactions falls within the purview of the policies, procedures, and beliefs about what is expected, valued, supported, and rewarded by the organization. Schwepker and Hartline (2005) proffer that service firms must utilize formal and informal controls to minimize opportunities for unethical behavior. Formal controls, such as a code of conduct, establish guidelines, and boundaries for ethical behavior. Nearly all codes of conduct contain edicts regarding customer treatment making it a key component of an organization's service climate policies. Through these policies and procedures, ethical expectations are fostered and employees learn what appropriate actions will be supported and rewarded. Once these policies have been internalized, informal controls, such as peer pressure to conform to work group expectations, can add to the service climate commitment.

When it comes to client service, tax professionals can find themselves in a difficult position. Despite the professional obligation to maintain the integrity of the tax system, client pressure can create an incentive to exploit ambiguous reporting situations, both for financial benefit and as a means of maintaining a positive relationship with the client. The presence of formal and informal control mechanisms that foster and support ethical behavior should reduce the pressure felt by improper client demands. When employees know what is expected, understand where the boundaries for acceptable client service reside, believe they will be supported in their behavior, and are aware that their behavior will be monitored and rewarded, then they are less likely to take subjective action to satisfy the client in the short run, with potentially harmful consequences to both the client and the firm in the long run.

Thus, we predict the following hypothesis:

> **H3.** Tax professionals will be less likely to concur with client demands when client service climate is stronger.

Research Question – Ethical Climates

The accounting literature has begun to examine how an organization's ethical climate or environment can influence ethical decision-making in an accounting setting. For example, Booth and Schulz (2004) conduct an experiment with managerial accountants and demonstrate that the presence of a strong ethical environment can discourage managers' tendencies to continue a failing project due to escalation of commitment. Bobek and Radtke (2007) study the ethical environment of tax professionals and find that, while tax professionals generally rate their ethical environments as quite high, those who have experienced an ethical dilemma in their firm perceive the environment as weaker (Bobek & Radtke, 2007), an effect that is stronger for non-partners than for partners (Bobek et al., 2010). Other investigations have found that organizational culture or the strength of the ethical environment can directly or indirectly influence auditors' ethical behavior (Douglas, Davidson, & Schwartz, 2001; Sweeney, Arnold, & Pierce, 2010). Taken together, this literature supports the notion that a strong ethical environment – one that encourages ethical behavior through social norms, social practices, and appropriate outcomes (Booth & Schulz, 2004) – can influence the ethical decision-making of accountants.

Less explored within an accounting setting has been the notion of different *types* of ethical climates, or how certain facets within the environment may influence accountants' ethical decision-making. The ethical work climate typology of Victor and Cullen (1988) is one such facet-specific climate, representing the organizational practices, procedures, and policies defining what is considered right or wrong behavior by members of the organization. Victor and Cullen use the Ethical Climate Questionnaire to develop a typology of the different types of ethical climates within organizations. Based on a sample of 872 employees at four firms, five different typologies are proposed: caring, law and code, rules, instrumental, and independence. These typologies correspond with three theoretical dimensions: egoistic, benevolence, and principled – each with three levels of reference – individual, local (immediate group or the organization), and cosmopolitan (external group or society at large).

An egoistic climate encourages individuals to be motivated by personal gains. The normative expectation is that decision-makers in the organization are likely to choose alternatives that benefit themselves while largely ignoring the needs of others.

A benevolent climate focuses on concern for others. The normative expectation is that decision-makers in the organization are likely to choose alternatives that result in maximum collective gains while largely ignoring their own personal needs and benefits. Parboteeah, Cullen, Victor, and Sokano (2005) assert that creating benevolent climates may be a critical means of reducing future accounting scandals.

A principled climate focuses on the use of abstract principles applied independent of situational outcomes. The normative expectation is that decision-makers in the organization are likely to choose alternatives based on the application or interpretation of rules, laws, professional codes, and standards. Victor and Cullen (1988) expect professional organizations, such as public accounting firms, to have principled climates.

Several studies have applied the Ethical Climate theory to public accounting firms. Cullen, Parboteeah, and Victor (2003) sampled accountants from two large multinational accounting firms and two small local firms in the southeast United States, and found that egoistic climates were negatively related and benevolent climates were positively related to organizational commitment. In both cases, the relevant reference was individual or local and not cosmopolitan. Cullen et al. conclude that an individual or local benevolent climate is more likely to encourage positive affect among organizational members, increasing attachment to the organization. Parboteeah et al. (2005) compare public accountants in U.S. offices to those in Japanese offices, and find no significant national differences. Sampling equally from auditing, tax, and consulting, Parboteeah et al. discovered four of the nine possible climate types – egoist individual, benevolent local, benevolent cosmopolitan, and principled-cosmopolitan. They assert that failing to observe all nine climate types is not unexpected because the three levels of reference will combine in unique ways within different organizations.

Shafer (2008) concluded that three ethical climates – egoistic, benevolent cosmopolitan, and principled-cosmopolitan – influenced behavioral intentions. He also determined that auditors who perceived that the climates they work in are egotistic are less likely to perceive questionable actions as unethical and more likely to agree that they would engage in such acts, whereas auditors who perceived that the climates they work in are benevolent cosmopolitan or principled-cosmopolitan are more likely to perceive questionable actions as unethical and less likely to agree that they would engage in such acts. Shafer also noted that benevolent cosmopolitan climates were more prevalent among local firms than among large multinational firms, implying that the local firms had a climate that emphasizes doing right by clients and the public. Shafer (2009) found that auditors in China employed in egoistic climates experience higher levels of conflict between organizational expectations and professional values than do auditors employed in benevolent cosmopolitan and principled-cosmopolitan climates.

More recently, Shafer, Poon, and Tjosvold (2013), using a sample of Asian auditors, concluded that those auditors employed in instrumental climates pursuing either self-interest or firm profitability were more likely to be competitive and less cooperative than auditors working in benevolent cosmopolitan environments. Omar and Ahmad (2014), employing auditors from Big 4 firms in Malaysia, determined that ethical climate was related to job satisfaction but was not related to turnover intention.

The extant literature has focused primarily on auditors. Where tax accountants have been sampled, their results have been merged with those of auditors and consultants, yielding little information about how tax accountants, as a group, perceived the ethical climates of their organizations or about the consequences that climate plays on their ethical judgments. We, therefore, are interested in exploring whether certain types of ethical typologies encourage or discourage unethical behavior of tax professionals in accounting firms. We therefore explore the following research question:

> **RQ1.** How do different ethical work climates (typologies) influence the behavior of tax professionals in accounting firms?

RESEARCH METHOD

Participants

This study used an online questionnaire to study the hypothesized relationships. One hundred and forty-nine tax professionals accessed an online questionnaire.[1] The authors contacted 21 public accounting firms and asked the contact person to forward an electronic link for a survey website to tax professionals in his or her firm. To ensure anonymity, no connection was made between the firm name and any of the individual responses, and it is unknown which firms participated or how many responses from each firm were received.

Table 1 describes the demographic information of the study participants. The average tax professional participant has 10 years of tax work experience and has been employed by his or her current accounting firm for 8 years. Most participants are female (58%) and active CPAs (77%). Half of the tax professional participants work at a Big 4 public accounting firm (50%), with others at international/national firms (14 participant), regional firms (24%), and local firms (12%). Respondents are split between staff (20%) and seniors (30%), and managers or senior managers (30%) and

Table 1. Participant Demographics ($n = 149$).

Years of Tax Experience	Mean of 10 Years (S.D. of 9.4)
Years of experience at current firm	Mean of eight years (S.D. of 7.9)
Gender	Female, 58%
	Male, 42%
Active CPA	Active CPA, 77%
	Non-CPA, 23%
Firm type	Big 4, 50%
	International, 14%
	Regional, 24%
	Local, 12%
Firm level	Partners/principals/directors, 20%
	Senior managers or managers, 30%
	Seniors, 30%
	Staff, 20%

Notes: Statistics are based on 149 tax professionals responding to an online questionnaire. Percentages for each question reflect the proportion of participants who responded to a given question.

partners/principals/directors (20%). Thus, the study includes participants from a mix of larger and smaller firms, and from a mix of levels within these firms.

Experimental Task

This study was conducted via an online instrument that allowed participants to evaluate a hypothetical scenario experienced by a tax professional. This scenario concerns the lack of documentation for a charitable contribution and originates from Yetmar and Eastman (2000). In the scenario, a hypothetical CPA decides to enter a charitable contribution on the client's tax return despite the fact that the charitable deduction amount is unsubstantiated and the tax professional doubts the accuracy of the amount claimed since it is three times larger than previous years' amounts. This scenario was developed by Yetmar and Eastman (2000) and was pre-tested by members of the AICPA Tax Division as being "realistic, relevant, and understandable" (p. 280). Under the current AICPA Statement on Standards for Tax Services (SSTSs), a tax professional may rely on information provided by the taxpayer "unless it appears to be incorrect, incomplete, or inconsistent"; thus, tax professionals are permitted to rely on information on charitable contributions provided by the taxpayers, but not if such information appears to be incorrect or inconsistent. This scenario therefore represents a violation of professional standards since the tax professional chooses to rely on unsubstantiated information that is inconsistent with prior year amounts and appears to be incorrect. Participants in our study generally agreed that the scenario contained an ethical issue (mean of 4.75 on a 7-point scale where 7 = strongly agree). Appendix A contains the text of the scenario.

Experimental Procedures

All of the tax professional participants completed the study in an online environment. Two of the study's variables were manipulated (client importance and social interaction), resulting in four experimental conditions. Participants randomly completed one of the four versions of the questionnaire, which were identical outside of the changes in manipulated variables. Analysis indicates that these demographic characteristics were not significantly related to any of these conditions.

Within the study, participants first provided demographic information. Next, they reviewed the hypothetical scenario (discussed above) and received information about the client (manipulated between subjects). Participants then responded to manipulation check questions and answered questions about the scenario. Finally, participants responded to questions measuring the client service climate and ethical climate at their current accounting firm.

Manipulated Variables

The hypothesized variables "client importance" and "social interaction" were manipulated between subjects. *Client importance* was manipulated as either high (important client) or low (an unimportant client) following Bobek et al. (2010). In the high client importance condition, the client was one of the largest clients of the hypothetical tax professional's firm and constituted a very significant source of revenue for the firm. In the low client importance condition, the client was a small client who was a very minor source of revenue for the firm. A manipulation check question assessed whether the client was considered an important client for the firm in the scenario (based on a 7-point scale with higher values indicating greater importance). Those in the low importance condition averaged 4.07 (1.47 standard deviation), while those in the high importance condition averaged 6.39 (1.25 standard deviation), which are quite similar to the values reported in Bobek et al. (2010). Interestingly, subjects in the low importance condition appear unwilling to rate client importance toward the lower end of the scale. Consistent with prior research, we infer this to mean that subjects are unwilling to rate a client as unimportant, anchoring toward the mid-point of the scale. Nevertheless, the difference between the low condition and the high condition was statistically significantly at $p < .001$; thus, the importance manipulation appears successful.

Social interaction was also manipulated as either high or low. This manipulation was modeled off of the idea of social proximity from the Jones (1991) model and attempted to capture the multiple ways in which a tax professional could socially interact with a client and his/her firm. In the high social interaction, the hypothetical tax professional was on a recreational softball team with the client, belonged to the same country club, and had children who attended the same schools. In the low social interaction condition, the hypothetical tax professional has no social interaction outside of work with the client. The manipulation check question for this variable assessed whether the hypothetical tax professional interacts socially with the client outside of work (7-point scale with higher values indicating greater social interaction). Those in the low social interaction condition averaged 1.69 (standard deviation of 1.37) and those participants in the high social interaction condition averaged 6.49 (standard deviation of .704). The difference was statistically significant at $p < .001$; thus, the social interaction manipulation also appears to be successful. Appendix B reproduces the text used for the manipulated client factors for the four experimental conditions.

Measured Variables

The study's primary dependent variable measures a third-party's behavioral intention – specifically, participants' assessment of what others in their firm would do if in a similar situation. This primary dependent variable was measured on a 7-point Likert-type scale (1 = very low and 7 = very high) with the question, "What is the probability that others in your firm would undertake the same action as Greg if placed in his particular situation?" The average response was 4.30 (standard deviation of 1.60), indicating that participants were slightly more likely than not to think that others in their firm would undertake the same action (failing to substantiate the charitable contribution). We also measured participants' *own* behavioral intentions with what they would do in a similar situation; the average response was 3.84 (standard deviation of 1.76) – slightly less likely than not to assert that he or she would undertake the same action presented in the scenario.

We measured the *client service climate* by modifying the measure employed by Schneider et al. (1998) to address accounting firms. Four separate questions were included assessing the emphasis on quality client service, each measured on a 6-point scale (with higher numbers indicating greater emphasis). Table 2 reports the questions used for these four items and their descriptive statistics. In addition, Table 2 reports the results of a factor analysis for these items – all four items load onto a single factor (with each item loading in excess of 0.70). When all items are included in a single scale, the scale exhibits sufficient reliability (Cronbach's alpha of 0.753). Thus, a *Client Service Scale* is generated by summing all four items together.

The measure for ethical climate originates from Victor and Cullen's (1988) ethical climate questionnaire. This questionnaire contains 26 items measuring nine different theoretical dimensions based on the combination of the ethical criterion (principled, benevolence, or egoistic) and the locus of analysis (individual, local, or cosmopolitan). Victor and Cullen (1988) report the emergence of different typologies: caring (benevolence), law and code (principled-cosmopolitan), rules (principled-local), instrumental (egoism), and independence (principled-individual). Per Cullen et al. (2003, p. 132), "it is important to note that emergent climate types need not conform exactly to the nine climate types" and different climate types may emerge and different typologies may emerge from different organizations, a belief verified by Martin and Cullen (2006). In our study, we follow Victor and Cullen, and all items are measured on a 6-point Likert-type scale with higher values indicating greater levels of agreement.

We perform a factor analysis using Varimax rotation of the 26 ethical climate items. After deleting items that cross-loaded or only weakly loaded onto a factor (item loading of less than 0.60), the final factor analysis includes 14 items that load onto five factors. Table 2, Panel B presents these items, their descriptive statistics, and the results of the factor analysis. The first factor, *Rules & Laws*, includes six items from the principle-based ethical criterion and both the local and cosmopolitan level of reference. The second

Table 2. Factor Analysis.

Panel A: Factor Analysis of Client Service Scale

Item	Means (S.D.)	Factor Loading
How would you rate the overall quality of client service provided by your firm?	4.49 (0.580)	.743
How would you rate the leadership shown in management at your firm in supporting the client service quality efforts?	4.22 (0.825)	.820
How would you rate efforts to measure and track the quality of client service provided at your firm?	4.00 (0.781)	.807
How would you rate the recognition and rewards employees receive for the delivery of superior client service?	3.25 (1.154)	.723
Overall (Cronbach's alpha of 0.753)	15.94 (Mean of 3.99)	60% Variance explained

Notes: Factor loadings based on Principal Components Analysis with Varimax rotation. Items are assessed on a 5-point Likert-type scale, where 1 = poor and 5 = excellent.

Panel B: Factor Analysis of Ethical Climates

Factor 1: Rules & Law	Means (S.D.)	Factor Loading
(PC) In this office, the law or ethical code of the profession is the first consideration.	5.21 (0.789)	.725
(PL) Everyone is expected to stick by firm rules and procedures.	5.34 (0.906)	.792
(PL) People in this office strictly obey the firm's policies.	4.64 (0.884)	.811
(PC) In this office, people are expected to strictly follow legal or professional standards.	5.56 (0.618)	.776
(PL) It is very important to follow the firm's rules and procedures here.	5.26 (0.769)	.795
(PC) People are expected to comply with the law and professional standards over and above other considerations.	5.30 (0.840)	.740
Overall (Cronbach's alpha of 0.869)	31.36 (Mean of 5.23)	24% Variance explained

Factor 2: Benevolence (Caring)	Means (S.D.)	Factor Loading
(BL) In our office, what is best for everyone at the firm is the major consideration.	4.19 (1.082)	.837

Table 2. (*Continued*)

Factor 2: Benevolence (Caring)	Means (S.D.)	Factor Loading
(BI) In our office, the major concern is always what is best for the other person.	3.12 (1.027)	.766
(BL) The most important concern is the good for all the people in our office.	4.02 (1.037)	.765
Overall (Cronbach's alpha of 0.726)	11.29 (Mean of 3.76)	15% Variance explained

Factor 3: Firm Interests	Means (S.D.)	Factor Loading
(EL) People here are concerned with the firms' interests to the exclusion of all else.	2.94 (1.26)	.820
(EL) People are expected to do anything to further the firm's interests, regardless of consequences.	1.91 (1.103)	.743
Overall	4.87 (Mean of 2.43)	10% Variance explained

Factor 4: Personal Morality (Independence)	Means (S.D.)	Factor Loading
(PI) In this office, people are guided by their own personal ethics.	4.17 (1.064)	.864
(PI) In this office, people are expected to follow their own personal and moral beliefs.	3.93 (1.121)	.787
Overall	8.14 (Mean of 4.07)	10% Variance explained

Factor 5: Efficiency	Means (S.D.)	Factor Loading
(EC) In this office, it is expected that each person above all will work efficiently.	4.18 (1.033)	.903 (7% Variance explained)

Notes: Factor loadings based on Principal Components Analysis with Varimax rotation. Items are assessed on a 6-point Likert-type scale, where 1 = completely false and 6 = completely true. Abbreviations for the ethical climate dimensions consist of: Egoism (E), Benevolence (B), Principle (P), Individual (I), Local (L), and Cosmopolitan (C).

factor, *Benevolence* (termed as "Caring" in the Victor & Cullen, 1988 study), includes three items that rely on the benevolence ethical criterion (both the individual and local references of analysis). Both of these factors demonstrate sufficient reliability when the items retained in the factor analysis are summed to form a scale (Cronbach's alpha for all in excess of 0.70). The next two factors include two items each – *Firm Interests* and *Personal Morality* (termed as "Independence" in the Victor and Cullen study). The factor Firm Interests consists of questions from the egoism-local level, emphasizing company profit; the factor Personal Morality consists of items from the principle-individual level, which emphasizes independence and individuals' own personal sense of ethics. The final factor to emerge, Efficiency, consists of one item from the egoistic-cosmopolitan level and emphasizes working efficiently at the firm. Overall, the ethical climate typologies that emerge from our study of tax accountants are consistent with prior studies of auditors and accountants.

Finally, we also assess whether any of the demographic variables were significantly correlated with the study's dependent variable. We find that participants from Big 4 public accounting firms are significantly less likely to believe that others in their firm would fail to substantiate the charitable contribution when compared to participants from non-Big 4 (smaller) public accounting firms. This finding is congruent with Pierce and Sweeney (2010, p. 91), who found that "respondents from Big 4 firms [had] higher ethical views" compared to accountants from non-Big 4 firms, which may be due to the structures in place in Big 4 firms to encourage ethical decision-making. Thus, our analyses include a control for whether or not participants work at a Big 4 firm.

RESULTS

Hypothesized Relationships

Hypotheses 1 and 2 predict that client importance and social interaction, respectively, will influence the behavior of tax professionals. Table 3 presents the descriptive statistics for the dependent variable (behavior of other tax professionals in your firm) for the four different cells created by the manipulations of these two variables. There are no statistically significant differences between cells, and means between the groups appear almost identical.

An analysis of covariance (ANCOVA) is presented in Table 4, Panel A. This ANCOVA includes the manipulations of client importance and social interaction as the factors, and includes both the client service climate scale and Big 4/non-Big 4 dichotomous variable as covariates.

Table 3. Descriptive Statistics for Dependent Variable (Behavior of Others in Your Firm).

	Low Importance	High Importance	Row Means (Social Interaction)
Low social interaction	4.34 (1.84)	4.25 (1.41)	4.30 (1.63)
	$n = 32$	$n = 32$	
High social interaction	4.29 (1.66)	4.32 (1.49)	4.30 (1.59)
	$n = 42$	$n = 25$	
Column means (importance)	4.31 (1.73)	4.28 (1.44)	4.30 (1.60)

Note: Items are measured on a 7-point Likert-type scale (1 = very low and 7 = very high) assessing, "What is the probability that others in your firm would undertake the same action as Greg in his particular situation?"

The overall model is statistically significant ($p = .02$) with an adjusted R^2 value of .072. However, neither the client importance nor the social interaction manipulations are statistically significant; thus, Hypotheses 1 and 2 are not supported. Consistent with the findings from the auditing literature (Hunt & Lulseged, 2007; Kerler & Brandon, 2010; Li, 2009), tax professionals, despite being charged with client advocacy, still appear able to make ethical decisions in the face of increased pressure from their clients.

Table 4, Panel A also indicates that the Client Service Scale is statistically significant within the ANCOVA ($p = .052$), indicating that the client service environment influences others' behavior within the tax professionals' firms. Table 4, Panel B further investigates this statistically significant finding. We mean-split the scale into those from a low client service climate (score below 16) and a high service climate (scores of 16 or above). Participants from low client service climates have significantly lower scores for the anticipated behavior of others than do participants from high service climates (means of 4.57 vs. 3.91, respectively). Thus, participants that perceive their accounting firms' environment as having weaker client service climates are more likely to think that others in their firm would go along with the questionable behavior. Thus, Hypothesis 3 is supported, with the finding that unethical behavior is less likely to occur in stronger client service climates.

We also find that participants are significantly less likely ($p = .003$) to think that others in their firm would go along with the questionable

Table 4. Hypothesis Testing.

Panel A: Analysis of Covariance for Others' Behavior (with Client Service Scale)

	F-Statistic	Significance Level
Importance manipulation	.002	.961
Social interaction manipulation	.029	.916
Social × importance interaction	.120	.729
Client Service Scale	3.874	.052
Big 4 firm	9.038	.003
Model statistics:		
F-statistic = 2.799		
Significance level = .020		
Adjusted R^2 = .072		

Notes: Dependent Variable is measured on a 7-point Likert-type scale (1 = very low and 7 = very high) assessing, "What is the probability that others in your firm would undertake the same action as Greg in his particular situation?"

Panel B: Means for Others' Behavior – High versus Low Service Climate

	Low Client Service Climate	High Client Service Climate	Overall
Client service climate	4.57 (1.58)	3.91 (1.70)	4.27 (1.67)
	n = 65	n = 53	

Notes: "High" and "Low" Service climate are created based on median-splitting the "Service Climate Scale" measure (score of 16 and above out of 20-point scale is coded as "high"). Dependent Variable is measured on a 7-point Likert-type scale (1 = very low and 7 = very high) assessing, "What is the probability that others in your firm would undertake the same action as Greg in his particular situation?"

behavior when they are from Big 4 (larger) firms than when they are from smaller firms. This finding is consistent with Yetmar and Eastman (2000), who found that tax practitioners from larger firms were more likely to recognize ethical issues than their counterparts from smaller firms. Interestingly, we do not find a significant correlation between participants' client service scale and their firm size ($p > .50$), indicating that client service climate has an important influence on decision-making beyond that of firm size.

Further analysis explores whether any components of client service climate are more likely than others to encourage or discourage the questionable behavior. Correlation analysis reveals that one item on the scale in particular, "How would you rate efforts to measure and track the quality of client service provided at your firm?" is strongly correlated with the dependent variable. We substitute in this single-item measure for the client service scale and repeat our analyses. Table 5, Panel A presents the results of our ANCOVA model but with this measure ("client service measurement") included, whereas Table 5, Panel B presents the dependent variables for conditions of low and high client service management. Results are similar to the previous analysis, but the "measuring and tracking" variable is even more strongly related to the dependent variable ($p < .001$). Furthermore, the overall fit of the model improves to an adjusted R^2 of .144. Big 4 firm membership continues to have a strong influence on behavior ($p < .01$). Thus, it appears that measuring and tracking client service quality is particularly important in deterring unethical or questionable behavior. When employees understand that leadership will be monitoring, supporting, and rewarding acceptable client service, they perceive less likelihood that others in the firm will take subjective, questionable actions to satisfy the short-term demands of a client. This result suggests that an effective means of deterring unethical or questionable behavior is to put in place measures for observing that the firm's standards are being carried out and that employees are not left to determine their own best courses of action.

Research Question

Our study's research question addresses whether different types of ethical climates discourage unethical or questionable behavior. We investigate the correlations between others' behavior and the ethical climate scores for the five identified climate types (Rules & Law, Benevolence, Firm Interests, Personal Morality, and Efficiency). Table 6, Panel A reports this correlation analysis. Two of the ethical climate types are significantly correlated with participants' assessment of others' behavior within their firm. Participants with stronger ratings on the *Rules & Law* ethical typology (emphasizing a principle-based ethical criterion at either the local or cosmopolitan locus of analysis) reported that others in their firm would be significantly less likely to engage in the unethical behavior in the scenario. Thus, having a strong emphasis on company rules and policies as well as

Table 5. Hypothesis Testing – Further Analysis.

Panel A: Analysis of Covariance for Others' Behavior ("Measuring" Quality of Service)

	F-Statistic	Significance Level
Importance manipulation	.081	.776
Social interaction manipulation	.307	.581
Social × importance interaction	.266	.607
Measuring client service item	13.605	<.001
Big 4 firm	7.685	.007
Model statistics:		
F-statistic = 4.074		
Significance level = <.001		
Adjusted R^2 = .144		

Notes: "Measuring Climate Service" is measured on a 5-point Likert-type scale (1 = poor and 5 = excellent) assessing, "How would you rate efforts to measure and track the quality of client service provided at your firm?" Dependent Variable is measured on a 7-point Likert-type scale (1 = very low and 7 = very high) assessing, "What is the probability that others in your firm would undertake the same action as Greg in his particular situation?"

Panel B: Means for Others' Behavior – High versus Low Client Service Measurement

	Low Client Service Measurement	High Client Service Measurement	Overall
Client service measurement	4.45 (1.60) n = 88	3.98 (1.57) n = 43	4.30 (1.60)

Notes: "High" and "Low" measurement of "client service measurement" is created based on median-splitting the item (score above 4 is coded as "high"). Dependent Variable is measured on a 7-point Likert-type scale (1 = very low and 7 = very high) assessing, "What is the probability that others in your firm would undertake the same action as Greg in his particular situation?"

an emphasis on professional codes of conduct appears to deter unethical or questionable behavior. However, participants with stronger ratings on the *Personal Morality* reported that others in their firm would be *more* likely to engage in the unethical behavior, thus demonstrating that unethical behavior may be more likely when tax professionals within a firm are guided by their own personal ethics to determine right from wrong. Taken together, the results suggest that tax accountants are less confident that their peers

Table 6. Research Question.

Panel A: Correlations of Others' Behavior and Ethical Climates

Ethical Climate Typology	Others' Behavior
Rules & Law	−.251***
Benevolence	.124
Firm Interests	.065
Personal Morality	.222**
Efficiency	.061

Panel B: Correlations of Client Service Climate and Ethical Climates

Ethical Climate Typology	Client Service Climate
Rules & Law	.336***
Benevolence	.259***
Firm Interests	−.303***
Personal Morality	−.028
Efficiency	−.366***

Notes: (Panels: A and B) Dependent Variable is measured on a 7-point Likert-type scale (1 = very low and 7 = very high) assessing, "What is the probability that others in your firm would undertake the same action as Greg in his particular situation?" Refer to Table 2, Part B for the measurement of the Types of Ethical Climate.
Correlation is statistically significant at ***$p < .01$; **$p < .05$; *$p < .10$.

will take the ethical action when they are allowed to follow their own ethics rather than being encouraged to follow firm guidelines and professional standards. In an additional (untabulated) analysis, we run five separate ANCOVAs with each of the five separate ethical climate types, while controlling for social interaction, client importance, and Big 4 firms. Results are consistent with our correlation analysis; specifically, unethical behavior among others in the firm is *less* common when the *Rules & Law* climate type is stronger, whereas unethical behavior among others in the firm is *more* common when the *Personal Morality* climate is stronger.

Our results are consistent with prior research using the Defining Issues Test to assess the individual moral reasoning abilities of accountants. Early research (see Ponemon, 1994) lamented that the moral reasoning abilities of accountants were lower than those of the general public, especially at higher levels of the firm (a result that has been contradicted by Scofield, Phillips, & Bailey, 2004). Accountants were consistently viewed as predominantly reasoning at the conventional level, suggesting that, when faced with a professional dilemma, they will look toward the rules of their referent group and the profession. Jeffrey and Weatherholt (1996) determined that accountants reasoning primarily at the conventional level displayed higher levels of professional commitment and were more likely to be rule oriented. Lampe and Finn (1992) reported that auditors reasoning at conventional levels were unlikely to deviate from the professional code of conduct. Sweeney and Roberts (1997) found that auditors reasoning at conventional levels were more likely to comply absolutely with independence standards, whereas auditors reasoning at post-conventional levels may deviate from professional standards if these standards are incongruent with personal values. Abdolmohammadi and Baker (2006) determined that graduating accounting students who prefer conformity display higher levels of conventional reasoning. More recently and with regard to tax accountants specifically, Doyle, Hughes, and Summers (2013) assert that tax accountants moral reasoning is less principled (more conventional) when deliberating a tax issue than when considering dilemmas in a broader social context. On the whole, this literature would suggest that tax accountants would believe that their peers would be more likely to take the right action if the firm climate emphasized firm policies and professional standards.

With one exception, we do not find differences in the ethical climate types due to firm sizes. Participants from Big 4 firms are significantly more likely ($p = .033$) to have higher scores on the *Efficiency* dimension than participants from non-Big 4 firms (untabulated). In order to shine light on the potential overlap between client service climate and ethical climate, we also examine the correlations between climate service climate and the five different ethical typologies that emerged in our study. Table 6, Panel B presents the results of this correlation analysis. The results are striking. Tax professionals perceive a stronger client service climate in ethical climates in which the *Rules & Laws* and *Benevolence* typologies are stronger (both $p < .01$). In other words, climates that emphasize following company policy and professional codes have stronger client service climates. Moreover, climates where employees feel cared about also have stronger client service climates. This result is consistent with Moon and Choi (2014), who assert that a strong ethical climate leads to higher levels of customer satisfaction. On the other hand, when the *Firm Interests* and *Efficiency* ethical typologies – an egoistic climate – are stronger, client service climates are significantly weaker (both $p < .001$); thus, client service climates are likely to suffer in firms that emphasize profits and efficiency. The ethical typology *Personal Morality*, in which individuals are encouraged to follow their own personal ethics, is not significantly related to client service type. Overall, these results indicate that stronger client service climates are more likely to be found in firms that first consider the rules and policies of both the firm and the profession, as well as those that emphasize caring and acting with benevolence.

Supplemental Analyses

We perform several additional analyses to assess the robustness of our results. Given that the construct of client service climate is a new addition to the accounting literature, we conduct additional analyses to understand its influence. We fail to find any significant interactions between client service climate and either of the study's manipulated variables, indicating that the influence of this variable is fairly constant regardless of conditions. We also investigate which types of participants report higher levels of firm service climate. Interestingly, we find a strong difference among firm levels ($p = .01$) but not firm size. Firm leaders (partners, principals, or directors) report the highest perceptions of client service climate (average of 17.1 on a 24-point scale), while seniors (average of 14.8), staff (average of 16.0), and managers (average of 15.7) are significantly lower. Further investigation indicates that this difference is not due to perceptions over the tracking or measuring of service quality, but is driven by differences in perception over the leadership shown by management in supporting quality client service and in recognition or rewards in supporting service quality. Thus, it appears that participants have fairly homogeneous views over the tracking or measuring of client service, regardless of their firm level or size, but that participants at different levels have different perceptions of the values or norms that their firm places on such behavior.

Second, we consider influences on participants' *own* behavioral intentions. These findings are similar to the tabulated results reported for others' behavioral intentions. In particular, tax professionals are less likely to engage in unethical or questionable behavior when they are in a firm environment that has strong monitoring and tracking systems to measure client service quality. However, the overall quality of the client service climate is irrelevant – only the measuring/tracking variable matters. This further supports our finding that the strength of a firm's monitoring policies can have an important influence on curbing questionable behavior.

Third, we consider the influence of other demographic variables. The majority of these factors have no effect on the study's dependent variable, with the exception that active CPAs are less likely to think that others within their firm would engage in unethical behavior.

IMPLICATIONS

The results of our study indicate that the client service climate of a firm is strongly associated with the *Rules & Laws* and *Benevolent* ethical climates and has the potential to influence the ethical behavior of tax professionals. In particular, tax professionals are less likely to engage in questionable behavior when they perceive that the firm has a good system for monitoring or tracking client service quality. We cannot infer from our results whether this result is because of the positive focus on service quality, rather than just on financial performance, or whether this result reflects concern that a strong monitoring system will result in questionable actions being detected. Nevertheless, the client service climate literature suggests many positives for the firm are derived from a strong client service climate.

How can public accounting firms strengthen their client service climates? Bowen and Schneider (2014) explain important antecedents; among these are (1) human resource management (HRM) practices and (2) leadership issues.

With regard to HRM practices, policies should be directed specifically at service quality, rather than being more general policies emphasizing high performance (Hong, Liao, Jia, & Kaifeng, 2013). Hiring and training should focus on attributes related to service quality (Ployhart, Van Iddekinge, & MacKenzie, 2011). And as our results indicate, a system of monitoring and tracking client service quality is critical to constant improvement.

With regard to leadership, the client service literature has demonstrated repeatedly that management should focus on the "basics" or the details that will create a positive and strong climate for service to clients. Bowen and Schneider (2014, p. 8) state that "… [L]eaders' committed attention to everyday mundane tasks may be as impactful as their stated service vision and generic motivational inspiration." In other words, it is not enough that accounting firm leaders be committed to service quality; instead, leaders need to be hands-on in establishing detailed behavior that leads to service quality, model it for their staff, remove obstacles to it, and ensure that their staff has the resources that they need to deliver it (Salvaggio et al., 2007; Schneider et al., 2005).

Bowen and Schneider (2014) also suggest that a strong client service climate requires employee engagement. Staff members and other employees will be engaged if they (1) believe that they have the resources to support and facilitate their work, (2) feel that their work is challenging and meaningful, and (3) believe that they are treated fairly and share a mutual trust with firm leadership. Our analysis suggests that accounting staff at public accounting firms do not believe that either the support of service quality nor the rewards and recognition for providing high quality service is as strong as firm leaders perceive it to be, implying room for improvement in this area.

Taken together, prior research and our results suggest that accounting firm leaders should emphasize service quality, not just high performance, if they want to reduce questionable behavior by tax professionals. Moreover, firm leaders need to be hands-on in establishing and modeling service quality, ensure that HRM practices for hiring, training, and monitoring staff performance emphasize client service quality, and provide sufficient rewards and recognition for high service quality. Given the unique role that tax professionals play, our results suggest that firm leaders need to be aware of and address the competing demands faced by tax professionals if they wish to encourage ethical decision-making in this environment.

CONCLUSION

This study examined the influence of client factors and the firm's client service climate on tax professionals' ethical decision-making. Our results indicate that even when tax professionals perceive that a client is important to the firm or when social interaction outside of work is high, these client characteristics have little influence on ethical decision-making. However, we also find that client service climate (Schneider et al., 1998) strongly influences tax professionals' behavior, and results are strongly related to the degree of monitoring and tracking of client service quality that the accounting firm engaged in. These findings suggest that an organization's climate has a strong influence on tax professionals' behavior. Furthermore, client service climates were stronger among ethical climates that emphasized following rules and laws as well as those with a caring or benevolence orientation, and weaker in ethical climates that prioritized efficiency or firm profits. Overall, this study demonstrates that tax professionals' belief that quality is being tracked and can be observed is critical. Tax professionals tend to believe that ethical decision-making will occur if their firm has standards and then policies in place to observe that firm rules are being carried out rather than relying on individuals to determine the best course of action.

The results of this study should be interpreted in light of its limitations. First, our experiment used a single scenario and results may not be generalizable beyond the circumstances of the scenario. However, the use of the single scenario enables greater comparability across the different conditions. Second, as the study deals with a sensitive topic, participants may not have been completely honest in addressing how they would behave. This concern is partially assuaged by the fact that for our hypotheses testing, we examined what tax professionals felt that others within their accounting firm would do. Third, while our results show statistically significant differences, the experimental design of our study makes assessing the economic magnitude of our results difficult. However, given the differences found in our study based on client service climates and ethical climate types, firm leaders would still be well advised to consider how organizational climate may affect accounting professionals. Finally, our manipulation of client importance, while statistically significantly different between the conditions, does not appear to be as strong as our manipulation for social interaction. We followed prior research on tax professionals (Bobek et al., 2010) for the wording for our client importance manipulation, and we report similar results for our manipulation check. We note that subjects seem to be unwilling to rate clients as unimportant, thereby compressing the range of this variable. Future researchers may wish to build upon and further refine the manipulation for this variable.

Overall, this study contributes to the ethics literature by exploring how organizational characteristics may influence tax professionals' ethical decisions. The influence of a firm's client service climate (Schneider et al., 1998) suggests that these constructs should be further considered in future research. Researchers could also attempt to develop client service climates and ethical climate typologies that are unique to the accounting firm environment. In all, future researchers can build upon this study to continue examining how elements of organizational climate influence accountants' behavior.

NOTE

1. The data for this study was collected in conjunction with a larger project. None of the results for this study have been previously reported or discussed. Furthermore, of the 149 participants who accessed the questionnaire, not all answered all of the survey questions; thus, results reported for each analysis include all of the participants who completed the applicable questions.

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APPENDIX A: TEXT OF THE EXPERIMENTAL SCENARIO

The Princetons gave Greg partial documentation pertaining to the charitable contributions for the current year. The amount the Princetons indicated for the current charitable contribution amount is larger than the Princetons' prior three years' reported contribution deductions. The Princetons advised Greg that they misplaced the documentation pertaining to the current contributions. The charitable contribution deduction is not that large in relation to the Princetons' gross income. The Princetons have discussed with Greg that if they are not permitted to deduct this charitable contribution amount, they will take both the tax return and audit preparation elsewhere. Greg enters the charitable contribution amount on the Princeton's current tax return and decides to utilize the remaining budgeted hours to pursue and verify more material amounts and issues.

APPENDIX B: TEXT OF MANIPULATED VARIABLES

High Social Interaction, High Client Importance

Greg, a CPA tax practitioner with Smith & Co., is responsible for the tax work of John and Jane Princeton. John and Jane Princeton are high income taxpayers; John is a local bank president and Jane is a nurse at a local hospital. John's bank is one of Smith & Co.'s largest clients. The Princetons are considered important clients because the bank audit and tax return preparation fees are a very significant source of revenue for Smith & Co. The Princetons have been a client of Smith & Co. for the past 15 years. Greg is on a recreational softball team with John, and both Greg's family and the Princetons belong to the same country club. Greg's two children attend the same school as the Princetons' children; Greg's wife serves on the PTA with Jane.

High Social Interaction, Low Client Importance

Greg, a CPA tax practitioner with Smith & Co., is responsible for the tax work of John and Jane Princeton. John and Jane Princeton are high income taxpayers; John is a local bank president and Jane is a nurse at a local hospital. The bank is not a client of Smith & Co. The Princetons' tax return preparation fees are a very minor part of the overall revenue of Smith & Co. The Princetons have been a client of Smith & Co. for the past 15 years. Greg is on a recreational softball team with John, and both Greg's family and the Princetons belong to the same country club. Greg's two children attend the same school as the Princetons' children; Greg's wife serves on the PTA with Jane.

Low Social Interaction, High Client Importance

Greg, a CPA tax practitioner with Smith & Co., is responsible for the tax work of John and Jane Princeton. John and Jane Princeton are high income taxpayers; John is a local bank president and Jane is a nurse at a local hospital. John's bank is one of Smith & Co.'s largest clients. The Princetons are considered important clients because the bank audit and tax return preparation fees are a very significant source of revenue for Smith & Co. The Princetons have been clients of Smith & Co. for the past three years. Greg has no social interaction outside of work with the Princetons.

Low Social Interaction, Low Client Importance

Greg, a CPA tax practitioner with Smith & Co., is responsible for the tax work of John and Jane Princeton. John and Jane Princeton are high income taxpayers; John is a local bank president and Jane is a nurse at a local hospital. The bank is not a client of Smith & Co. The Princetons' tax return preparation fees are a very minor part of the overall revenue of Smith & Co. The Princetons have been clients of Smith & Co. for the past two years. Greg has no social interaction outside of work with the Princetons.

DOES MONITORING REDUCE THE AGENT'S PREFERENCE FOR HONESTY?

Brian K. Laird and Charles D. Bailey

ABSTRACT

Traditional agency theory assumes monitoring is good for the principal, but we investigate an unintended effect: diminishment of the agent's preference for honesty. We hypothesize greater dishonest behavior in a monitored environment than in a non-monitored environment, when the agent has the opportunity to cheat outside the scope of monitoring. Relevant theories to explain such behavior are behavioral agency theory, where trust and reciprocity are thought to alter contractual outcomes, and the fraud-triangle theory, where the ability to rationalize deviant acts affects behavior. We utilize participants who have been acclimated to either a monitored or an unmonitored condition in an immediately preceding experiment and seamlessly continue that treatment. Within each of these conditions, participants perform a simple task with a performance-based monetary reward. Half self-report and can safely cheat, while the other half are verified; the difference between verified and self-reported scores is a proxy for dishonest reporting. As hypothesized, unmonitored individuals reciprocate with honest behavior, while

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monitored individuals tend toward dishonest behavior when the opportunity arises. Implications for fraud prevention are discussed.

Keywords: Monitoring; control; honesty; agency theory; fraud; internal controls

It is well established in the business literature that monitoring increases effort and deters dishonest behavior within an organization (e.g., Jensen & Meckling, 1976; Niehoff & Moorman, 1993). This conclusion is logical and intuitive, since a self-interested agent is likely to work hard and be honest to avoid sanctions. Despite the importance of monitoring in the firm, many questions still remain regarding the psychological and behavioral effects of monitoring on the agent. In particular, how monitoring affects the agent's attitude toward dishonesty and whether monitoring may increase the likelihood of dishonest behavior when the agent has the opportunity to benefit from undetectable dishonesty, are largely unanswered empirical questions.[1] Given that monitoring formally addresses only the "opportunity" side of the fraud triangle (Cressey, 1973; PCAOB, 2005), identifying its potential effects upon the other sides of the triangle – incentive/pressure and attitude/rationalization – is important to the design of internal controls and the prevention of fraudulent behavior. While we do not measure these latent variables in this study, we do measure the agent's actual behavioral dishonesty. If an individual engages in a behavior, he or she likely has formed attitudes, intentions, and preferences supportive of such behavior.[2]

We propose that workplace monitoring increases the likelihood of agent behavioral dishonesty for two reasons. First, behavioral agency theory suggests that the inclusion of trust (Beccerra & Gupta, 1999) and reciprocity (Kuang & Moser, 2009) into traditional agency theory can alter contractual outcomes. Specifically, individuals seem to respond negatively to workplace controls that restrict their feelings of autonomy (Falk & Kosfeld, 2006). Second, the theory of the fraud triangle suggests that the ability to rationalize deviant behavior is an important component in the decision to be dishonest or commit fraud in the workplace. When faced with an opportunity to gain from dishonesty, most individuals are not completely honest (e.g., Evans, Hannan, Krishnan, & Moser, 2001), but they do limit their dishonesty to the point that they can rationalize their behavior and do not have to downgrade their self-perception

(Mazar, Amir, & Ariely, 2008). Environmental factors such as monitoring influence the amount of dishonesty one may partake in and still be able to rationalize his or her deviant behavior.[3]

We experimentally test the proposition that monitoring tends to increase dishonest behavior by using a research design where participants are assigned to one of three monitoring-treatment groups: an unmonitored condition, traditional human monitoring, and electronic surveillance monitoring. After participants have been exposed to the monitoring treatment for an induction period and with the monitoring still in place, they perform a simple mental math task where they receive a monetary reward based upon task performance. Half in each treatment group self-report their results, while the other half have their results verified. Dishonesty is operationalized as the difference in means between the "self-report regime" and the "verify regime" of each treatment group (see Mead, Baumeister, Gino, Schweitzer, & Ariely, 2009 for a similar research design). As hypothesized, the results of the experiment indicate more dishonesty in the monitored treatment groups than in the unmonitored group.

By examining the effects of monitoring on behavioral honesty, this research answers the call of Christ, Emett, Summers, and Wood (2012) to further develop our understanding of the potential consequences of formal controls within firms. Also, by positing that monitoring not only reduces opportunity for dishonesty, but also reduces the individual's internal ethical motivation, and increases the ability to rationalize cheating, we heed the call of Hogan, Rezaee, Riley, and Velury (2008) to design studies that examine multiple elements of the fraud triangle simultaneously. That is, aside from the intentional reduction of opportunity, monitoring (if perceived as controlling rather than supportive) provides substantial excuses for rationalization; and, if the agent reacts with hostility, it may increase the incentive to be dishonest for personal gain.

The rest of this paper is organized as follows: The next section expands on the theory and background, leading to our research hypothesis. The section after this describes the research design, the next provides the results, and the final section gives the summary and conclusions.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Honesty in the accounting and finance literature is usually discussed in the framework of agency theory and/or fraud prevention. In both of these frameworks, monitoring traditionally is viewed in a positive light, where the only restraint on monitoring and control is the economic cost/benefit to the principal (e.g., Hansen, 1997; Zajac & Westphal, 1994). However, some research suggest the existence of hidden costs and unanticipated effects of monitoring and control (Belot & Schröder, 2013; Falk & Kosfeld, 2006). These implicit or hidden costs of control are not well understood and rarely are considered in theoretical models. This study addresses one possible dimension of these costs by examining the effects of monitoring on the agent's behavioral honesty.

The view of honesty in the psychology literature contrasts with the view in the traditional economics literature. The standard economic perspective of behavior is one of economic rationality, where the individual is a rational[4] and selfish entity interested only in maximizing his or her own external payoffs. In contrast, the psychology literature holds that, in addition to the external reward and punishment mechanisms, internal motives and rewards substantially influence individuals' decisions and actions.

Although, much of human behavior can be explained by using the rational, self-interested model of behavior, some observed behaviors are not consistent with the characteristics of economic rationality. This phenomenon has led to the development of additional theories to account for the discrepancies between economic rationality and actual human behavior (Cuevas-Rodríguez, Gomez-Mejia, & Wiseman, 2012). Two theoretical areas, in particular, are relevant to the effects of monitoring on (dis)honest behavior within firms: behavioral agency theory and the fraud-triangle theory.

Behavioral Agency Theory

Traditional agency theory assumes that principals and agents are strictly rational, leaving little room for important psychological components. However, in the development of behavioral agency theory, researchers have found that the inclusion of trust (Beccerra & Gupta, 1999), reciprocity (Kuang & Moser, 2009), and social norms (Fehr & Falk, 2002) into traditional agency models can dramatically alter the predicted outcomes of contracts. For example, in an experimental budget setting, Evans et al. (2001) found that contracts relying on subjects' preferences for honest reporting yielded the highest firm profit. Their findings indicate that a trade-off exists between the intrinsic rewards of being honest and the extrinsic rewards from dishonesty. Most people value non-pecuniary benefits such as fairness, reciprocity, and honesty (Gibson, Tanner, & Wagner, 2012; Gneezy, 2005; Lundquist, Ellingsen, Gribbe, & Johannesson, 2007), and when faced with the dilemma of being honest versus receiving a reward for dishonesty, people usually look for a compromise, resulting in "partial honesty" (Evans et al., 2001).

Controls may crowd-out the agent's intrinsic motivation to perform the behaviors that the principal expects, causing the agent's cooperation and work performance to depend on external motivation (Frey & Jegen, 2001; Frey & Oberholzer-Gee, 1997; Ryan & Deci, 2000). Frey (1997) attributes this "hidden cost" to three psychological processes: impaired self-determination, impaired self-esteem, and impaired expression possibility (Frey, 1997, pp. 16–17). Impaired self-determination occurs if management's intervention is seen as *controlling* rather than supportive (Frey, 1997, p. 93). If the agent perceives such motives, he or she will likely reciprocate with uncooperative behavior (Fehr & Gächter, 1998; Frey, 1993; Matuszewski, 2010). Falk and Kosfeld (2006) found that agents reduce their effort when principals exercise control through production hurdles. Impaired self-esteem stems from the agent's rejection of the agent's intrinsic motivation and leads to reduced effort; and impaired expression possibility is the deprivation of an opportunity to display one's intrinsic motivation. Taken together, studies in behavioral agency theory suggest that agents behave positively toward trust and negatively toward monitoring and control. Hence, agency theory may be self-activating, where the monitoring and control alter agent behavior, creating a need for continued monitoring and control.

Thus, when one is already intrinsically motivated to perform a behavior, such as resisting temptation to commit fraud, controlling or incentivizing that behavior may externalize the motivation. Closely monitored individuals may grow to see the external controls as the underlying reason for their honest behavior (through impaired self-determination), undermining their intrinsic motivation to be honest; this contrasts with an unmonitored, trusted situation, where individuals must take personal responsibility. Ultimately, when the opportunity to be dishonest without getting caught arises, the incentive toward fraud may prevail more easily than if monitoring had never been introduced.

Fraud Triangle

Auditors use a fraud-triangle model to assess fraud risk because three factors (opportunity, incentive/pressure, and attitude/rationalization) generally must be present for fraud to occur.[5] The fraud triangle provides an appropriate framework for the study of honest behavior in the principal-agent setting. The incentive and opportunity sides of the triangle are more easily conceptualized and understood than the rationalization side.[6] Regarding the "rationalization" side, the U.S. audit standards simply say that those involved are able to rationalize committing a fraudulent act (PCAOB, 2005), but the inclusion of the rationalization side implies that a non-predisposition toward fraud is a central tenet of the public company accounting oversight board (PCAOB) audit framework (Murphy & Dacin, 2011, p. 604).

Since the propensity toward fraudulent behavior is not wholly a predisposition of character (except for the rare psychopath), environmental factors, by facilitating the rationalization of such behavior, play an important part in the decision to commit fraud. The theory of Self-Concept Maintenance (Ariely, 2012; Mazar et al., 2008) posits that everyone is only partially honest, cheating only to the point that allows the individual to maintain his or her self-image as a good person (cf. Evans et al., 2001). It follows that, the easier it is to rationalize a questionable act, the more likely it is that any given individual will commit the act.

Tsang (2002) describes rationalization as the cognitive process people use to convince themselves that their behavior does not violate their moral standards. The process of rationalization involves a search for acceptable excuses for the target behavior. Murphy and Dacin (2011) present a model of the "pathways" by which organizational members can rationalize fraud. In the model, situational/contextual factors such as organizational climate play a prominent role in deciding that a fraudulent activity is worth pursuing and subsequently rationalizing it.

Monitoring may facilitate rationalization in two ways. First, self-concept determines the threshold for dishonest behavior, and self-concept can be diminished by the message that the individual "needs monitoring" and cannot be trusted (impairing self-esteem, as discussed above). Second, undermining the climate of trust and reciprocity through workplace monitoring may facilitate the agent's propensity toward rationalization of dishonest behavior.

Trust and reciprocity have been widely studied in the economics literature (see Fehr & Gächter, 1998), and one robust conclusion is that when people are trusted they reciprocate with trustworthy behavior (e.g., Berg, Dickhaut, & McCabe, 1995; Fehr, Kirchsteiger, & Riedl, 1993; McCabe, Rigdon, & Smith, 2003). However, consistent with the impairment of self-determination and self-esteem discussed above, individuals often view monitoring as a signal of distrust (Cialdini, 1996; Falk & Kosfeld, 2006), and this signal may increase the agent's ability to rationalize deviant or dishonest behavior. Some may perceive dishonesty in a monitored environment as "fair game," in contrast to an environment where trust has been granted.

The discussion above has focused primarily on "cool," cognitive processes rather than "warm," motivational processes.[7] Certainly, retaliation for perceived mistreatment of various types can be a motive as well as a rationale for employee theft or dishonesty. For example, Greenberg (1990) found that failing to communicate the reasons for temporary pay reductions in some segments of a company resulted in greater employee theft than in segments where the reasons were explained clearly. They interpreted the results in terms of equity theory, wherein the workers attempt to restore pay equity. While the workers might have been rationalizing an act they knew to be wrong, they also had a concrete motive aside from greed. A less ambiguous example is the experiment by Belot and Schröder (2013), in which participants were hired for a job that had several opportunities for deviant behavior (poor performance, tardiness, or theft). They concluded that workers are motivated to retaliate for being monitored, as increased monitoring of performance led to increased deviance in tardiness. Thus, while we do not measure the latent, mediating variables in our study, we recognize that increased cheating likely would derive from a combination of strengthened motivation and facilitated rationalization.

In summary, research based on behavioral agency theory indicates that trust, reciprocity, and social norms are important in agency relationships and that agents display intrinsic preferences for honest behavior – which we argue that monitoring can crowd-out. Within fraud-triangle theory, we focus our attention on rationalization and argue that monitoring facilitates rationalization and may lower the agent's bar for acceptable behavior. Accordingly, we hypothesize the following:

> **Hypothesis.** When the opportunity to gain from undetectable dishonesty arises, dishonesty will be higher in a monitored environment than in an unmonitored environment.

RESEARCH DESIGN

To test our hypothesis, we conducted a laboratory study in which participants, who had been subjected to one of three monitoring treatments during an immediately preceding study by the same researchers, were allowed to solve a set of simple math puzzles for a monetary reward. Half of the participants in each monitoring-treatment condition were required to turn in their solution sheet for verification, while the other half were allowed to self-report their score and receive payment with no verification.[8] The study therefore represents a 3×2 (Monitoring $\times$ Reporting) between-subjects design. Thus, we hold explicit incentives constant while manipulating the monitoring environment across groups, which we have theorized will affect rationalization and behavior. Our proxy for dishonesty is the difference in reported scores between the verified and the unverified reporting treatments. The hypothesis will be supported if dishonesty is higher in the monitored conditions than in the unmonitored condition.

The experiment was conducted in a computer lab at a large public university and approved by the university's institutional review board. In the 3×2 experimental design, each cell includes 19 participants, for a total of 114. For each of the six treatment combinations, we conducted two separate sessions (for manageability and to minimize internal validity threats), for a total of 12 research sessions, each including either 9 or 10 participants. Groups were segregated and unaware of each other.

Recruitment was through the university email newsletter, flyers, and word of mouth. The session dates and times were pre-assigned, and participants self-registered online for the session they preferred.[9] A diverse group of adult volunteers participated. Table 1 shows the demographics collected from the participants with a short demographics questionnaire (see Appendix A) given upon arrival to capture variables that might affect task performance or honesty.

Monitoring Treatments

To induce the monitoring treatments, we utilized participants who had just spent about an hour performing tasks in other paid experiments by the same team of researchers, unrelated to the honesty test.[10] They were assigned to either an unmonitored environment or one of two forms of monitoring: a traditional human-monitoring environment or an electronic-monitoring environment. Thus, the monitoring treatments were made available by the preceding experiment. While it is unclear a priori whether

Table 1. Demographics of Sample by Treatment Group and Reporting Regime.

Treatment Reporting Regime	Unmonitored		Human Monitored		Electronically Monitored			
	Self	Verified	Self	Verified	Self	Verified	Total	Percent
Gender								
Male	9	10	9	8	8	10	54	47.4
Female	10	9	10	11	11	9	60	52.6
							114	100.0
Age								
18–24	12	11	11	15	7	11	67	58.8
Over 24	7	8	8	4	12	8	47	41.2
							114	100.0
Student nationality								
Domestic	8	15	13	11	9	12	68	59.6
International	11	3	3	7	8	4	36	31.6
Not a student	0	1	3	1	2	3	10	8.8
							114	100.0
Business student								
Business student	9	5	6	5	8	3	36	31.6
Non-business student	10	13	10	13	8	13	67	58.8
Not a student	0	1	3	1	3	3	11	9.6
							114	100.0
College level								
Fresh/soph	9	10	6	12	3	5	45	39.5
Junior/senior	7	6	6	2	7	5	33	28.9
Graduate	3	2	4	4	6	4	23	20.2
Non student	0	1	3	1	3	5	13	11.4
							114	100.0
Mental math								
Yes	9	14	15	14	10	10	72	63.2
No	10	5	4	5	9	9	42	36.8
							114	100.0
Tired								
Yes	7	9	5	8	8	6	43	37.7
No	12	10	14	11	11	13	71	62.3
							114	100.0

Note: Each of the six combinations of monitoring treatment and reporting regime had 19 participants. The mental math category shows the answer to the question, I consider myself good with mental math and numbers. While the tired category shows the answer to the question, I feel tired today.

the two monitoring treatments (human and electronic) will have the same effect on behavioral honesty, having two different forms of monitoring allows for a richer analysis and may enhance generalizability, as both forms of monitoring are common in the workplace.

Those in the unmonitored treatment were told, "You will not be watched and we believe you will follow instructions as given," and research personnel left the room and returned when time was up. Those in the human-monitored groups were told, "I will walk around the room so I can observe your work and make sure you follow the instructions as given." Accordingly, the researcher and the research assistant wandered around the room and passively observed the participants.

In the electronic-monitoring treatment, small webcams faced participants' workstation keyboards and papers when they arrived (see Appendix B). They were told, shortly after arrival, "you are being monitored with webcams so we can observe your work and make sure you follow the instructions as given."[11] Although the webcams were not activated, the experimenter and research assistant sat prominently at a corner workstation, implied to be the monitoring station, while participants worked.

Importantly, both monitoring treatments were designed to appear controlling, rather than supportive (Frey, 1997); the administrators ostensively were not there to help, but to be sure the instructions were followed.

Experimental Task

The task for this experiment was a short math puzzle. Following Mead et al. (2009), participants were given identical sheets of paper with 20 numeric matrices (see Appendix C). Each matrix contained 12 three-digit numbers, and participants had 5 minutes to find the unique two numbers that add to 10.00 in as many matrices as possible. Participants were informed that all matrices contained the unique combination, that they could proceed in any order they chose, and that they would earn 25¢ per matrix solved, for a maximum of $5 on this task.[12] With this same payout structure for all groups, explicit incentives were held constant for all participants.

Reporting (Verification) Treatment

Participants in the self-report condition were told that writing or marking on the paper as they worked was optional, and no indication or proof of their work would be required. These participants simply self-reported the number of matrices solved. Thus, cheating without detection was transparently possible even though the monitoring-treatment continued to be in place during the task. Participants in the verified condition had to mark their papers to indicate the correct combination, and their work was verified by the researcher. Performance in the verified condition provided a baseline assessment of how many matrices participants could complete when they did not have the opportunity to be dishonest. Dishonesty was operationalized as the difference in mean scores between the self-report and verified conditions within each monitoring-treatment group (cf. Mead et al., 2009).

RESULTS

Table 2 shows the number of matrices reported as solved across monitoring treatments and reporting treatments. In the unmonitored treatment, the participants who self-reported their results – and could have cheated with impunity – reported solving *fewer* matrixes than the participants who knew their work would be verified.[13] In both monitored treatments, the participants who self-reported their results reported solving *more* matrixes than the participants who knew their work would be verified.

Fig. 1 shows histograms of the numbers of reported solutions, by treatment group. Perhaps the most striking point, from the perspective of conventional agency theory, is the low amount of apparent cheating across all three monitoring treatments when the participants are free to cheat (the left-hand column). Of the 57 participants in the self-report treatment, only three claimed perfect scores of 20 even though they could cheat with impunity. However, this result is consistent with past studies which show that, when given the option, most people are neither completely honest nor completely dishonest (e.g., Evans et al., 2001; Mazar et al., 2008).

Before proceeding to the formal testing of the hypotheses it is important to note that three individual differences, from the demographic survey (shown in Appendix A), significantly affect the number of matrices reported as solved ($\alpha = .10$, untabulated). On average, males who said they were good at mental math and they were not tired reported that they solved more matrices than did females who said they were not good with mental math and they were tired. Past research suggests that these individual differences may affect task performance, or interact with the treatments to

Table 2. Matrices Reported Solved by Treatment and Reporting Regime.

Treatment Reporting Regime	Unmonitored			Human Monitored			Electronically Monitored			
	Self	Verified	Combined	Self	Verified	Combined	Self	Verified	Combined	All
Average matrices	8.26	9.68	8.97	11.58	8.47	10.02	8.95	8.11	8.53	9.18
Std. Dev.	4.87	4.73	4.79	4.07	4.88	4.70	3.91	5.13	4.52	4.67
Min	0	2	0	3	1	1	4	2	2	0
Max	20	18	20	20	17	20	20	20	10	20
Observations	19	19	38	19	19	38	19	19	38	114

Note: This table shows the number of matrices reported solved for each combination of monitoring and reporting regime.

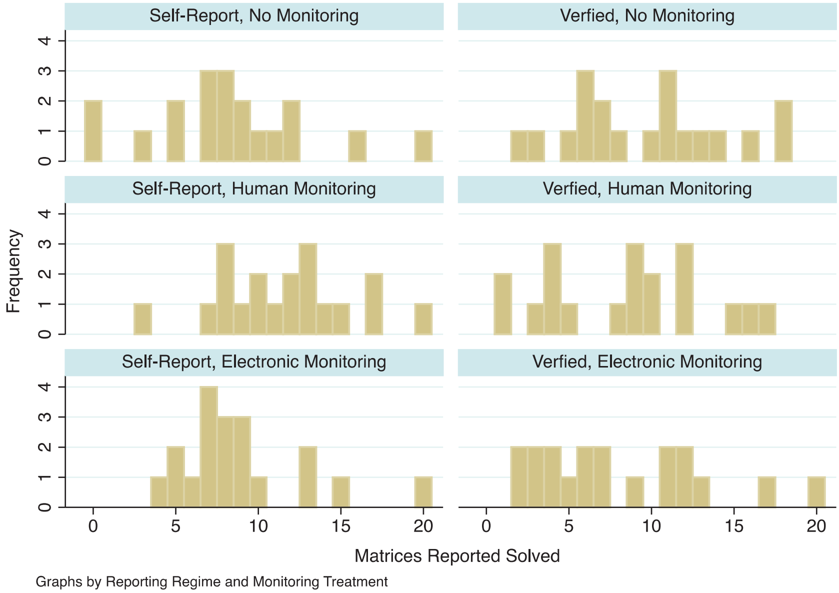

Fig. 1. Frequencies of Matrices Reported Solved, by Reporting Condition and Monitoring Condition. *Notes*: The left column shows the numbers of matrices participants in the Self-Report treatment group claimed to have solved, and the right column shows the number in the Verified treatment group. The rows represent the three Monitoring treatments – No Monitoring, Human Monitoring, and Electronic Monitoring. Each cell includes 19 participants. Considering as an example the lower-left cell (self-report/electronic monitoring), no one reported solving 0, 1, 2, or 3; one reported 4; two reported 5, etc. None reported 11, 12, 14, 16, 17, 18, or 19, and one reported 20.

alter performance (or reported performance). For example, some research suggests that, on average, males are slightly better at mental math (Hyde & Mertz, 2009), but some research also suggests that males are more likely to be dishonest about their performance (Dreber & Johannesson, 2008). Being tired may affect performance, but past research also has shown that individual may be more dishonest about their performance when they are tired (Mead et al., 2009). Moreover, tired individuals may feel more pressure to perform in the presence of monitoring, causing an interaction with the monitoring treatment. Lastly, monitoring intensity (through work-related stress) may interact with mental ability to affect performance on tasks (Schultz & Searleman, 1998).

These individual differences (mental math ability, tiredness, and gender), interacting with one another and the treatments, should be included in the analysis to reduce error variance. Cell sizes are sufficient to calculate the main effects and all two- and three-way interaction terms.[14] Levene's test indicates that the assumption of equality of error variance is not violated ($p = .17$), reducing concerns about differences in cell sizes (Neter, Wasserman, & Kutner, 1990).

Table 3 shows that, consistent with the hypothesis, after accounting for all the control variables and interactions, the monitoring treatment and reporting regime interact to affect the number of matrices individuals reportedly solved ($p = .027$). The effect of the reporting treatment depends on the monitoring treatment, and vice versa. Further, this interaction is not

Table 3. ANOVA Results.

Number of Observations	114		*R*-Squared	0.53	
			Adjusted *R*-squared	0.27	
Source	Partial SS	df	MS	*F*	Prob > *F*
Model	1318.71	41	32.16	2.01	**0.005**
Monitoring	91.38	2	45.65	2.86	*0.064*
Reporting	0.06	1	0.06	0.00	0.953
Tiredness	95.25	1	95.25	5.97	**0.017**
Gender	121.01	1	121.01	7.58	**0.007**
Mental math	14.80	1	14.80	0.93	0.339
Monitoring × reporting	121.41	2	60.70	3.80	**0.027**
Monitoring × reporting × tired	5.76	2	2.88	0.18	0.835
Monitoring × reporting × gender	18.19	2	9.10	0.57	0.568
Monitoring × reporting × mental math	36.07	2	18.04	1.13	0.329
Residual	1149.78	72	15.97		
Total	2468.49	113			

Note: This table shows the relevant results of a five-way ANOVA for the effects of **Monitoring** (Unmonitored, Human Monitoring, or Electronic Monitoring) **Reporting** (self-report or verified), and the dichotomous control variables self-assessed **Tiredness**, **Gender**, and self-assessed **Mental Math** ability on the number of **Matrices** the participants reported as solved. The **Monitoring × Reporting** interaction is the key effect of interest, and is unaffected by the control variables, as shown by the nonsignificant three-way interactions. *p*-values < .05 are **bolded**; those < .10 are *italicized.*

All two- and three-way interactions are included in the model but the interactions without theoretical interest (nine two-way and seven three-way interactions) are omitted from the table for clarity.

affected by the other control variables (none of the three-way interactions that include monitoring and reporting regime are significant), so that we can examine this relationship without qualification. The remaining interactions in the ANOVA do not relate to our hypotheses, and are included only to control for extraneous variance in the factorial design. They are omitted from the table to improve clarity.[15]

Fig. 2 shows, graphically, the adjusted-means for each of the treatment groups, as reported in Table 3.[16] The slope of each line indicates the effect of verification on reported scores, which is our proxy for cheating. The lower reported scores in the verified condition than the self-reported condition (the negative slopes) suggest that cheating was likely present under human monitoring, and to a lesser extent under electronic monitoring.

A direct test of the research hypothesis is a planned comparison of the unmonitored versus the combined monitoring-treatment groups (Buckless & Ravenscroft, 1990). This one-tailed comparison, based on the adjusted-means in Table 3, is significant ($t = 1.693$, 108 df, $p = 0.047$), supporting the hypothesis. In addition, Table 4 shows one-tailed comparisons of the adjusted-means (representing the slopes of the individual lines in Fig. 2).[17] Self-reported scores are significantly higher than verified scores in the human-monitored treatment ($p = 0.018$). The difference within the

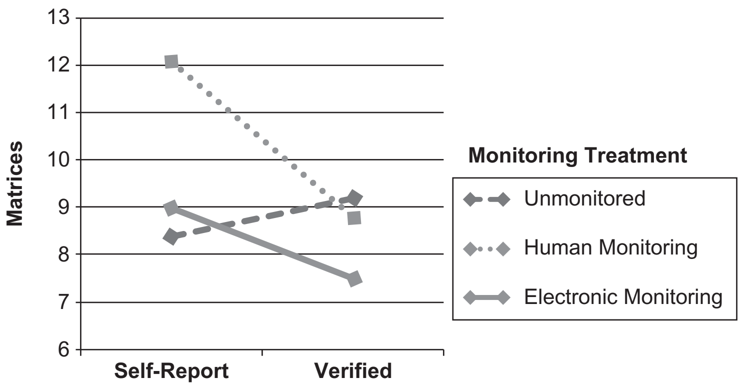

Fig. 2. Matrices Reported as Solved: Results by Reporting Regime and Monitoring Treatment. *Notes*: Participants either were allowed to self-report without verification, or their reports were documented and verified. Means are adjusted for Tired, Gender, and Mental Math, as reported in Table 4.

Table 4. Pairwise Comparisons of Adjusted-Means.

Monitoring Treatment	Reporting Regime					95% Confidence Interval for Difference	
	Self-report	Verified	Difference	Std. error	Sig.	Lower	Upper
Unmonitored	8.38	9.14	−0.76	1.42	0.797	−3.59	2.06
Human monitoring	12.04	8.71	3.33	1.55	0.019	0.239	6.42
Electronic monitoring	9.04	7.40	1.64	1.50	0.138	−1.34	4.63

Note: This table shows the pairwise comparison of the means for each reporting regime in each monitoring treatment, adjusted for Tired, Gender, and Mental Math. All of the comparisons were related to a planned, specific hypothesis rather than a result of post hoc comparisons. Consequently, the alpha level was not adjusted for the multiple comparisons. The p-values are one-tailed, consistent with the hypothesis.

electronic-monitoring group is also higher, but not statistically significant ($p = 0.138$). The difference is, as already noted, not significant in the unmonitored treatment ($p = 0.797$), where the self-reported scores are *lower* than the verified scores.

In summary, an ANOVA shows that, when other factors and interactions are accounted for, the predicted interaction exists between the monitoring treatment and the reporting regime: dishonesty is higher in a monitored environment than in an unmonitored environment. Further, a statistically significant level of our proxy for dishonesty appears in the combined monitored groups and in the human-monitored group alone. In the electronic-monitoring group dishonesty is higher for the monitored group, but not at a statistically significant level. No dishonesty is evident in the unmonitored group. Overall, we conclude that the results support our hypothesis and that when the opportunity to gain from undetectable dishonesty arises, dishonesty will be higher in a monitored environment than in an unmonitored environment.

Supplemental Analyses of Internal Validity Threats

Despite the safeguards of quasi-randomization, demographic differences among the treatment cells could pose an internal validity threat. Concerns exist because some participants were international students (e.g., Nyaw & Ng, 1994; Transparency International, 2014); and the sample included various class levels as well as nonstudents, encompassing a substantial age range (e.g., Westerman, Bergman, Bergman, & Daly, 2012).

Concerning students of different academic class levels, and nonstudents, we performed a one-way ANOVA for the four groups (freshman/sophomore, junior/senior, graduate, and nonstudent), with the dependent variable being the number of matrices claimed to be solved. The F-test was not significant ($p = .80$), indicating no significant difference between any of the groups. As an acid test, however, we compared in a t-test the two groups that differed the most (13 nonstudents, who claimed the largest number of solved matrices, and 23 graduate students, who claimed the smallest). The difference was not significant ($p = 0.35$). Because cheating could exist only in the self-report group, we ran the same tests using only the self-reporting participants and found almost identical nonsignificant results.

Concerning international versus domestic participants, a t-test of the difference in the number of matrices claimed was not significant for the entire sample ($p = 0.51$) but was marginally significant or the self-reporting half ($p = 0.10$). Given this marginal significance, we checked whether adding the "International" dummy variable as a covariate in the basic ANOVA analysis would affect the results, and it did not change the pattern of significant and nonsignificant results in the basic analysis. Moreover, Ariely (2012, pp. 240−242) reports a surprising absence of cultural differences in the extensive experiments he and his colleagues have conducted using designs similar to ours. He hypothesizes that "Our matrix test exists outside and cultural context" (p. 242).

Regarding age effects (ages 18−24 vs. over 24), we again performed t-tests of the difference in the number of matrices claimed, finding no significant difference for either the entire sample ($p = 0.62$) or the self-reporting half ($p = 0.73$). The age range did not seem large, as none of the "over 24" participants appeared to be beyond their thirties.

SUMMARY AND CONCLUSIONS

In this study, we theorize that monitoring can have several deleterious effects on honest behavior. It can crowd-out an individual's intrinsic motivation to be honest, increasing his or her propensity toward dishonesty. In addition, it can alter an agent's perceived relationship with the principal and increase his or her ability to rationalize deviant behavior. Hence, holding explicit incentives constant, there may be an interaction such that the effects of opportunity (to gain from dishonesty) will differ across monitoring conditions, because the effects of opportunity depend on the ability of the agent to rationalize the behavior. This led to our hypothesis that, when the opportunity to gain from undetectable dishonesty arises, dishonesty will be higher in an environment where monitoring is present than where monitoring is not present.

In our experiment, participants had been acclimated to one of three monitoring environments during a previous experimental session: unmonitored, human monitoring, or electronic monitoring. With this treatment induced and the monitoring environments remaining seamlessly in place, we gave the participants a simple mental math task with a monetary reward based on performance. Half the participants in each treatment could cheat with impunity because they self-reported their results, while the other half had their results verified. The difference between the reported performance of verified and non-verified groups was a proxy for the incidence of cheating in each monitoring-treatment group (Mead et al., 2009).

In the unmonitored condition, there was no indication of cheating. Statistically significant cheating was detected in the human-monitored treatment and in the two monitored conditions combined. In the electronically monitored treatment standing alone, the result was in the direction indicating cheating, but not statistically significant. Therefore we find evidence that monitoring does decrease agents' preference for honesty, as revealed in their actual behavior. Monitored individuals were more likely to cheat, as compared to individuals who were not monitored. The low level of cheating, overall, is consistent with the low levels expected under the theory of self-concept maintenance (Mazar et al., 2008) and not the high levels that conventional agency theory would predict.

The lower level of dishonesty observed under electronic monitoring than under human monitoring was a bit surprising. While electronic monitoring and traditional human monitoring have the same fundamental purpose, past research suggest that the pervasive, continuous nature of electronic monitoring often elicits stronger reactions from the worker (Aiello & Kolb, 1995; Lund, 1992). We offer four explanations for the lower dishonesty under electronic monitoring. First, perhaps, despite a strong propensity to be dishonest, the electronic monitoring convinced the participants that the risk of exposure was still present in this situation. Second, the electronic monitoring may have been a cue that the task was very important to the monitor, or that the monitor was very concerned with their work. This perception could have decreased their propensity to be dishonest, even if they disliked the monitoring. Third, the presence of human monitoring might have caused more social pressure to artificially inflate performance (and "look good") than in the other treatments. Fourth, possibly participants did not dislike the electronic monitoring as much as they disliked the human monitoring, despite past research and anecdotal evidence which shows electronic monitoring is more stressful than traditional human monitoring (Stanton, 2000). Future research should investigate how workers view different monitoring regimes, and how their views shape their attitudes toward different work behaviors such as honesty and cooperation.

This study adds to the growing evidence of significant "hidden costs" (Falk & Kosfeld, 2006), and unanticipated effects, of monitoring and control that have yet to be fully explored in the business literature. Since these costs and effects are mostly unknown, business researchers currently lack the ability to predict the effects of controls on behavior. In contrast, much more is known about other environmental effects on behavior, such as the effects of incentives on work performance (Bonner, Hastie, Sprinkle, & Young, 2000), than is known about how workers react to different types of internal controls. Following Christ et al. (2012), we believe that future research should further develop our understanding of the potential consequences of formal controls.

Additionally, this study continues an interesting line of research in the accounting literature concerning how the business environment can influence propensity to commit fraudulent or deviant behavior in accounting and managerial domains. With regard to the fraud triangle, researchers are interested in rationalization and attitudes related to dishonest behavior, whether they are developed through the tone at the top (Rezaee, 2005), contract design (Evans et al., 2001), the vertical and horizontal equity of compensation (Matuszewski, 2010), personality traits (Murphy, 2012), or other factors. In this study we posited that some internal controls, such as workplace monitoring, may also facilitate the rationalization of deviant behavior.

Further, the conceptualization of the fraud triangle may need to be re-evaluated if, as our results suggest, increased monitoring makes it easier to rationalize misreporting. The standard assumption is that incentives and pressure motivate misreporting while lax controls facilitate misreporting (Hogan et al., 2008). Individuals are generally viewed as being predisposed to character traits that partially determine the extent to which they rationalize their deviant behavior (Murphy, 2012). However, we propose that not only do incentives promote misreporting, but strong controls may also promote deviant behavior by crowding out the intrinsic motivation to be honest and making it easier to rationalize dishonest behavior.

The study is subject to limitations that provide opportunities for future research. First, this study did not employ an exit questionnaire to capture the participants' feeling about the monitoring regimes. An exit survey could have been an important tool to determine how the participants felt about the monitoring or absence of monitoring, and how their attitude toward the monitoring controls may have mediated or moderated their behavioral honesty. Second, the effects of several covariates complicated the use of the mental math task. Future research in this area may consider a simpler task to measure honesty, such as a dice-rolling task (e.g., Ruffle & Tobol, 2014), which could accomplish the same objective without having to control for innate ability. Third, employees may be exposed to workplace monitoring for a long time, while our experiment looked at a short time period – although past research suggest that initial reactions to workplace monitoring may be a good predictor of long-term effects (Stanton, 2000). Finally, because of the small sample size per treatment group (19 per cell), some imbalances in participant demographics could not be controlled for, and could have affected the results. Despite these limitations, this study adds to the current literature by providing evidence on the important relationship between monitoring and honesty.

Further developing this line of research may yield important clues to long-standing questions, such as why financial fraud is still persistent despite increases in regulation and ethics training (Rezaee, 2005), why individuals display trustworthy behavior in certain situations and contractual arrangements but selfish behavior in others (e.g., Rankin, Schwartz, & Young, 2008), why individuals collude against control systems (Zhang, 2008), and why whistleblowing may be more likely in some environments or situations than in others (Seifert, Stammerjohan, & Martin, 2013). Using empirical evidence to address the questions will aid in the design of more effective internal controls (Sprinkle, 2003), the development of more efficient contracts (Brown, Evans, & Moser, 2009), and more comprehensive theoretical models for business researchers (e.g., Tirole, 2009).

NOTES

1. For a broad review of honesty in managerial research, see Salterio and Webb (2006).

2. The theory of planned behavior states that attitude toward behavior, subjective norms, and perceived behavioral control, together shape an individual's behavioral intentions. Accordingly, behavioral intentions are positively correlated with actions (Ajzen, 1991).

3. Several lines of research have shown that environmental factors are often an important determinant of individual honesty and ethical behavior. In corporate governance, the "tone at the top" is a prominent example. In an education setting, contextual factors such as an honor code may decrease dishonesty (McCabe & Trevino, 1993). In an experimental budgetary setting, Hannan, Rankin, and Towry (2006) find that the existence of an information system increases managerial honesty, with honesty being lower under a precise information system than under a coarse information system.

4. The term *rationality* has a long and convoluted intellectual history (Lehrer, 2009, p. 100). In general usage, the term is similar to *reasonable*, but to the economist, any internally consistent set of beliefs is rational (Kahneman, 2011, p. 411). Our study, however, is in the context of traditional agency theory, where "The concept of man … assumes that individuals maximize their own utility subject to the constraints imposed most importantly by income and time. He or she is taken to be egoistic and to be interested mainly—and sometimes wholly—in material values only. This is the crude model of *Homo Oeconomicus*" (Frey, 1997, p. 118).

5. First, there is an incentive or pressure that provides a reason to commit fraud. Second, there is an opportunity (and ability) for fraud to be perpetrated (e.g., absence or weakness of controls). Third, the perpetrator possesses an attitude enabling them to rationalize the fraud.

6. Generally, the incentives to commit fraud are monetary in nature, but are also sometimes associated with pressure to perform or meet targets (Graham, Harvey, & Rajgopal, 2005). Opportunity is described in the U.S. audit standards as the absence of controls, ineffective controls, or the ability to override controls, providing the opportunity for a fraud to be perpetrated (PCAOB, 2005).

7. For a discussion of the cognitive/motivational distinction, see Kruglanski (1999). The cognitive revolution of the late 1960s and 1970s saw a discounting of motivational theories in explaining behavior, but recent years have seen a revitalization of motivational theories. Kruglanski notes, however, that motivation and cognition are not truly distinct, and motivation may be seen as a form of cognition.

8. Reported performance in the verified condition of each monitoring treatment served as a baseline in which to measure the reported performance of the self-report condition in each monitoring treatment. See studies by Mead et al. (2009) and Mazar et al. (2008) for more examples of this research design.

9. Because of scheduling demands, individuals could not be randomly assigned to sessions. They selected the date and time that fit their schedule, but they did not select or have any knowledge of the treatments.

10. Aside from their random assignment to the monitoring treatments, all had received homogeneous treatment in the earlier session; they had completed a 25-minute clerical task for a flat-wage and a 30-minute puzzle task for a piece-rate wage. There were no correlations between performance levels on the prior tasks and the dependent variable in this study.

11. This wording is based on a similar study by Enzle and Anderson (1993), examining the effects of controlling versus non-controlling electronic monitoring on intrinsic motivation.

12. Research suggests that the amount has little influence on the behavioral outcome. Some research shows prevalent lying for a payoff as small as $0.25

(e.g., Baiman & Lewis, 1989). Using the same task as our study, Mazar et al. (2008) found no significant difference between incentives of $0.50 and $2 per matrix solved. Hence, large rewards are likely not needed in tests of honesty.

13. The difference is not significant, but the direction emphasizes the apparent absence of cheating in the unmonitored group.

14. "Higher-order interactions occur rarely" and are difficult to interpret (van Belle, 2002, p. 135). As noted, the cell sizes were not adequate to include them in this model.

15. Of the nine remaining two-way interactions, only one was significant at 0.05, and of the seven remaining three-way interactions, only one was significant at 0.05.

16. Comparing the adjusted means in Fig. 2 to the data in Table 2 shows that the results are similar before and after adjusting for extraneous variables, as reported in Table 3.

17. All of the measured outcomes were related to planned, specific hypotheses rather than a result of post hoc comparisons. For this reasons, we did not adjust the significance level of the *p*-values for the planned comparisons. This approach is consistent with guidelines for planned multiple comparisons (Buckless & Ravenscroft, 1990; Fisher, 1947; Rothman, 1990).

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APPENDIX A

Demographics Questionnaire

Circle all that apply to you

1. I am: **Male** **Female**
2. My age is : **Under 18** **18–24** **Over 24**
3. I consider myself mostly an: **International Student** **American Student** **Not a student**
4. I consider myself mostly: **A business student** **Not a business student** **Not a student**
5. I am a: **Freshman/Sophomore** **Junior/Senior** **Graduate Student** **Other**
6. I like to play sports or enjoy watching sports: **Yes** **No**
7. I consider myself good with numbers and mental math: **Yes** **No**
8. I am in a good mood (happy) today: **Yes** **No**
9. I am tired today: **Yes** **No**

Your answers on this form and your performance on the assigned tasks will remain anonymous and will not be matched to your name, image, person, or consent form.

Note: Participants were given this questionnaire at the beginning of the research session. Most questions were asked in order to control for as much variance as possible in the experimental design. Question 6 was a distractor item to reduce hypothesis-guessing by participants.

APPENDIX B

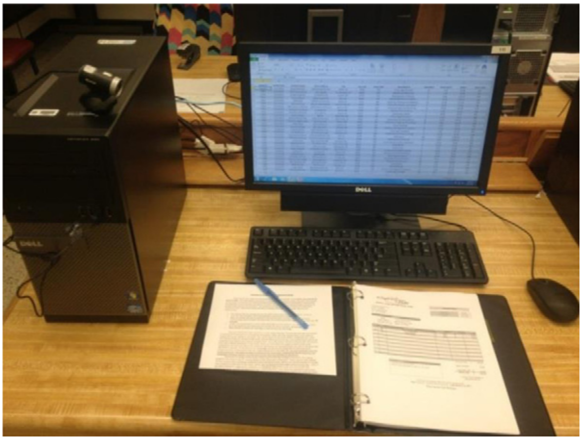

Fig. B1. Electronic Monitoring Workstation with Camera on Computer Tower. *Note*: Participants in this experiment were assigned to one of three monitoring treatments: no monitoring, human monitoring, or electronic monitoring. This appendix shows the electronic monitoring set-up.

APPENDIX C

Table C1. Matrix Task for Testing Honesty.

9.50	4.92	6.47	6.84	8.99	7.24	6.00	6.23	4.94	0.12	8.07	2.02
9.37	6.09	8.15	2.38	7.68	6.65	8.83	9.01	7.96	1.71	2.20	3.44
3.11	0.50	7.54	9.60	8.56	5.47	0.86	4.04	0.99	8.88	9.96	8.29
4.41	8.11	9.35	1.01	1.76	3.92	4.25	1.42	6.06	9.18	8.92	1.17
6.79	4.15	8.95	3.36	4.20	0.06	0.48	6.40	8.36	1.82	2.44	7.36
4.06	5.82	4.34	1.57	8.39	3.35	2.42	9.72	6.92	1.10	8.87	3.37
4.93	4.18	5.18	0.61	1.43	5.29	5.21	2.57	7.65	8.02	1.93	9.16
3.23	8.56	1.80	8.43	6.97	6.75	9.81	1.64	3.58	2.49	1.97	2.64
6.46	0.89	6.92	7.46	0.78	1.08	1.51	3.64	1.86	1.09	5.74	3.45
2.02	0.52	0.37	9.97	3.02	1.89	7.19	7.13	4.56	8.82	6.53	6.44
0.07	3.54	0.45	5.21	0.64	7.27	1.48	7.09	2.96	5.12	7.01	4.31
3.39	4.80	7.46	9.22	7.87	2.29	2.30	8.18	8.14	6.55	5.63	8.83
0.28	1.71	7.31	7.21	3.24	3.31	7.80	3.12	3.59	4.95	2.10	7.65
0.14	1.93	9.72	1.10	8.12	9.00	1.34	9.81	2.96	9.02	8.33	2.97
8.27	9.39	2.48	7.10	7.12	7.75	2.86	4.42	9.31	9.61	5.61	9.61
8.66	1.12	2.34	5.13	8.90	3.80	6.88	6.44	5.67	2.12	5.52	5.05
2.08	0.28	8.60	7.48	4.98	5.32	3.84	8.22	1.97	9.44	6.71	4.29
5.02	5.00	3.93	7.11	2.94	6.92	5.48	6.98	5.77	6.93	9.34	1.28
3.40	4.98	7.44	2.52	9.49	8.57	8.03	1.31	0.92	8.36	6.85	9.28
6.98	8.61	0.94	2.69	3.86	6.01	6.37	6.59	0.28	0.56	8.89	4.92

Note: While being exposed to their monitoring treatment, participants did the matrix math task. Participants had 5 minutes to find the 2 unique values that summed to 10.00 in each matrix. Participants were paid for each matrix solved. In each monitoring treatment half the participants were in a self-report regime where they self-reported their results. The other half were in a verified regime, where they had their results verified. Regimes were segregated and unaware of each other.

ANTEBELLUM MANAGEMENT ACCOUNTABILITY AT THE MOBILE & OHIO RAILROAD (1849−1862)

Dale L. Flesher, Gary John Previts and Andrew D. Sharp

ABSTRACT

This paper contributes to the literature of accountability and ethics by providing historical perspective by way of archival discovery of original, primary documentation as to corporate practices and behaviors of an early major U.S. corporation during the period 1849−1862. The authors provide the results of examination and analysis of surviving corporate records.

The challenges to appropriate behavior and the application of stewardship principles with regard to the custody of property and the sanctions imposed for transgressions are all identified from primary corporate documents and hand-written minutes books of the board of directors of the Mobile & Ohio Railroad during the period. The de facto development of a corporate code of conduct enumerated by the board provides an early example of explicit corporate governance guidance. This unique

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discovery informs contemporary understanding of ethical issues identified in the accountability literature by adding the perspective of management experiences from over 150 years ago.

Keywords: Code of conduct; history; ethics; stewardship

The failures of numerous companies in the first decade of the 21st century represented a new era in corporate history. This "new era" elicits the question of whether accounting historians should use "old lenses" to interpret the events. Czarniawska (2012) conveys the need for "new plots" to improve the social and business interpretation of financial crises. This paper relates the mid-19th century experiences of a railroad that in its time represented a new era of business phenomena in the United States. Common concerns found a century and a half later in U.S. business failures and scandals, triggering the collapse of Enron, WorldCom, Bear Sterns, and the government bailout of numerous others in 2008–2009, suggest that over time common "plots" are associated with corporate governance failures as well as misconduct. The episodes explained herein, based on previously unstudied primary archival materials of a major corporation, the 1850s Mobile & Ohio Railroad (M&O), demonstrate many of the concerns expressed about Enron, WorldCom, and the like, including the board's lack of oversight, related-party transactions, and lack of transparency. In addition to adding to the historical literature, this paper also contributes to explanations of "emplotment" discourse by adding an historical component to that view, and demonstrating the manner in which self-interested actions by corporate agents qualifies as a fundamental explanatory variable in emplotment scenarios.[1] The M&O's activities provided a structure of corporate governance and established expectations as to management ethics during the early years of the railroad and represent a state-of-the-art governance system with effective internal controls in place.

Corporate governance encompasses the firm's organizational structure, including the activities of the audit committee and the board of directors. Understanding a company's governance system entails knowledge of the corporate bylaws, rules, and corporate minutes (Arens, Elder, & Beasley, 2003, p. 204).

Accounting and management records that survive the passage of time enable historians to study and better understand the institutions and values of earlier generations. Archival research makes primary sources available in the form of minute books, accounting journals, and ledgers – items that provide a richer story than the mere numbers, transactions, receipts, and disbursements. Such records can assist future generations in learning what living in an earlier time was like. In addition, analytical implications may flow from the interpretations of accounting when viewed as an important aspect of socio-economic evolution (Chatfield, 1977, p. 3). This paper seeks to identify and determine what evidence is available in the original handwritten board of directors' minute books and accounting records of the M&O Railroad archived from the years preceding the American Civil War.[2] As such, these records represent a unique, original discovery that may serve to improve understanding of these times and of the operations of the M&O.[3] At the same time, governance and accountability can be evaluated. The fact that the M&O board of directors considered governance at all is meritorious in that era before the American industrial revolution when the corporate form of business was far from the norm (Flesher, Previts, & Samson, 2005). In recent years, attention to the historical development of control systems in antebellum institutions including rice plantations (Stewart, 2010), and canals (Russ, Previts, & Coffman, 2009) have advanced the understanding of the state of management control in the context of their times. This study also contributes to that literature.

This paper is organized into five sections. It begins with a brief chronology of the construction of the M&O and aspects of the internal control requirements over routine operating matters. Then it describes a conflict of interest involving the chief engineer and another officer of the Company. The ethical insights gleaned from the 1862 M&O payroll records are considered next. The penultimate section addresses contemporary 21st century corporate governance issues and discusses the connection of the M&O case to the present day Sarbanes-Oxley Act. The paper concludes with a consideration of the findings.

BACKGROUND ON THE M&O

The M&O was one of the most ambitious and significant internal development projects undertaken in the United States during the period just before the civil war. It gained national political support and attention including large grants of government land as incentives for the development of transportation infrastructure to open up territories for settlement and to facilitate commerce between the deep south and the mid-west.[4] It was, despite popular tendencies to think of east-west linkages, part of the first transcontinental railroad within the United States, moving people and materials in a direct north-south corridor, from a port city on the Gulf of Mexico to Chicago and the Great Lakes.

During 1849, capital was raised through stock subscription, with a 20% down payment. The citizens of Mobile so supported the idea of building a railroad that they voted to assess a property tax of 25 cents per $100 of real estate value to be used to purchase shares of stock from the M&O. Thus, public money backed this private enterprise. State loans, starting in 1854 with Alabama loaning the M&O $400,000 for two years at 6%, were another example of public support of the M&O, a quasi-private business. Tennessee's 1854 amendment to its 1852 Internal Improvements Act, which authorized a $10,000-per-mile grant to railroads constructing lines in Tennessee, is another example of the public financing aspect of the M&O line. However, instead of cash being given by Tennessee, when the railroad was constructed, Tennessee gave the railroad bonds instead, which the railroad had to sell to raise cash.

Construction of the M&O's 472-mile line commenced in October 1849 from the port city of Mobile, Alabama, north through Mississippi, Tennessee, and Kentucky to reach its destination, the Ohio River (Proceedings of the Second (1850, February) annual meeting, pp. 4, 13) across from Cairo, Illinois. By early 1855, the M&O's rail line had been constructed 104 miles from the "Cotton City" of Mobile when construction stopped for three months due to lack of funds. Upon receipt of $706,000 for stock purchased in the city of Columbus, Mississippi, work resumed. The M&O virtually extorted these funds from the town as the M&O route could have been altered to bypass Columbus. Construction cost was estimated at $14,500 per mile ($6.85 million to build). Like the Illinois Central, contemporaneously, and Western railroads such as the Union Pacific over a decade later, the M&O benefited from a federal land grant of 1,156,658 acres, which lay within 15 miles of the track. The land was to be used initially as collateral for securing loans and bonds to construct the line. Once the railroad was operating, the land's value was expected to soar and the land could then be sold to pay off the bonds/loans. The estimate in 1853 was that the land's value would double within 10 years to be worth at least $5.00 per acre. Given this grant, initially it was believed by management that the amount of equity issued should be restricted, to give shareholders the greatest benefit of leverage. Cost overruns and difficulty with obtaining debt financing changed this strategy. Capital was periodically raised as running out of cash occurred often, delaying the completion of the line. This liquidity pattern had been typical of other railroads as well

(Flesher & Previts, 1999). Also, following other railroads, the M&O sought capital investments from both public and private sources including European investors. As had been the case with the Baltimore & Ohio Railroad, states and local governments invested heavily into the railroad (Previts & Samson, 2000). Counties and towns along the route became shareholders.

In the spring of 1861, Marshall J. D. Baldwyn, the man who first promoted the idea of the M&O Railroad, drove the symbolic silver spike at the junction in Corinth, Mississippi, where the northern and southern portions of the M&O connected. The Company, however, never bridged the Ohio River from Columbus, Kentucky, to Cairo, Illinois – the ultimate destination of the line, where it could have connected to the Illinois Central Railroad (Amos-Doss, 1985, p. 202). On April 22, 1861, the M&O line reached its terminus on the south bank of the Ohio River across from Cairo, barely satisfying Congress's 10-year timeline to receive government lands. Reaching the Ohio River allowed the M&O to obtain clear title to the 1.15 million federal land grant acres that were allocated to the Road, and represented a large natural resource asset – a lump sum payment in kind. By transferring the railroad cars to a steamboat, trains from the M&O could cross the River and access the Illinois Central tracks on the other side.[5] From there, shippers could access Chicago and Lake Michigan, thus linking the Great Lakes to Mobile, the Gulf of Mexico, and the Atlantic Ocean. Essentially, the combination of the M&O and Illinois Central became America's first transcontinental railroad line. Other rail connections further linked the north-south M&O with east-west railroads to Cincinnati, Ohio, and St. Louis, Missouri. Unfortunately for the young company, the arrival at the Ohio River coincided with the first shots at Fort Sumter, signaling the start of the American Civil War and a period of turmoil and destruction that would affect the M&O for many years.

INTERNAL CONTROLS IN THE BYLAWS

The M&O's corporate bylaws specified several elements of internal control over routine operating matters. For example, Rule 3 covered various aspects of cash control, as shown in the following excerpt:

> **Rule 3.** The secretary and treasurer shall be chief clerk and treasurer, to have charge of stock and installment books, Law, maps, deeds, records and of all receipts and vouchers, and the accounts of all moneys received and paid; To keep the records and accounts of the running Department; to keep regular accounts of stocks and the

> transfers of the same and all land sales; to have daily settlement with the ticket clerk, freight master, and conductor, and have weekly settlement of cash, and generally to attend to all duties appertaining to the office of chief clerk and treasurer; to prepare and lay before the board at each regular meeting an abstract containing a statement of committees and duties in their charge. and what reports are due, and what business stands adjourned, The total expenditure for the previous month and upon what account chargeable and from what sources obtained, The receipts and disbursements of the transportation department for the month. All moneys received by him shall be daily deposited in Bank to the credit of the company, and all books, accounts and papers of the company under his control shall be kept at the office of the company and at all times subject to the examination of the directors. It shall more over be his duty to pay the drafts and negotiations of the chief and resident engineers on account of the construction and engineering of the road and to report the savings to the executive committee at its next meeting thereafter.

Note that the cash requirements included making daily deposits of all cash received, and there were to be weekly reconciliations. There was also to be transparency of accounting records in that they must be "at all times subject to the examination of the directors."

Rule 8 also covered a routine matter – the sale and transfer of stock, including what to do in the event of a lost stock certificate.

> **Rule 8.** A stock ledger shall be carefully kept. All transfer of stock must be made at the office of the company in person or by proxy and the old certificate must first be surrendered. In case of lost certificates, two months notice of such loss shall be given by the owner in a newspaper, designated by the board, with particulars of the certificate. Three months after completion of such notice, a duplicate certificate shall be given provided no good or sufficient cause be shown to the contrary by parties objecting. All certificates of full stock shall be signed by the president and counter signed by the secretary, with seal of office.

Just as important as the routine internal controls was Rule 11, which provided for an audit committee of the board. "Once in every three months a Committee to be elected by ballot by the Board, shall examine the treasurer's accounts, and all vouchers connected with receipt and payment of money and report at the next regular meeting of the board." Contrary to modern audit committees, the one at the M&O apparently actually conducted a quarterly audit of the treasurer's accounts.

CONFLICT OF INTEREST

During the construction period, the company faced its first issue with unethical behavior, and the board of directors' role in corporate governance came to the forefront. In 1852, the board had appointed a committee to formulate bylaws and rules of conduct for officers and directors. Those bylaws and rules were approved in 1853 (see the Appendix). No immediate transgressions were noted, but the Proceedings of the Ninth (1857, February) annual meeting (pp. 13–44) detailed the unethical behavior of high-ranking employees of the Company. As the line was built northward, management problems occurred. It was discovered in 1856 that two officers – Capt. John Childe, the chief engineer and general agent, and another of the Company's officers, J. W. Wheeler – had been acquiring land along the route. Wheeler was the active purchaser and Capt. Childe the secret partner. An audit committee was designated by the Board of Directors to investigate the affair. Wheeler tendered his resignation. This conflict of interest, which involved an officer responsible for deciding the right of way, resulted in considerable controversy and the subsequent termination of the chief engineer after due process.

This transgression by the chief engineer and another officer was apparently foreseen by the board of directors, as the corporate bylaws specifically addressed the issue. Four of the 1853 M&O bylaws dealt with corporate governance and ethics germane to directors and officers of the Company. The chief engineer and aspects of land speculation (along with speculation in lumber and other materials used in railroad construction) are specifically mentioned.

> **Rule 19.** The president and chief engineer shall make report of all their proceedings connected with the progress and operations of the road as often as possible. (Minute Book 2, June 2, 1853, p. 28)
>
> **Rule 21.** No Director shall, without the consent of the Board, be interested, concerned in, or in any wise connected with any contract for work done or to be done, or materials furnished or to be furnished, for the use of the Rail Road, and for any violation thereof, such Director shall be dismissed from the Board. (Minute Book 2, June 2, 1853, p. 28)
>
> **Rule 22.** No officer of this Company, including especially the Chief Engineer and Assistant Engineers and other subordinate officers, as well as the Secretary, shall be in any manner or degree, directly or covertly interested in, or connected with any contract whatsoever, for work to be done on said Road, or for any materials furnished for same. Nor shall they or any of them be, in any manner or degree engaged in any land entries or speculation, on or near the line of said road, or in any private speculations in timber, lumber, or other materials, without the consent of the Board. And for any violation hereof such officer or subordinate shall be dismissed from the service of the Company, and be forever thereafter incapable of holding any office of profit or trust in said Company. This article is to be in force no longer than the completion of the Road. (Minute Book 2, June 2, 1853, p. 28)

> **Rule 23.** No engineer of the company or person appointed by an engineer shall be a partner with a contractor of the company, whether in business connected with the company or any other business whatever, either within or without the State of Alabama. (Minute Book 2, June 2, 1853, p. 28)

The February 25, 1857, report of the investigating committee (Roby Committee) regarding the Childe case that was presented to the convention of stockholders charged Capt. Childe with violating a bylaw (Number 22) of the Company and engaging in certain land speculations on the line, as well as at one of the depot stations. These extensive speculations in real estate occurred at Okolona, Mississippi, a community about 261 miles north of Mobile.

The Roby Committee's exposition as to the violation of trust that had been committed centered on the stockholders, public, and credit of the M&O.

> Men become stockholders in such companies as ours, under the hope, at least, that those entrusted with their management will prosecute the enterprise with an eye single to the common benefit of all concerned. (M&O, 1857 Annual Report, p. 31)

> How could such a hope be sustained or such a belief entertained, when it becomes known that the officer whose duty it is to locate the road and select the sites for its depots, has been secretly engaged in purchasing lands on the line of the road and contiguous to its stations? Is it not certain that such transactions, when known, must tend to shake the confidence of the Stockholders and of the public in the integrity of his management? And, if continued in his position, could it otherwise than impair the credit of the Company? (M&O, 1857 Annual Report, p. 31)

Childe's conflict between corporate and public duty and private interests – what is today known as an "agency problem" – became unacceptable because of self-interested dealing for his own profit.

The work routines of other employees were also addressed in the bylaws in Rules 16 and 17:

> **Rule16.** Any employee of known habits of intemperance of the company shall be dismissed from the service of the company by the president upon the written request of any three directors.

> **Rule 17.** The office shall be opened for business from eight AM to five and a half PM every day, Sundays and legal holidays excepted.

Thus, the M&O board members seemingly had considered many possible aspects of behavior that might affect the company assets and the railroad's success. A governance system was put in place, and its stewardship focus, to protect the assets of the entity, seems clear.

PAYROLL RECORDS

The Kotheimer Collection archives also included monthly M&O payroll records from 1862 regarding laborers on various sections of the tracks. Extant monthly documents for 1862 include January, April, May, June, July, August, September, and November. Thus, 8 of 12 months of 1862 could be studied. These records are time sheets related to workers on the First Division – the 126 miles from Mobile to Lauderdale County, Mississippi. The findings indicate that management had noted the possibility of a different ethical issue at the time.

The columnar sheets of the payroll records contain eight pre-printed headings followed by hand-written input data: "names of men" (e.g., Stephen Davis), "how employed" (e.g., Sec. 1), "names of Negroes" (e.g., Lewis), "number of days" (e.g., 26), "rate of pay" (e.g., $15), "amount each" (e.g., $15), "amount due" (e.g., $192), and "signatures of men" (e.g., Paid March 28th). On some of the time sheets, the word "men" in the first column heading is stricken and the word "owner" inserted. The "amount due" represented the total wages earned by all of an owner's slaves leased to the M&O. Records indicate that the slaves were not paid but that their owners received the compensation. The payroll records overall suggest owners rented large numbers of "Negroes" to the M&O. While the term "slaves" is not used in the time sheets, these black laborers are listed in the time sheets by first name only. Descriptions of their work included: laborer, striker, foundry helper, gravel train, cutting wood, and pumping water.

A few additional observations gleaned from the 1862 payroll records deserve mention. Milton R. Brown, president of the M&O, rented slaves to the Railroad. The payroll records also provide evidence that O.S. Beers leased slaves to the M&O. According to the 1859 Mobile City Directory, Beers served as the auditor of the M&O. Some of the white supervisors also rented slaves to the Company. For example, Road Master Geo. H. Hall, Conductor of the Gravel Train Jacob Sumrall, and Section Master No. 16 R. W. Miller provided slaves. Thus, they received two paychecks. Initially, the authors thought that the aforementioned corporate bylaw prohibiting related-party transactions for materials used in construction did not extend to the leasing out of slaves. However, an 1860 Board resolution had addressed this conflict of interest issue for the M&O:

> As much in convenience arises by the employment of Negroes in the department of their owners, it was on motion, Resolved, That no officer or employee of the Company shall employ his own Negroes to work directly or indirectly under his control. And that

> the Secretary give a copy of this Resolution to the Chief Engineer J. W. Goodwin, J. Elder and H. Ruggles. (Minute Book 2, December 5, 1860, pp. 296–297)

Thus, a control was put into place to allow for the hiring of employees' slaves, because of the convenience that arose, but to avoid problems, or the appearance of problems, slaves could not be supervised by their owners. This rule may have been necessary because there was a concern that owners would not work their own slaves as hard as they would slaves belonging to others; or there could be circumstances where a supervisor would sign in his own slave when that individual was working somewhere else other than the railroad.

RELATIONSHIP TO PRESENT-DAY ISSUES

Stein (2008) examines corporate governance issues as part of the ever-changing landscape, providing a reflection on why the government enacted legislation in the form of the Sarbanes-Oxley Act (SOX) aimed at public companies. In the period of the late 20th century, corporations concentrated on a continuous increase in quarterly earnings. Pressure for improved earnings intensified and grew at a steady pace during this time frame. Scherpenseel (2004, p. 50) observed that many thought the financial reporting requirements of the Securities and Exchange Commission (SEC) and generally accepted accounting principles (GAAP) provided a sufficient basis for corporate governance. In this setting, off-balance sheet transactions with high-profile failures persisted as several executives selfishly comported themselves in a manner to benefit their personal wealth, much in the same way that the chief engineer had done at the M&O in the 1850s.

As Stein (2008) reports, Congress attempted to legislate business behavior in significant ways. On April 25, 2002, the U.S. House of Representatives overwhelmingly passed the Oxley Bill. Then, on July 15, 2002, the U.S. Senate unanimously passed the Sarbanes Bill. President Bush signed the Sarbanes-Oxley Act of (2002) on July 30, 2002. The Act contained sweeping reforms related to corporate responsibility for management of publicly traded entities.

Section 406 of the Act required companies to disclose whether they had adopted a code of ethics for their principal executive officer, principal financial officer, principal accounting officer/controller, or other individuals performing similar tasks. Companies that had not adopted a code of ethics for their senior financial officers had to disclose this fact and explain why an ethics code has not been adopted. As illustrated in the 1853 bylaws of the M&O, shown in the Appendix to this paper, the company's board anticipated some of the legislative requirements of a century and a half later. Indeed, the M&O had a board governance system in place, along with an audit committee of the board.

Section 406 expects senior financial executives to comport themselves ethically and honestly when handling actual and apparent conflicts of interest. Yet, according to AICPA ethics committee member Nancy Wilgenbusch (Myers, 2003, p. 33), a code of ethics will not end unethical behavior (as occurred at the M&O, Enron, and Worldcom). Management must support the letter and the spirit of the ethical code. Transgressions should trigger meaningful discipline as well as full prosecution under the law (as it did at the M&O).

In accordance with Section 404 of the Act, management must acknowledge its responsibility for establishing and maintaining an adequate system of internal controls/procedures. Additionally, that Section requires management to provide an assessment of the effectiveness of the internal control system. Duffy (2004, p. 58) and Ramos (2004, pp. 76–77) believe a company's character is central to the internal control environment. This includes management's integrity, ethical values, operating philosophy, and commitment to organizational competence. Thus, the ethical culture must be effective. The M&O's bylaws did address internal controls and operating procedures. In fact, the M&O's bylaws would seem to meet the spirit of most of the Sarbanes-Oxley requirements, albeit the subject of whistle-blowing was not addressed (Finn, 1995; Shawver & Shawver, 2007).

CONCLUSIONS

This paper contributes to the literature of accountability and ethics by careful documentation of primary source materials and other archival records previously unexamined, relating to a major U.S. corporation's actions taken in response to perceived breeches of acceptable behavior over 160 years ago. The findings support an interpretation that early corporate behavior, while primarily demonstrating a stewardship of property dimension, also involved a modicum of community behavior representative of contemporary social responsibility considerations, albeit not to the extent that Neimark (1995) advocates.[6] Further, this fundamental stewardship of property focus and its related fiduciary culture of the past provides a plausible explanation in part as to why Czarniawska finds that "there is a repetition" of the same explanations. Given that the same explanation would be given if the same plot, that is, stewardship, is an influential, historical, and long standing focus, then the story will be the same. If the plot is the same, that is, from the viewpoint of a steward, then the story will be similar. In that respect, the historical context of the M&O is comparable to that of the early 21st century.

Zeune (1994, p. 280) recounted, "I believe it was Chief Justice Earl Warren who stated that 'the law floats on a sea of ethics.' When the ethics of an organization deteriorate, observance of the law will surely sink with them." The M&O did not succumb to the lawlessness warned about by Justice Warren, because, overall, the ethics remained strong.

According to Dechow, Sloan, and Sweeney (1996) and Beasley (1996), weak corporate governance is related to financial reporting fraud. Responding to the recent avalanche of high-profile corporate financial frauds, the New York Stock Exchange (NYSE) and NASDAQ have enacted rules to augment the quality of corporate governance requiring member firms to have a majority of independent directors on their boards of directors (Farber, 2005, p. 540). Such a requirement would have been met at the M&O. The outside directors outnumbered the officer members.

As seen from the archived M&O corporate records of the antebellum period, and as related in the accountability literature, unethical behavior in the business environment is not just a 21st century phenomenon. As Czarniawska (2012, p. 762) noted: "The financial crises have generated many articles and books outside of the scholarly and financial press." These social commentaries, along with traditional scholarly and financial works should be informed, as well, by historical study. This unique analysis of the practices of an antebellum railroad in the United States provides ways to identify and compare timeless variables that suggest constant human behaviors found both inside and outside of scholarly and financial sources. The issues of corporate governance and ethics were impacting America long before the present day. Excessive self-serving behavior has been and still is part of the corporate climate. History, as shown in this exposition, provides such evidence. The M&O documents clearly indicate that the company had a formal governance system in place at a time when large corporate entities were little known. And, while the M&O Railroad was a pioneer in the field of corporate governance,[7] and a pioneer in addressing transgressions by officers in violation of the company's bylaws and ethics requirements, elements of human behavior that combine poor judgment with selfishness remain a part of today's institutional climate and action.

Taken together the literature considered in this paper reviews the origins of corporate accountability as an ethical dimension founded upon stewardship of property. In the ensuing decades, calls for a broader, more socially responsible theme (Neimark, 1995), and new emplotments (Czarniawska, 2012) suggest that suitability must be evaluated comprehensively not only as to what "is" being done, and what "ought" to be done, but also as to what "was" done. This paper adds to the literature by providing a comprehensive historical example of the latter.

NOTES

1. Emplotment is a term applied in historiography to identify the assembly of a series of historical events into a narrative with a plot ("Emplotment," 2015).
2. The M&O archives are housed in the Kotheimer Collection at the University of South Alabama Archives in Mobile, Alabama. The authors thank the archivists for their assistance on this project.
3. Beginning with the Baltimore & Ohio Railroad, organized in 1827, railroads became the first large corporations in the United States. Such large private businesses found they needed controls and a governance structure. Beside the B&O, other early railroads were small and local until the 1848 chartering of the M&O and Illinois Central soon after. These three railroads pioneered governance and accounting practice, and innovated many policies. This paper is based on primary archival records, which are the ultimate resource for historians, adding institutional historical context to accountability issues. If other antebellum roads faced problems such as at the M&O, the accounting literature is silent – often because archival materials are incomplete or undiscovered for other roads than these three. Early U.S. auditing practices (Flesher et al., 2005) have been studied and traced to these enterprises as well. Today's auditing institutions were unknown in this period, but a form of internal check and auditing began to develop.
4. The federal Land Grant Act of 1850 was passed to support railroad development in Illinois, Alabama, and Mississippi. Future president Abraham Lincoln was an early supporter of the bill, as was future Confederate States president Jefferson Davis. Supporters of the bill argued that federally owned land was worthless until a railroad would open up the territory to settlers. Investing in the railroads by giving away every alternative section of land, in a checkerboard fashion anticipated that the remaining land, owned by the government, would substantially increase in value. Opponents argued that passage would result in publicly owned land being given to private corporations. Supporters proved to be correct as both the railroad lands and government lands increased in value many fold after the railroad was completed (Flesher & Previts, 1999; Samson, Flesher, & Previts, 2003).
5. Interestingly, the pilot of one of the Illinois Central Railroad's steamboats was Samuel Clemens, who later gained fame as the writer Mark Twain (Flesher & Previts, 1999).
6. In contrast to Czarniawska (2012) who wrote in support of establishing new "plots" to fit popular culture to provide clarity to the interpretation of major

21st century financial crises, Neimark (1995) advocated that a more informed view of acceptable business behavior requires a socially responsible focus as a fundamental element. Neimark promotes the need to expand the scope of ethical corporate behavior beyond the bounds of traditional stewardship and custody over assets to a social responsibility view that includes assessment of non-financial behaviors, including the community-wide role of a corporate citizen, moving the argument toward what today is called the triple bottom line, people, planet, and profits. Such community-wide behaviors are present, albeit seldom extolled as primary corporate functions in the historical settings at the M&O. For example, the railroad customarily provided no cost or low cost service to clergy and needy individuals and made grants of its property to assist in the establishment of desirable community facilities, such as schools and churches.

7. See note 3 for support of this statement.

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APPENDIX

Mobile & Ohio Railroad Company
Corporate Bylaws
June 2, 1853

Rule 1. The officers of the company shall consist of a President, Secretary and Treasurer, and such number of clerks and assistants as the board of directors may elect; their duties, compensation and secretaries shall be filed by the board.

Rule 2. The president shall be the chief executive officer and responsible head of the company and ex officio member of all standing committees, and to have supervision over every department of the organization. To preside at all meetings of the Board, unless absent on the service of the company or otherwise prevented; to be the general agent of the company whenever it shall be required by the board; to have the transactions of all local or special agents of the company under cognizance and cause monthly returns to be made to the office at Mobile for the inspection of the Board; to conduct correspondence of the Company; to sign checks for the payment of moneys; to travel through the country upon the lines of the Road, and to direct the local agent in the exercise of their several duties; to arrange the accounts of the several departments in a systematic and methodical manner; to have full knowledge at all times of the current means and resources of the company, and also of its liabilities; to shape and make these resources available to invest the expenditures as they arise; to originate and present [for the action] of the Board from time to time, plans for the ordinary and conduct of the company's affairs; to confer with the executive committee upon all questions not "embraced" in the routine of his official duties; and to be governed by their decision respecting such extra official matters and to perform generally all the execution duties which his position as the immediate and responsible agent of the company may require; and to report to the Board at their regular monthly meetings upon all matters connected with his office for confirmation and approval. His undivided time and attention shall be devoted to the business of the company for which a liberal salary shall be paid to be fixed by the board of directors.

Rule 3. The secretary and treasurer shall be chief clerk and treasurer, to have charge of stock and installment books, Law, maps, deeds, records and of all receipts and vouchers, and the accounts of all moneys received and paid; To keep the records and accounts of the running Department; to keep regular accounts of stocks and the transfers of the same and all land sales; to have daily settlement with the ticket clerk, freight master, and conductor, and have weekly settlement of cash, and generally to attend to all duties appertaining to the office of chief clerk and treasurer; to prepare and lay before the board at each regular meeting an abstract containing a statement of committees and duties in their charge. and what reports are due, and what business stands adjourned, The total expenditure for the previous month and upon what account chargeable and from what sources obtained, The receipts and disbursements of the transportation department for the month. All moneys received by him shall be daily deposited in Bank to the credit of the company, and all books, accounts and papers of the company under his control shall be kept at the office of the company and at all times subject to the examination of the directors. It shall more over be his duty to pay the drafts and negotiations of the chief and resident engineers on account of the construction and engineering of the road and to report the savings to the executive committee at its next meeting thereafter.

Rule 4. An executive committees of these directors shall be elected by the board by ballot one of whom they shall designate as Chairman, which shall have general cognizance over the affairs of the company: to meet twice a week for business or oftener if necessary at the office of the Company, where all letters received and to be kept on file with copies of the replies thereto, accessible to the directors at any and all times: to advise and co-operate with the President when practicable, on matters pertaining to the management of the company, and to be kept fully acquainted with the general condition and progress of its affairs: to have the functions and exercise the powers of the Board in the absence of a quorum ad interim keeping records of its proceedings to be reported to the first regular meeting of the Board thereafter for approval, and through the chairman to conduct the executive operations of the company in the absence of the President, during which time any two of its members shall be authorized to sign checks for the payment of money: to examine and pay audit all claims against the company, allowing no money to be withdrawn from the Treasury without their approval, except as above authorized by the President or Board of Directors; except only when the President and a quorum of the directors may at the same time be absent from one city, or fail to attend called or regular meetings.

In the absence of the President, the Chairman of the Executive Committees shall preside at all meeting of the directors.

Rule 5. The regular meetings of the board shall be held on the first Wednesday of every month, when immediately after the readings of the minutes of the proceeding meeting the Secretary and the treasurers shall submit the statement as required in Rule 3.

Rule 6. The routine of business and rules of action at the board after the above, shall be as follows:

(1) Call of regular and standing committees for reports and action thereon
(2) Call of special committee for reports and action thereon
(3) New business
(4) New suggestions.

Rule 7. The president, or in his absence, the chairman of the executive committee, may call extra meeting, when in his opinion, it may be required for the interests of the company, and shall also do so, at the written request of any four directors.

Rule 8. A stock ledger shall be carefully kept. All transfer of stock must be made at the office of the company in person or by proxy and the old certificate must first be surrendered. In case of lost certificates, two months notice of such loss shall be given by the owner in a newspaper, designated by the board, with particulars of the certificate. Three months after completion of such notice, a duplicate certificate shall be given provided no good or sufficient cause be shown to the contrary by parties objecting. All certificates of full stock shall be signed by the president and counter signed by the secretary, with seal of office.

Rule 9. The Board of Directors shall have an official seal to be affixed to such documents as may be ordered by them.

Rule 10. No stockholder shall vote at any meeting or election when in default of payment of any installment past due.

Rule 11. Once in every three months a Committee to be elected by ballot by the Board, shall examine the treasurer's accounts, and all vouchers connected with receipt and payment of money and repeat at the next regular meeting of the board.

Rule 12. The election of Directors shall be held on the Second Wednesday in February of each year at the company's office unless otherwise ordered by the board. Previous to which at a called meeting of the stockholders, the directors shall submit a general statement of the affairs of the company and of its proceedings since the last meeting.

Rule 13. Bylaw shall be repealed in whole or in part unless by a vote of seven directors and at least one week's noticed shall be given of an intended change.

Rule 14. All officers shall be elected to hold office until subsequent election of directors.

Rule 15. All contracts and wages for the services of officers of the company shall be determined at the pleasure of the Board for sufficient cause.

Rule16. Any employee of known habits of intemperance of the company shall be dismissed from the service of the company by the president upon the written request of any three directors.

Rule 17. The office shall be opened for business from eight AM to five and a half PM every day, Sundays and legal holidays excepted.

Rule 18. Previous to the annual elections, the board shall appoint three stockholders, not directors, to act as inspectors of election under the provisions of the charter.

Rule 19. The president and chief engineer shall make report of all their proceedings connected with the progress and operations of the road as often.

Rule 20. The business of the board shall be conducted in an ordinary manner, and governed as near as may be by parliamentary rules and rules of debate in public bodies. Each member shall regard it as a point of honor and not to divulge the acts or opinions of any member, of decision of the Board, when so requested by the President.

Rule 21. No director shall, without the consent of the board, be interested, concerned in any wise connected with any contract for work done or to be done or materials furnished or to be furnished for the use of the rail road, and for any violation hereof, the director shall be dismissed from the board.

Rule 22. No officers of the company, including especially the chief engineer and assistant engineers and other subordinate officers, as well as secretary, shall be in any manner or degree, directly or covertly interested in or connected with any contract whatsoever for work to be done on said road, or any materials furnished for same. Nor shall they or any of them be in any manner or degree engaged in any land entities on speculation, on or near the line of said road, or in any private speculation in timber, lumber, or other materials without the consented by the board. And for any violation hereof such officers or subordinated shall be dismissed from the service of the company and be forever thereafter incapable of holding any office or profit or trust in said company. This article to be in force no longer than the completion of the road.

Rule 23. No engineer of the company or person appointed by an engineer shall be a partner with a contractor of the company, either in business connected with the company or any other business whatever, either within or without the State of Alabama.

Rule 24. Such director is to regard himself bound to discharge the duties assigned to him with diligence (and energy) to attend all meetings of the board if practicable and not to leave the board before the regular business is finished, except for urgent cases. Three months absence without leave shall vacate the seat of a director.

Rule 25. It shall at all times be competent for any director, upon the final action of the board, on motions and resolutions, to demand the yeas and nays, which shall be recorded by the secretary. If the yeas and nays are not called for, the decision of the board shall be regarded as unanimous, and no member thereafter shall to permitted, to plead that his assent was not given.

Rule 26. All rules, by laws and regulations, heretofore agreed upon, are hereby repealed, so far only as the same shall or may conflict with the forgoing.

Source: M&O Minutes of Meetings Book 2, 1852–1866, pp. 24–29.

EMOTIONAL REACTIONS TO FINANCIAL STATEMENT FRAUD

Tara J. Shawver and Lynn H. Clements

ABSTRACT

Prior research suggests that evaluating employee reactions can help understand the human costs of unethical behavior. However, there is limited research exploring emotional reactions to unethical behavior and no studies that explore emotional reactions when financial statement fraud occurs. In an attempt to fill a gap in the literature, the purpose of this study is to explore whether practicing accountants feel certain negative emotions when asked by a member of management to manipulate earnings. We find that practicing accountants feel emotions of anger, disappointment, and regret when asked by a member of management to complete an action that results in financial statement fraud. The implications of these findings are discussed.

Keywords: Ethical decisions; emotions; earnings management; fraud

INTRODUCTION

"Aggressive" earnings management has been of concern to regulators (Levitt, 1998) and "intensified following evidence of improper accounting by Enron, WorldCom, and some other major corporations" (Nelson,

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Elliott, & Tarpley, 2003, p. 18). What about the effects on the innocent employees in these scandals? Pelletier and Bligh (2008) identified that although journalists recognized the significance of employees' stories and the impact of corruption on their lives, ethics researchers have failed to examine how unethical behavior affects employees. Pelletier and Bligh (2008, p. 823) identify that "evaluating employee reactions to corruption at the hands of top leaders serves a useful purpose for increasing our understanding of the human costs of unethical behavior, as well as how organizations can best deal with the aftermath of an ethical scandal."

There are a few studies that explore emotional reactions to unethical decision-making. Pelletier and Bligh (2008) found that governmental employees express feelings of cynicism, pessimism, optimism, and fear (including paranoia) when corruption occurs. Shawver and Clements (2012) found that accountants experience feelings of regret when faced with choosing an unethical decision alternative. However, we found no studies that explore the emotional reactions of anger or disappointment when unethical decisions are made in an accounting context. Therefore, the purpose of this study is to extend the current literature and explore whether practicing accountants feel the negative emotions of regret, anger, and disappointment when accounting manipulations occur.

The remainder of this paper is divided into four sections. The literature review section provides the theoretical foundations for the study, discussing aggressive earnings management techniques and emotions. The second section provides the methodology. The third section provides the results and discussion. The fourth section reports our conclusions and recommendations, the limitations of the study and suggestions for further research.

LITERATURE REVIEW

Earnings Management

Stice and Stice (2006) identify that not all types of earnings management are considered illegal, unethical, fraudulent, or violations of Generally Accepted Accounting Principles (GAAP). Most companies engage in certain types of earnings management, such as making end of year tax planning decisions and making legitimate choices on how to deal with accounting for transactions in accordance with GAAP. On the other hand, earnings management may involve intentionally recognizing or measuring events in the wrong accounting period, fabricating false transactions or disclosing events or accounts in a way intended to deceive the reader of the financial statement. These actions are considered fraudulent. Determining when a behavior crosses the line from legitimate to fraudulent can be hard to distinguish.

This study examines two situations that Stice and Stice (2006) describe as "fraudulent reporting" and "fraud." The Report of the National Commission on Fraudulent Financial Reporting (1987) defines fraudulent financial reporting as "intentional or reckless conduct, whether act or omission, that results in materially misleading financial statements." Fraudulent reporting, also called "non-GAAP accounting" occurs when financial statements are presented without disclosing the fact that the financial statements are in violation of GAAP or expectations of fair presentation (Stice & Stice, 2006). Examples of fraudulent accounting include the lack of disclosure by Enron in reporting special purpose entities (SPEs) and the improper capitalization by WorldCom of $3.8 billion of expenditures that should have been reported as operating expenses.

"Fraud" refers to an intentional act by one or more individuals among management, those charged with governance, employees, or third parties, involving the use of deception to obtain an unjust or illegal advantage (ISA 240 § 11). Stice and Stice (2006) define "Fraud" as the creation of "fictitious transactions" in order to manipulate earnings. An example of fraud includes ignoring product returns from customers to increase reported income.

Earnings management may go undetected, but the effects of fraudulent earnings management and fraud can be disastrous. This paper extends accounting ethics research by comparing the presence of certain emotions felt in two situations of earnings management involving improper financial statement reporting and fraud.

Ethical Decision-Making

Ethical decision-making is complicated and the literature includes multiple variations of similar models. One well-known model is Rest's four component model of ethical decision-making (Rest, 1986) that consists of moral sensitivity, moral judgment, moral intention, and behavior. In the first component, moral sensitivity, an individual must make "some sort of interpretation of the particular situation in terms of what actions are possible and who would be affected by each action" (Rest, 1986, p. 3). In step two, moral judgment, a person must make a judgment about what an individual ought to do in each situation. Prior research has suggested that moral judgment is determined in part by an individual's level of moral reasoning. Kohlberg (1969) describes moral reasoning as a progression of stages where lower levels focus on an individuals' environment (pre-conventional) and progresses to higher levels of reasoning focusing on what is best for society (post-conventional). In step three, moral intention, an individual indicates an intention to act. An individual person must give priority to moral values above other personal values to do what is right (Rest, 1986). In step four, an individual makes a decision to follow through on the action to engage in a moral behavior (Rest, 1986). Although not discussed in detail in this manuscript, there are three extensive reviews of the ethical decision-making literature (see Ford & Richardson, 1994; Loe, Farrell, & Mansfield, 2000; O'Fallon & Butterfield, 2005).

Although there is a significant amount of research that exists applying and interpreting Kohlberg's and Rest's models; there is very little research that examines how employees feel when financial frauds occur. Shawver and Clements (2012) examined moral judgment and the effect of emotions for two situations of reducing bad debts and for shipping products early to meet a bonus. Although, both of these situations are problematic, they are lower on the Stice and Stice (2006) continuum and would not be considered fraud. In an attempt to fill a gap in the literature, the purpose of this study is to explore whether practicing accountants feel certain negative emotions when asked by a member of management to manipulate earnings for the two highest violations on the Stice and Stice (2006) continuum previously described as fraudulent financial reporting and fraud.

Emotions

What are emotions? Arnold (1960) suggests that emotions involve thoughts, feelings, action tendencies, and somatic states. Dimensional appraisal theory suggests that all emotions include appraisal judgments – judgments to the effect that one is facing a predicament that matters (Arnold, 1960). "We assess whether the predicament we are in is beneficial or harmful, whether it involves objects that are present or absent, and whether those objects are easy to attain or avoid. Different answers to these appraisal questions yield different emotions" (Prinz, 2004, p. 14). Emotions can be defined as "distinctly patterned human experiences that, when consciously felt produce qualitatively distinct subjective feelings and redispositions … Emotions and thinking are, in sum, complementary, synergistic, parallel processes, constantly blending and interacting as a person functions" (Callahan, 1988, p. 10). Some emotions may be intrinsically negative (fear), some emotions may be intrinsically positive (joy). On some occasions an individual may experience both a negative emotion and a positive emotion concurrently (Prinz, 2004). For example, an individual may feel both happy and sad when a friend wins a contest that the individual was also competing in (Greenspan, 1980).

Emotional responses to moral issues and dilemmas may influence moral sensitivity, moral judgment, and motivate moral behavior (Greenfield, 2007). Pelletier and Bligh (2008) conducted a qualitative study of 76 employees in a large southern California government agency that had recently been involved in a highly publicized ethics scandal. Those governmental employees expressed feelings of cynicism, pessimism, optimism, and fear (including paranoia) when corruption occurred. Pelletier and Bligh stated that when an ethics scandal occurs in an organization, "providing individual employees opportunities to heal may be critical" and that "employees need outlets for emotional responses to the psychological distress and mistrust precipitated by ethical transgressions …" (2008, p. 839).

Coughlan and Connolly studied Etzioni's (1988) belief that emotions are the primary factor in choosing between alternatives by exploring the important justifications in the resolutions of ethical situations (2008, p. 351). Coughlan and Connolly utilized three scenarios of business-related ethical problems by surveying 184 students and asking them, (1) how they should and would resolve the issue at hand and (2) how they would feel about selecting each option. Their survey used questions to measure three emotions: regret, relief, and satisfaction. Coughlan and Connolly (2008) found that anticipated relief was significant when choosing two of three ethical alternatives, anticipated regret is sometimes associated with acting inappropriately in the decision to choose an ethical alternative, and no significance was found between satisfaction and choosing an ethical or unethical alternative. We extend prior research to explore the emotional reactions of regret, and further extend the research to emotions of anger and disappointment.

Anger

Anger is created when an individual's plans, desires, and needs are unsatisfied, and the individual perceives the situation as unbalanced or biased against them (Arslan, 2010). Stress is one of the biggest reasons for anger, and being stressed has become a normal feeling in the daily lives of many individuals, especially those working in a business environment with expected results, deadlines, and success factors which must be met (Arslan, 2010).

Wilkowski and Robinson (2010) present an integrative cognitive model, in which they propose three cognitive processes which jointly add to an individual's anger level: (1) automatic tendency, (2) rumination, and (3) effortful control. Automatic tendency explains when individuals automatically attribute unfriendly traits to others. Rumination occurs when individuals hold in and dwell on aggressive feelings, allowing the feelings to grow and intensify. Effortful control is a process by which the individual is able to regulate and control anger before acting on the situation.

Although some individuals may be able to control their expression of anger, Park and Lee (2011) found that "regulatory processes involving emotion and a feeling of control influence risky decisions when anger is evoked." Being in a negative or angry state of mind can cause individuals to become more willing to take high-risks in order to change their negative state (Park & Lee, 2011). This study explores the reaction of anger in two situations involving earnings management and accounting fraud. Therefore, we hypothesize that:

> **H1.** A practicing accountant will feel anger when earnings are manipulated for corporate benefit.

Disappointment

Disappointment has been found to "considerably impact decision making" and many individuals tend to make decisions based on their attempt to avoid negative emotions (Tzieropoulos, Grave, Bossaerts, & Gonzalez Andino, 2011). A study conducted in Switzerland showed that "a large variance in the tolerance to disappointment was observed across subjects, with some participants needing only a small disappointment to impulsively bias their subsequent decisions" (Tzieropoulos et al., 2011). Disappointment is a large factor in decision-making and according to Rajeev and Bhattacharyya (2007), "makes people reluctant to take subsequent decisions." This study explores the reaction of disappointment in two situations involving earnings management and accounting fraud. Therefore, we hypothesize that:

> **H2.** A practicing accountant will feel disappointment when earnings are manipulated for corporate benefit.

Regret

Regret is "… a negative, cognitively based emotion that we experience when realizing or imagining that our present situation would have been better had we acted differently" (Zeelenberg, 1999, p. 325). The effects of regret on choice were studied in the area of consumer behavior (Inman, Dyer, & Jia, 1997; Simonson, 1992; Tsiros & Mittal, 2000), and were found to have an effect on decision-making in the area of medical treatment choice (Connolly & Reb, 2003). Pieters and Zeelenberg (2005) reported that regret impacts voting decisions. Coughlan and Connolly (2008) found that anticipated regret is sometimes associated with acting inappropriately in the decision to choose an ethical alternative. Shawver and Clements (2012) found that accountants experience feelings of regret when making a moral judgment regarding potentially unethical decision alternatives for adjusting bad debt expense and shipping products early to meet a bonus. This study explores the reaction of regret in situations involving the intent to commit the highest levels of accounting fraud on the Stice and Stice continuum. Therefore, we hypothesize that:

> **H3.** A practicing accountant will feel regret when earnings are manipulated for corporate benefit.

METHODOLOGY

Fredrickson (1986) and Cavanagh and Fritzsche (1985) supported the benefits of the scenario approach in ethics studies; therefore, we have applied the scenario approach in this study. We created scenarios that matched actions that Stice and Stice (2006) describe as "fraudulent reporting" and "fraud." A pre-test of the instrument was completed using accounting students prior to collecting the data reported in this study using accounting professionals. Minor modifications were made to the instructions and the instrument as a result of the pre-test.

Continuing professional education seminar participants in four seminars sponsored by a state society of certified public accountants were invited to participate in this controlled experiment. Of the 1,127 attendees, 220 agreed to participate in the study and complete the survey (a 20% response rate). Those who did not complete the survey were eliminated. Table 1 provides selected demographic information about the participants of this study. Of the 220 participants, 157 (71%) are male, 62 (28%) are female, and one preferred not to answer the gender question. Of the 220 participants, 141 (64%) consider themselves either "somewhat conservative" or "very conservative." Nearly all of the participants identified themselves as a CPA.

Two surveys were administered. For survey A, participants answered questions about fraudulent reporting (improper capitalization of expenses).

Table 1. Demographics.

Panel A: Gender of Participants		
Gender	Number	Percent of Total
Female	62	28
Male	157	71
Prefer not to answer	1	0
Total	220	
Panel B: Age of Participants		
Age	Number	Percent of Total
20–29	4	2
30–39	12	5
40–49	41	19
50–59	89	40
60–69	74	34
Total	220	
Panel C: CPA		
Group	Number	Percent of Total
Hold a CPA license	214	97
Do not hold a CPA license	6	3
Total	220	
Panel D: Political Orientation		
Age	Number	Percent of Total
Very liberal	16	7
Somewhat liberal	33	15
Neither liberal nor conservative	31	14
Somewhat conservative	82	37
Very conservative	58	26
Total	220	

For survey B, participants answered questions about fraud (ignoring customer returns to increase reported income). Ninety-two participants completed survey A, and 128 participants completed survey B. Appendix A provides the vignettes and Appendix B provides an excerpt of the survey. Participants were asked a number of statements about each vignette, utilizing a 7-point Likert scale rated from 1, "strongly disagree," to 7, "strongly agree." Consistent with most ethical models of decision-making, participants first complete an ethical evaluation of the scenario by responding to, "The adjustment made by the staff accountant is ethical" rated from 1, "strongly disagree," to 7, "strongly agree." Next, the participants identified whether they believed their peers would complete the action by responding to "It is likely that my peers would complete the same action requested by the controller." Then the participants identified three emotions that they might feel by responding to "Most staff accountants would feel anger if this happened at their company," "Most staff accountants would feel regret if this happened at their company," and "Most staff accountants would feel disappointment if this happened at their company." To mitigate potential social desirability response bias, these questions were purposefully worded in the third person since prior research suggests that the best predictor of respondent's behavior is their beliefs and perceptions concerning their peers' behavior (Israeli, 1988).

In Table 2, we present the means and standard deviations for the variables in this study. Participants in this study identified that actions involving fraudulent reporting (improperly capitalizing expenses) and fraud (ignoring customer returns to increase reported income) are unethical

Table 2. Sample Statistics.

Variable	Mean	Std. Dev.
Panel A: Fraudulent Reporting (Capitalizing Expenses)		
Ethical evaluation	2.105	1.519
Ethical intention	3.107	1.743
Anger	5.369	1.278
Disappointment	5.714	1.208
Regret	5.536	1.145
Panel B: Fraud (Ignoring Customer Returns)		
Ethical evaluation	1.670	1.302
Ethical intention	2.664	1.527
Anger	5.088	1.556
Disappointment	5.257	1.673
Regret	5.372	1.513

Note: Variables are measured on a seven-point Likert scale, 1 = strongly disagree and 7 = strongly agree.

(i.e., responses are closer to 1). However, if they completed the actions, participants reported they would feel anger, disappointment, and regret when these actions occur (responses are closer to 7).

RESULTS AND DISCUSSION

In Table 3, we report the correlation matrix for the variables in this study. For the situation involving fraudulent reporting (improperly capitalizing expenses), ethical intentions are significantly correlated to anger at the .05 level and regret at the .01 level. For fraud (the situation ignoring customer returns), ethical intentions are significantly correlated to anger, disappointment, and regret at the .01 level.

In Table 4, we report the results of two multivariate regression analyses. We did not find a statistically significant relationship (p-value < .05) between feelings of anger, disappointment, or regret when fraudulent reporting occurs, identified in this study as the improper capitalization of expenses. However, moderately significant results for disappointment (p-value = .056) and regret (p-value .086) are observed although not within the .05 level of significance. We find statistically significant evidence that accountants feel anger, disappointment, and regret when financial statement fraud occurs (all p-values > .05). These results provide partial support for H1, H2, and H3. It is possible that these varying results may be

Table 3. Pearson Correlation Coefficients.

	Ethical Intention	Anger	Disappointment	Regret
Panel A: Fraudulent Reporting (Capitalizing Expenses)				
Ethical intention	1.000			
Anger	−0.242*	1.000		
Disappointment	−0.145	0.732**	1.000	
Regret	−0.302**	0.750**	0.674**	1.000
Panel B: Fraud (Ignoring Customer Returns)				
Ethical intention	1.000			
Anger	−0.348**	1.000		
Disappointment	−0.326**	0.900**	1.000	
Regret	−0.324**	0.805**	0.787**	1.000

*Correlation significant at the .05 level (two-tailed).

**Correlation significant at the .01 level (two-tailed).

Table 4. Multivariate Regression.

Independent Variable: Ethical Intention				
Dependent Variable	Type III Sum of Squares	Mean Square	*F*	Sig.
Panel A: Fraudulent Reporting (Capitalizing Expenses)				
Anger	14.252	2.375	1.512	0.185
Disappointment	17.302	2.884	2.158	0.056
Regret	14.213	2.369	1.929	0.086
Adj. R^2 = .062				
n = 82				
Panel B: Fraud (Ignoring Customer Returns)				
Independent Variable: Ethical Intention				
Dependent Variable	Type III Sum of Squares	Mean Square	*F*	Sig.
Anger	61.383	10.230	5.171	0.000**
Disappointment	71.715	11.952	5.239	0.000**
Regret	66.437	11.073	6.179	0.000**
Adj. R^2 = .217				
n = 117				

**Significant at the 0.01 level (two-tailed).

attributed to two different sets of individuals who completed the survey, one group completing questions about fraudulent reporting (improper capitalization of expenses) and the second set of participants answering questions about fraud (ignoring customer returns to increase reported income). However, there were no significant statistical differences when comparing the means for each variable for questions about fraudulent reporting (improper capitalization of expenses) and fraud (ignoring customer returns to increase reported income).

In Table 5, we report the results of factor analyses for the emotion variables. The variables of anger, disappointment, and regret loaded onto one factor for both fraudulent reporting (improper capitalization of expenses) and fraud (ignoring customer returns to increase reported income). Although the literature identifies some difference, we find that there are also similarities. We then combined these emotions by averaging them to create a new variable that we identify as a negative emotion factor. The mean for the negative emotion factor for fraudulent reporting (improper capitalization of expenses) is 5.56 with a standard deviation of 1.095. The

Table 5. Factor Analysis.

Variable	Factor
Panel A: Fraudulent Reporting (Capitalizing Expenses)	
Anger	0.911
Disappointment	0.903
Regret	0.911
KMO	0.751
% of Variance explained	82.535
Panel B: Fraud (Ignoring Customer Returns)	
Anger	0.959
Disappointment	0.952
Regret	0.915
KMO	0.743
% of Variance explained	88.757

mean for the negative emotion factor for fraud (ignoring customer returns to increase reported income) is 5.239 with a standard deviation of 1.490.

In Table 6, we report the results of two univariate regression analyses. We find a statistically significant relationship between the negative emotions factor and fraudulent reporting (p-value = .018) and financial statement fraud (p-value = .000). When earnings manipulations occur, these negative emotions are stronger when occurring concurrently for both situations in this study. This is an interesting finding and not one explored by prior research. In addition, we further explored the impact of the demographic characteristics of our participants on the variables in this study. There were no significant differences between gender, age groups, political orientation, or those that hold a CPA license.

Controllers, managers, and internal accountants often face daily decisions to manage earnings. External accountants (such as CPAs) are often aware of these types of decisions in their clients. When these decisions are not consistent with ethical norms of the individual or groups with which that individual identifies, ethical problems can arise. Ethical problems may be further complicated by trying to balance personal self-interest, organizational interest, and society's interest.

Stice and Stice report that "in most companies, earnings management, if it is practiced at all, does not extend beyond savvy transaction timing" (2006, p. 348). However, there are many examples where accounting manipulations have evolved into major accounting frauds, causing

Table 6. Univariate Regression.

Independent Variable: Ethical Intention					
Variable	Type III Sum of Squares	Mean Square	*F*	Sig.	
Panel A: Fraudulent Reporting (Capitalizing Expenses)					
Negative emotion factor	6.624	6.624	5.842	0.018	**
Adj. R^2 = .054					
Panel B: Fraud (Ignoring Customer Returns)					
Independent Variable: Ethical Intention					
Variable	Type III Sum of Squares	Mean Square	*F*	Sig.	
Negative emotion factor	30.953	30.953	15.790	0.000	**
Adj. R^2 = .117					

**Significant at the 0.01 level (two-tailed).

significant financial losses to individuals, corporations, and society. Stice and Stice (2006) identify that the key thing to remember is that pressures to manage earnings are real, and it is possible to gradually slip from legal forms of earnings management to illegal forms of earnings management and fraud. The consequences of regret, disappointment, and anger in response to unethical actions of others may be serious. First, it may influence accountants to become more willing to take high-risks in order to change their negative state (Park & Lee, 2011). Second, according to Rajeev and Bhattacharyya (2007), it may make people reluctant to make subsequent decisions. Third, the employee may act inappropriately in choosing an unethical alternative in future situations (Coughlan & Connolly, 2008). It is therefore prudent for companies which have experienced unethical behavior to intervene with counseling, training, or other help in encouraging the affected employees to heal from the emotional reactions to fraud. Ultimately, this may reduce future unethical actions and their risks, which can translate into cost savings for companies, increased shareholder returns and the reduced probability of embarrassing scandals.

CONCLUSIONS AND RECOMMENDATIONS

There are many examples and evidence of companies which have managed earnings in fraudulent ways; however, this study is the first to explore emotional reactions for situations involving fraudulent reporting and financial statement fraud. Our study suggests that some of the employees in organizations that have committed fraud may have experienced anger, disappointment, and/or regret as a result of scandalous unethical behavior. We agree with Pelletier and Bligh (2008) that it may be prudent and critically important to provide "individual employees opportunities to heal" for two reasons. First, without that healing, the anger, disappointment, and/or regret may affect future ethical decision-making by influencing accountants to choose unethical decision alternatives over making subsequent ethical decisions. Second, many employers would agree that helping innocent employees (i.e., those who were not part of the unethical behavior) is simply the right thing to do.

In an effort to deter fraud, it is our hope that when evaluating dilemmas management will consider the emotional effects of these decisions before encouraging unethical behaviors. However, if a fraud has occurred, the managers responsible for responding to the situation should provide interventions to help the employees heal from likely emotional reactions of disappointment, regret, and anger.

There are limitations to this study. First, there were limited facts provided in the scenarios, preventing the participants in the study from gathering further evidence and facts. A second limitation is that the survey participants were in two different groups, so that each participant evaluated only one of the two scenarios in this study. A third limitation is all of the participants were from one geographic area. Future studies may wish to increase the sample size, explore different geographic regions of the participants, explore additional negative emotions, or explore the consequences and impact as a result of feeling these emotions when financial statement fraud occurs. Future studies may also wish to explore the implications of these emotions and whether the emotions of anger, disappointment, and regret are separate and distinct emotions or are more appropriately combined to creating a stronger negative emotion factor as we have found in this study. We leave these opportunities for future research.

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APPENDIX A: VIGNETTES

Fraudulent Reporting – Improperly Capitalizing Expenses

A staff accountant prepared the preliminary financial statements for the fourth quarter and sent it to the controller for approval. After review, the controller asked the staff accountant to capitalize expenses for routine maintenance of production machinery. In the past, these costs were expensed. The adjustment would increase net income by 4% for this publically traded company. The accountant agreed to make the adjustment.

Fraud – Ignoring Customer Returns

A staff accountant prepared the preliminary financial statements for the fourth quarter and sent it to the controller for approval. After review, the controller asked that the accountant ignore all customer returns received during the last week of the fourth quarter in order to increase reported net income by 5%. The accountant agreed to make adjustments to the financial statements and record these transactions in the first quarter of the next year.

APPENDIX B: SAMPLE SURVEY, SELECTED QUESTIONS, AND VARIABLES

Vignette

A staff accountant prepared the preliminary financial statements for the fourth quarter and sent it to the controller for approval. After review, the controller asked the staff accountant to capitalize expenses for routine maintenance of production machinery. In the past, these costs were expensed. The adjustment would increase net income by 4% for this publically traded company. The accountant agreed to make the adjustment.

Please indicate how strongly you agree or disagree with the following statements by circling one answer for each of the following statements using the following scale:

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree.

The adjustment made by the staff accountant is ethical (Ethical Evaluation).

It is likely that my peers would complete the same action requested by the controller (Ethical Intention).

Most staff accountants would feel anger if this happened at their company (Anger).

Most staff accountants would feel disappointment if this happened at their company (Disappointment).

Most staff accountants would feel regret if they were asked to perform this action (Regret).

A DESCRIPTIVE ANALYSIS OF THE CONTRIBUTORS, INSTITUTIONS AND CONTENT OF THE AMERICAN ACCOUNTING ASSOCIATION SYMPOSIUM ON ETHICS RESEARCH IN ACCOUNTING 1999–2015

Diane H. Roberts

ABSTRACT

This paper explores the contribution of the AAA Symposium on Ethics Research in Accounting to fostering accounting ethics research. For a 17-year period, the contributors, their schools of affiliation, and their research topics were analyzed to determine the extent of and trends in accounting ethics research. The research rankings of the contributing authors were examined in business ethics journals, top-40 accounting journals, and accounting education journals. Institutional rankings identify supportive places to do accounting ethics research. The impact of significant accounting scandals such as Enron and Madoff was examined

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and a financial scandal "bump" in paper presentations was found. Authors affiliated with Texas schools had papers following the state requirement of an ethics accounting course. A large amount of ethics education-related research was also presented at the Ethics Symposia. Overall the study results indicate that the Symposium with its AAA affiliation is a high-quality venue for paper presentation.

Keywords: Accounting research rankings; accounting research topical areas; accounting ethics; research productivity

INTRODUCTION

Research areas that are underrepresented by major journals may have prolific authors who are not recognized by faculty productivity research (Pickerd, Stephens, Summers, & Wood, 2011, p. 472). Financial reporting is the largest accounting sub-field based on number of articles published (Bonner, Hesford, Van der Stede, & Young, 2006) and dominates rankings. Although there has been interest in accounting ethics research, Bernardi (2004) notes that such research "has traditionally been undervalued due to the use of a different research methodology and its relatively recent entry as an appropriate topic" (Bernardi, 2004, p. 145). Studies ranking the productivity of top ethics accounting researchers have examined their publications both in top-40 accounting journals and in business ethics journals (Bernardi & Bean, 2010; Bernardi, 2005). This study provides some initial evidence on the "pay off" of Ethics Symposium presentation to aid researchers in decisions about how to allocate finite time, resources and expertise.

The American Accounting Association (AAA) created the Professionalism and Ethics (P&E) Committee with the charge to "encourage and support accounting ethics education and scholarship in universities" (American Accounting Association [AAA], 2014) and to raise awareness in academics and students of the "centrality of professional and ethical conduct in an accounting career" (American Accounting Association [AAA], 2014). In fulfillment of this charge, the P&E Committee conducts an annual Ethics Research Symposium in conjunction with the AAA National Meeting. Programs were available for the fourth Symposium held in 1999 through the 20th Symposium held in 2015. These programs provide information about how the Symposium has contributed to the development of both accounting ethics research as a discipline and accounting ethics authors as researchers.

The contents of an academic journal may be analyzed to determine the journal's status and contribution to its field (Meyer & Rigsby, 2001). This research applies similar methodology to analyze the contents and contributors of the Symposium on Ethics Research in Accounting. First, this study identifies those who have made significant contributions to the field of accounting ethics research. Second, those schools that have supported accounting ethics research and are hospitable homes for accounting ethics researchers are identified. Third, trends in research change over time and this analysis helps identify such trends. Finally, it is useful to evaluate where the Symposium currently stands to appreciate and understand what the Symposium has been able to achieve over the years (Table 1).

The occurrence of accounting scandals such as Enron and the subsequent negative impact on the accounting profession due to the downfall of Arthur Andersen have led to increased interest in ethics as an accounting education topic (Earley & Kelly, 2004). The Enron scandal led Texas to enact an accounting ethics course requirement in order to sit for the CPA exam and this requirement has influenced accounting academics in Texas to participate in the Symposium. The study demonstrates the impact of external environment events such as Enron, Madoff, and the Texas legislation on the ethics research presented at the Symposium.

This paper is organized as follows with an initial literature review section. The methodology employed and the data are described. The analysis results detail the characteristics of the Symposium on Ethics Research, the contributing authors and their institutional affiliations. The impact of significant financial scandals and associated regulation (Enron and SOX and Madoff and Dodd-Frank) is discussed with a spotlight on impact of the first US accounting ethics course requirement in Texas. Research topics are then explored through key word analysis with special attention to the terms "ethical" and "moral." Accounting ethics education research at the Symposia is then analyzed. A final section offers a summary and limitations.

LITERATURE REVIEW

Research rankings of accounting faculty aim to ascertain the most prolific and influential scholars. Article counts address the quantity aspect of publication, while selection of "top" accounting journals have been the main method to address article quality in research ranking studies. Top accounting journals "do not evenly or proportionally publish all types of

Table 1. Ethics Symposia Characteristics.

Symposium Year	Location	Session Papers	Forum Papers	Total Papers	Total Authors	Panels	Speakers
Pre-Enron							
4 1999	San Diego	11	11	22	39	1	0
5 2000	Philadelphia	10	11	21	40	1	0
6 2001	Atlanta	20	21	41	77	0	0
7 2002	San Antonio	16	13	29	53	0	0
Post-Enron							
8 2003	Honolulu	23	9	32	65	0	0
9 2004	Orlando	21	10	31	60	0	0
10 2005	San Francisco	22	8	30	51	2	1
11 2006	Washington DC	12	11	23	36	1	2
12 2007	Chicago	24	9	33	63	1	1
13 2008	Anaheim	23	0	23	41	0	0
Post-Madoff							
14 2009	New York	18	15	33	71	1	1
15 2010	San Francisco	16	8	24	46	1	0
16 2011	Denver	21	6	27	53	1	0
17 2012	Washington DC	43	16	59	124	2	0
18 2013	Anaheim	21	11	32	66	2	1
19 2014	Atlanta	23	5	28	53	2	1
20 2015	Chicago	26	0	26	50	2	1
Total		350	164	514	988	17	8

accounting research" (Pickerd et al., 2011 p. 472). A journal's principal topic and methodology preference may influence faculty selection of publication outlets, thus quality papers in other topic areas that use other methodologies may never be submitted to these journals. Analysis by sub-field specialty allows faculty and institutions to compare their accomplishments with others who are concentrating on the same specialties (Coyne, Summers, Williams, & Wood, 2010).

Accounting Research Productivity

Both Coyne et al. (2010) and Pickerd et al. (2011) evaluated faculty research output by topical area and by methodology. Their topical areas were accounting information systems, audit, financial, managerial, tax, and other. Ethics was not listed in the "other" category which consisted of "education, methodologies, law, psychology, history, the accounting profession, work environment, etc." (Pickerd et al., 2011, p. 476, Coyne et al., 2010, p. 635). Methodologies examined were analytical, archival, experimental, and other.

Coyne et al. (2010) focused on institutions in their examination of publication in 11 top accounting journals. Current affiliations rather than affiliation at time of publication were used on the grounds that intellectual capital moves with the researcher. Large schools had greater breadth of research outside of financial accounting. Publication windows of 6, 12, and 20 years were used to correspond to tenure and promotion cycles and revealed whether a school had recently gained or lost faculty. The transfer of intellectual capital from faculty mobility caused schools to be ranked low that lost substantial numbers of well-published faculty to other institutions.

Pickerd et al. (2011) focused on individual faculty as the unit of analysis using Coyne et al.'s (2010) methodology. Faculty published in multiple topical areas but generally used one methodology exclusively: analytical, archival, or experimental. Both Coyne et al. (2010) and Pickerd et al. (2011) found that the dominant topic at top journals was financial accounting.

Dunbar and Weber (2014) used a citation-based analysis to discover the most influential works in the areas of audit, financial, managerial, tax, and other. Interdisciplinary and individual subfields "tend to be highly specialized with respect to the foundational ideas and methodologies from with they draw" (Dunbar & Weber, 2014, p. 2). No ethics journals were included in the analyzed journals. Citations were 70 percent journal articles, 10 percent books, and the other 20 percent were "working papers, dissertations, government publications, book chapters, and newspapers" (Dunbar & Weber, 2014, p. 7). Papers presented at the Ethics Symposium could be considered working papers.

Hasselback, Reinstein, and Abdolmohammadi (2012) found a significant gender effect where men were more productive. Doctoral granting school faculty was more productive over their entire career. At non-doctoral granting institutions faculty within 10 years of earning, the PhD were more productive than those who graduated earlier. The measures used top-40 accounting journals, none of which were ethics journals.

Holderness, Myers, Summers, and Wood (2014) noted, "accounting education research may be at the bottom of the pecking order" (Holderness et al., 2014, p. 88). Accounting education research was produced mainly by scholars at US public schools. Offering a doctoral program was not significant. Private and doctoral granting schools primarily produced non-education types of accounting research. Their results suggest that different types of institutions produce different types of research.

Ethics Ranking Research

Accounting ethics was not a research area in any of the accounting research productivity studies. Bernardi (2005) performed an initial ethics researcher ranking study using articles in ethics journals that was extended by Bernardi and Bean (2010) to also include publications in top-40 accounting journals. These studies used individual scholars as the unit of analysis and ranked authors by PhD graduation year. Bernardi and Bean (2010) also ranked accounting ethics researchers by full credit articles and by co-author-adjusted articles in business ethics journals, and then in accounting's top-40 journals. Bernardi, Bean, Melton, and Roberts (2008) and Bernardi and Bean (2010) developed a list of key words to identify accounting ethics articles in non-business ethics journals. From 1986 through 2008, 16.8 percent of North American accounting faculty with doctorates had published one ethics article and 6.3 percent published more than one article (Bernardi & Bean, 2010, p. 139).

Journal Analysis Research

Meyer and Rigsby (2001) performed an analysis of the first ten years of *Behavioral Research in Accounting* (BRIA), a journal of the AAA

Accounting, Behavior, and Organizations (ABO) section. Articles were initially classified as managerial control, accounting information processing, accounting information system design, auditing process, and organizational sociology research. Five categories were added: historical, behavioral accounting research design, accountant's career paths, ethics, and other. While not an ethics journal per se, there was a "strong focus on ethics in recent years is shown by the high ranking of Larry Ponomon in total citations" (Meyer & Rigsby, 2001, p. 265).

Bailey, Scott, and Hyde (2010) examined publication trends in *Research on Professional Responsibility and Ethics in Accounting* (RPREA) and developed an excel index of articles published in *RPREA* to facilitate citation of the journal. Ethical decision-making had the most positive trend as a research topic. Two education topics – teaching ethics and ethical dilemmas – also had strong positive trends indicating an increasing interest in accounting ethics education.

METHODOLOGY AND DATA

The timing of the first Ethics Symposium was not determinable but the second Symposium occurred in 1997. The theme in the Second Symposium's Call for Papers was "Symposium on Ethics Education in Accounting: Teaching and Curricular Issues." While later Symposia do feature some education research none of the others have this singular focus on teaching. The third Symposium was held in 1998 and welcomed all types of accounting ethics research, as did all subsequent Ethics Symposia. The programs of the first three Symposia were unavailable either on the AAA Annual Meeting Archive or through personal contacts of the author. Interest in accounting ethics was also in the AAA Accounting, Behavior, and Organization (ABO) Section as the theme of the 2nd ABO Conference in 1996 was "Ethics in Accounting" (Meyer & Rigsby, 2001).

The programs from the Annual Symposium on Ethics Research in Accounting were obtained for the Fourth Symposium held in 1999 through the 20th Symposium held in 2015 (American Accounting Association, Baker, 2007; Cullinan, 1999; Fogarty, 2008; Louwers, 2000; Roberts, 2010; Thornton, 2009). The programs list the concurrent paper session and forum paper presentation authors and paper title. Only four programs included abstracts, so there was insufficient abstract data for analysis. The author's institutional affiliation was listed for all Symposia except for the Eighth.

Paper submissions to the Symposium are assigned for blind, peer review by the director or co-directors of the Symposium. The blind, peer review for the Symposium may serve as the first round of journal submission at the journal editor's option. While rejection rate data was unavailable not all papers submitted are accepted and the Symposia directors aim for a quality program. The Symposium has a separate fee for attendees to the AAA National Meeting, thus program quality is important to induce attendees to spend an additional amount of their limited budgets.

Information on panel sessions, keynote speakers, moderators, and discussants was also contained in the programs. A database of the Ethics Symposium contents and contributors was created manually that contained which symposium the paper was presented, paper titles, authors, and institutional affiliation, author's gender, sole or co-authored paper, and session or forum presentation.

RESULTS AND DISCUSSION

The Ethics Symposium

The Ethics Symposium was held immediately preceding the AAA National Meeting on an annual basis in the period 1999 to 2015 (and continues to be held at this same time). Originally held in an afternoon and following morning format, since 2009 the symposium has been on an entire, single-day format. For the 17-year period, a total of 514 papers were presented with 350 in concurrent paper sessions and 160 in forums. The number of authors at individual Symposia ranged from 39 to 124 with an average of 58 authors per Symposia. As some accounting faculty presented at multiple Symposia, there were 621 unique authors of papers over the 17-year period.

Academic research papers have been the main focus of the Ethics Symposium. The forum is an informal presentation format that features the papers and their authors and some food, typically breakfast. The first five Symposia studied (4 through 8) featured two forums, an evening reception forum and a breakfast forum. Later Symposia have the breakfast forum only and the 13th and 20th Symposia did not have a forum.

The Call for Papers always states that papers on any aspect of accounting ethics are welcome; however, three Symposia had conference themes. The 5th Symposium's call indicated that at least one session would focus on independence and five of the 21 Symposium papers dealt with this topic. The 7th Symposium's call had the theme of new directions in accounting ethics research. The 8th Symposium held in 2003 had the theme of "Ethics in the Post-Enron Era."

There was an editor's panel in the 10th, 11th, 12th, 18th, and 20th Symposia that featured editors of publications that accepted accounting ethics articles. The journals represented were *Accounting and the Public Interest, Accounting Horizons, Accountancy Business and the Public Interest, Global Perspectives on Accounting Education, International Journal of Disclosure and Governance, Journal of Accounting and Public Policy, Research on Professional Responsibility and Ethics in Accounting*, and *The CPA Journal.*

Contributing Authors

The contributing authors of papers presented in either session or forum format were analyzed to determine which authors had a significant impact on ethics research at the Symposium. Table 2 lists those who have authored or co-authored a minimum of four papers at the Symposia. Four papers was selected as the threshold for analysis as it represents 24 percent of the 17 Symposia and is consistent with the four paper threshold used in Bernardi and Bean's (2010) ranking of accounting ethics researchers.

The authors are presented in order of total authorships with no weighting for sole versus co-authored papers. Using the methodology of Pickerd et al. (2011), all authors are given full credit for each paper. As some authors had more than one paper at a single symposium, the number of Symposia at which the author presented is also given. The final column shows the number of co-authored and sole authored papers to demonstrate patterns of research effort.

Forty-one authors contributed four or more papers to the Symposium over the 17-year period and they represent a core group of ethics researchers. Four of these authors were from universities outside the United States. Only 15 of the 41 (36.6 percent) most prolific authors are women. This is consistent with Hasselback et al.'s (2012) finding that male faculty generally score higher than female faculty on measures of research productivity. Overall, 26 percent (162) of Symposia authors were female.

Three of the top-four most productive authors primarily co-authored papers and most authors reflected this trend. Only five had more sole authored papers and four authors had an equal number of sole and co-authored papers.

The years that the Ethics Symposium has occurred can be divided into the following sub-periods: Pre-Enron (1999–2002), Post-Enron (2003–2008),

Table 2. Authors of at Least Four Papers at the Ethics Symposium 1999–2015.

Author Name	Total Authorships	# Symposia	Coauthored/Sole
Bernardi, Richard	18	12	17/1
Thorne, Linda	13	7	13/0
Baker, C. Richard	13	13	6/7
Massey, Dawn	12	9	11/1
Mintz, Steven	10	9	4/6
Kelly, Patrick	9	8	7/2
Shawver, Tara	9	8	5/4
Bean, David	8	5	4/6
Thornton, John	8	8	5/3
Van Hise, Joan	8	6	7/1
Abdolmohammadi, Ali	8	6	7/1
Fogarty, Timothy	8	7	4/4
Bailey, Charles	7	5	3/4
Dillard, Jesse (retired 2009)	7	7	5/2
Mahoney, Lois	7	7	7/0
Radtke, Robin	7	6	6/1
Sennetti, John	7	7	7/0
Curtis, Mary	6	6	6/0
Manly, Tracy	6	6	6/0
Reinstein, Alan	6	5	6/0
Roush, Pamela	6	6	5/1
Earley, Christine	5	4	5/0
Fisher, Dann	5	3	4/1
Reiter, Sara	5	5	2/3
Stevens, Douglas	5	4	5/0
Williams, Paul	5	4	4/1
Bobeck Schmitt, Donna	4	3	4/0
Gaa, James	4	4	2/2
Garcia, Andy	4	3	4/0
Guiral, Andres	4	3	4/0
Jones, Joanne	4	4	3/1
Lampe, James	4	3	4/0
Liyanarachchi, Gregory	4	4	2/2
Miller, William	4	3	4/0
Morris, Roselyn	4	4	3/1
Porco, Barbara	4	4	3/1
Roberts, Robin	4	4	4/0
Shaub, Michael	4	4	1/3
Stanley, Charles	4	4	3/1
Stuebs, Martin	4	2	3/1
Windsor, Carolyn	4	4	2/2

and Post-Madoff (2009–2015). The activity of these top researchers during these three periods was examined and 30 of the 41 (73 percent) were presenters in all three periods. Five authors presented only in the Pre- and Post-Enron periods. Six authors presented in both the Post-Enron and Post-Madoff periods. Three authors presented only in the Post-Madoff period and each had four authorships.

Bernardi and Bean (2010) ranked the top-50 faculty publishing accounting ethics research from 1986 through 2008 in both business ethics journals and top-40 accounting journals. The period covered by this study is 1999 through 2015 so the last seven years of the Symposia are not reflected in Bernardi and Bean (2010). As this is the most recent paper to focus on accounting ethics research productivity it will be used to evaluate the publication success of the authors contributing to the Symposium. Bernardi and Bean (2010) required a minimum of four sole authored papers published in business ethics journals or a combination of three sole authored papers and 1.83 coauthor-adjusted papers to be in top-50 researcher ranking. The top Ethics Symposium contributor list had a minimum of four papers, thus it is likely that many top Symposium contributors had sufficient productivity to potentially make the top-50-researcher list.

Panel A in Table 3 lists the 17 authors in the top-41 Ethics Symposia contributors that were ranked in the top-50 accounting researchers publishing in business ethics journals (Bernardi & Bean, 2010). The larger the body of work as represented by Symposia papers, the more likely the author was on the top-50 list. All of the double-digit contributors were on the top-50 list and most of those who had seven or more Ethics Symposia papers (10 out of 17) were on the top-50 list. Authors who were prolific journal publishers were also prolific Symposia presenters. Fifteen Symposia contributors had four Symposium papers and only four of these researchers were in the top-50 ethics researcher list. Authors tended to rank higher in business ethics journals than in top-40 accounting journal publications.

There were 621 unique authors of papers over the 17-year period and only 41 had four or more authorships. All contributors to the Symposia were compared to Bernardi and Bean's (2010) top-50 accounting ethics researchers listing to determine the level of Ethics Symposia participation of the top-50 researchers. Table 3, Panel B shows the 17 authors who presented less than four times at the Ethics Symposia and were in the top 50.

The pattern of higher ranking in business ethics journals than in top-40 accounting journals that Bernardi and Bean (2010) is also reflected in this set of authors. A total of 34 authors in the top-50 (68 percent) have presented at the Ethics Symposium at least once.

Table 3. Authors at the Ethics Symposium 1999–2015 also in Bernardi and Bean (2010) Publication Rankings in Full Credit (Sole Author) Business Ethics Top 50.

Author Name	Total Symposia Authorships	Business Ethics Journal Ranking Full (Coauthor)	Top-40 Accounting Journal Ranking Full (Coauthor)
Panel A: Authors with more than four authorships			
Bernardi, Richard	18	2 (3)	1 (1)
Thorne, Linda	13	7 (8)	13 (6)
Baker, C. Richard	13	– (31)	– (44)
Massey, Dawn	12	28 (37)	–
Mintz, Steven	10	9 (5)	6 (2)
Shawver, Tara	9	39 (49)	–
Bean, David	8	8 (10)	15 (18)
Abdolmohammadi, Ali	8	11 (9)	– (44)
Dillard, Jesse (retired 2009)	7	6 (7)	21 (11)
Mahoney, Lois	7	39 (44)	–
Radtke, Robin	7	18 (17)	28 (22)
Fisher, Dann	5	22 (20)	–
Gaa, James	4	– (38)	–
Williams, Paul	5	37 (41)	26 (19)
Lampe, James	4	31 (22)	–
Roberts, Robin	4	14 (21)	11 (6)
Shaub, Michael	4	17 (16)	20 (10)
Panel B: Authors with less than four authorships			
McGee, Robert	1	1 (1)	–
Yuthas, Kristi	3	5 (6)	–
Cohen, Jeffrey	1	10 (18)	3 (5)
Kaplan, Steven E.	3	12 (15)	2 (3)
Mitschow, Mark	3	13 (11)	–
Pant, Laurie	2	19 (33)	5 (16)
Elias, Rafik	1	20 (14)	–
Fleischman, Gary	1	23 (27)	–
Sharp, David	1	24 (28)	10 (27)
Geiger, Marshall	1	29 (40)	–
Ravenscroft, Susan	3	30 (43)	–
Oliver, Bruce	1	31 (22)	–
Finn, Don W.	1	35 (35)	–
Sweeney, John T.	2	35 (35)	39 (40)
Cullinan, Charles	1	49 (–)	–
Arnold, Vicky	2	50 (–)	–
Sutton, Steve G.	2	50 (–)	–

Institutional Affiliations and Characteristics

Institutions may develop research focuses that encourage publication in particular topics or research streams. The schools that were represented at the Symposium and their characteristics were investigated to determine the identity and nature of institutions that value accounting ethics research.

The affiliation at the time of the Ethics Symposium is shown in Table 4 for all schools with a minimum of four authorships. The number of different authors and of different papers are shown. The school type, public or private, and whether the school offers a PhD in accounting is also disclosed. Author information was complete but the 8th Symposium had no affiliation information. Using Meyer and Rigsby's (2001) methodology total authorships per school includes the number of authors of Ethics Symposium papers who were affiliated with the same school. If multiple authors from the same school were co-authors on the same paper, then each author was counted as an authorship for the school. For example, if three individuals affiliated with the same school coauthor one paper, this counted as three total authorships for the school.

This study used the affiliation at the time the paper was presented at the Symposium rather than the affiliation where the individual currently resides. Studies of published journal articles sometimes use the school where the individual currently resides on the grounds that the individual takes their intellectual capital with them (Coyne et al., 2010; Holderness et al., 2014). This study uses the affiliation at the time of the Symposium on the grounds that this institution is the one that provided the research support and travel funding for the researcher to present in the Ethics Symposium venue. Those authors with at least four Symposia authorships tended to stay at their schools. The four exceptions are Charles Bailey (University of Central Florida to University of Memphis), Jesse Dillard (University of Central Florida, University of New Mexico and Portland University, now retired), James Lampe (Texas Tech to Missouri State University, now deceased), and John Thornton (US Air Force Academy to Washington State University to Azusa Pacific University).

There are 59 schools that had four or more total authorships. Sixteen schools had double-digit authorships and all but two of these had a group of researchers that gave the school an average authorship per person between 1.57 and 2.78. Providence College had an average authorship per person of five (10 authorships and 2 authors) with a single author, Patrick Kelly responsible for nine authorships. Fairfield University had three different authors and produced 21 total authorships for 7 authorships per

Table 4. School of Affiliation of Authors (Schools with Minimum of Four Authorships).

School of Affiliation	Authors	Articles	Authorships	Type of School
Roger Williams University	12	18	32	Private
Fairfield University	3	14	21	Private
University of Central Florida	9	17	25	Public, PhD
Washington State University	14	13	22	Public, PhD
York University (Canada)	8	13	18	Public, PhD
Baylor University	9	10	15	Private
Bentley University	8	13	15	Private, PhD
Nova Southeastern University	8	10	14	Private
University of North Texas	7	6	12	Public, PhD
Texas A & M	6	10	11	Public, PhD
Texas Tech University	6	10	11	Private, PhD
Case Western Reserve University	3	8	10	Public, PhD
California State Polytechnic University at San Luis Obispo	4	8	10	Public
Florida State University	7	5	10	Public, PhD
Providence College	2	10	10	Private
University of Texas San Antonio	8	10	10	Public, PhD
Adelphi University	1	9	9	Private
Kansas State University	4	6	9	Public
Kings College	1	9	9	Private
Portland University	5	3	9	Private
University of Memphis	3	7	9	Public, PhD
University of San Francisco	4	6	9	Private
University of Tulsa	4	5	9	Private
Brigham Young University	8	3	8	Private, PhD
Louisiana State University	5	5	8	Public, PhD
SUNY Binghamton University	5	7	8	Public, PhD
Union College	3	4	8	Private
University of Wisconsin Eau Claire	5	4	8	Public
Iona College	2	6	7	Private
Macquarie University (Australia)	7	3	7	Public, PhD
North Carolina State University	2	7	7	Public
University of St. Thomas	4	6	7	Private
University of Texas El Paso	4	2	7	Public
Kent State University	6	3	6	Public, PhD
Quinnipiac University	3	3	6	Private
University of Calgary (Canada)	6	3	6	Public, PhD
Wayne State University	2	6	6	Public, PhD

Table 4. (*Continued*)

Current School of Affiliation of Authors (Minimum of four Authorships)

School of Affiliation	Authors	Articles	Authorships	Type of School
Bowling Green State University	2	5	5	Public
New Mexico State University	3	2	5	Public, PhD
Rutgers University	4	4	5	Public, PhD
University of Houston	5	4	5	Public, PhD
University of South Florida	4	5	5	Public, PhD
Eastern Michigan University	3	2	4	Public
Fordham University	1	4	4	Private
George Mason University	3	3	4	Public
Georgia Institute of Technology	3	2	4	Public
Georgia State University	3	3	4	Public
Indiana University Purdue at Fort Wayne	2	3	4	Public
Iowa State University	2	3	4	Public
McMaster University (Canada)	4	3	4	Public, PhD
Monash University (Australia)	4	4	4	Public, PhD
Northern Illinois University	4	2	4	Public
Qatar University (Qatar)	4	2	4	Public
San Diego State University	3	2	4	Public
SUNY Oswego	4	2	4	Public
University of Alberta (Canada)	1	4	4	Public, PhD
University of Arkansas	4	4	4	Public, PhD
University of Sydney	4	4	4	Public, PhD
University of Wyoming	3	2	4	Public

Notes: No affiliations were listed in the 8th Ethics Symposium Program.
Schools are listed by total authorships. Alphabetical order is used for ties.
Total authorships are the number of authors of Ethics Symposium papers who were currently affiliated with the same school. For example, if three individuals affiliated with the same school coauthor one paper this counted as three total authorships for the school.

person. The missing affiliation data for the 8th Symposium understates institutional participation slightly.

Some schools Ethics Symposia presence is primarily due to an individual author. Adelphi University's nine authorships are the work of C. Richard Baker. Fordham University's four authorships are papers by Barbara Porco and the University of Alberta's representation is from the work of James Gaa. All California State Polytechnic University at San Luis Obispo (Cal Poly) authorships are either sole authored by Steven Mintz or other Cal Poly faculty who co-authored papers with Steven Mintz. Both James

Gaa and Steven Mintz are retiring in 2016, effectively removing their school's presence from the Symposia. The 12 authorships from Roger Williams University all involve Richard Bernardi as a faculty member and the other 11 are Roger Williams University student co-authors.

The nature of the school was also investigated to determine if public or private schools presented more and whether having a PhD program made an impact. The majority of the schools (42) were public and 17 schools were private. Only three private schools had PhD programs and nine private schools had historic or current religious affiliations. Twenty-four public schools had PhD programs with a total of 27 schools (46 percent) offering PhD programs. Hasselback et al. (2012) found faculty at doctoral granting institutions were significantly more productive than those at non-doctoral institutions.

Eighteen of the 59 schools that had four or more total authorships were also in Holderness et al. (2014) as institutions who highly valued accounting education research. Institutional participation at the Ethics Symposia was consistent with the findings of Holderness et al. (2014) regarding accounting education research. There was less private school accounting education research and lower participation by non-US faculty.

The Texas Effect and the Financial Scandal Ethics Research Bump

Enron was headquartered in Houston, Texas, and the Texas State Board of Public Accountancy (TSBPA) reacted to the scandal by amending its licensure rule in 2003. A TSBPA approved three-semester-hour ethics course was required to sit for the Uniform CPA Exam after July 2005 (Hurtt & Thomas, 2008). Ethics courses in Texas must be submitted to the TSBPA for approval and adhere to the requirements of Board Rule 511.58. The course content is broken down into eight categories with percentage weights ranging from five to 15 percent. This emphasis on ethics also resulted in considerable accounting ethics papers presented at the Symposium.

Table 5 shows the productivity of Texas schools that had a minimum of four authorships at the Ethics Symposia. There were 47 papers written by 45 authors who were affiliated with seven Texas schools. These seven schools are 12 percent of the schools with substantial symposium participation. This illustrates a breadth of accounting ethics involvement by Texas accounting faculty. An additional six Texas universities also had papers at the ethics symposium although fewer than four authorships per school. Those results

Table 5. Texas Effect (Minimum of Four Authorships).

School of Affiliation	Number of Different Authors	Number of Different Articles	Total Authorships for School Number (Rank)
Schools with more than four authorships			
Baylor University	9	10	15 (6)
University of North Texas	7	6	12 (9)
Texas A & M	6	10	11 (10)
University of Texas San Antonio	8	10	11 (16)
University of Texas El Paso	4	2	7 (33)
Texas Tech University	6	5	6 (11)
University of Houston	5	4	5 (41)
Total	45	47	67
Schools with less than four authorships			
Texas Women's University	2	1	2
Southwest Texas State University	1	1	1
Stephen F. Austin State University	1	1	1
Texas State University	1	2	2
University of Texas Arlington	1	1	1
University of Texas Austin	3	3	3
Total Other Texas Schools	9	9	10
Total All Texas Schools	54	56	77

are shown in Table 5 as well. The lack of affiliation data for the 8th Symposium may have contributed to a slight undercounting.

The Texas law and Enron had a large impact on ethics research productivity. Seven Texas authorships were at the symposium before Enron. Four authorships come from one paper at Texas Tech and one from a paper from University of Texas at San Antonio. The 7th Symposium was held in San Antonio, Texas, and three additional authorships came from this symposium. The remaining 57 Texas authorships occur after Enron.

While Enron was headquartered in Texas the impact of the fraud and Arthur Andersen's part in the scandal was salient to accounting faculty throughout the US and beyond. The Sarbanes-Oxley legislation was enacted July 30, 2002 in response to Enron (Rockness & Rockness, 2005). The 8th Symposium held in 2003 had "Ethics in the Post-Enron Era" as the conference theme. There were 32 papers presented by 70 authors, of which 26 authors (37 percent) only presented at this Enron-themed Symposia. By comparison, there were 29 papers and 57 authors at the San Antonio Symposium the year prior and 31 papers and 62 authors in Orlando the year after. The 8th Symposium location was Honolulu, Hawaii, and was the only Symposium held in such a vacation paradise. A Honolulu effect may have interacted with an Enron effect to produce a large number of new, one-time authors.

The Madoff Ponzi scheme was exposed in December 2008 (Stolowy, Messner, Jeanjean, & Baker, 2014) and was part of the Global Financial Crisis of 2008. Like Enron, the Madoff scandal was front-page news that coincided with an economic downturn and was the impetus for federal regulatory legislation. No one state had "ownership" of the Madoff scandal so no geographic concentration of accounting ethics research followed. The Dodd-Frank Act was signed into law on July 21, 2010 and was enacted in response to the crisis. The 14th Symposium in New York in 2009 had 33 papers (there were 23 the year before) and 71 authors (41 the prior year). Of these 71 authors, 40 authors (56 percent) presented at the symposium for the first time and did not have any later symposium papers. The following year at the 15th Symposium in San Francisco there were 24 papers from 46 authors.

Interest in accounting ethics research appears to be piqued by current events or alternatively phrased, ethics research gets a scandal bump. Both Enron and the Madoff Ponzi scheme saw additional researchers write on ethics topics and not present at the Symposium again.

Topics of Ethics Papers Presented

Paper titles were the only data available for all Symposia. Abstracts and key words were only available in four Symposia's programs (12th through 15th) so analysis was performed using paper titles.

Bernardi and Bean (2010) developed a list of key words to identify ethics articles in top-40 accounting journals. Bernardi et al. (2008) used 126 key words for ethics article identification and included an additional 23 key words in the Bernardi and Bean (2010) paper. All 149 key words were used to search the Symposia paper titles. Table 6 shows the key words that were found in the Ethics Symposia paper titles.

Sixty of the key words were not found in the 514 Symposia paper titles but 89 (60 percent) were found. The frequencies are shown in Table 6 as

Table 6. Ethics Key Words from Bernardi and Bean (2010) in Ethics Symposia Paper Titles.

Key Word	Times	Key Word	Times	Key Word	Times
Accountability	5	Arthur Andersen	3 (8th)	*Behavior*	*14*
Bias	6	Cheating	2	Codes	4
Conduct	8	Conflict	2	Conflict of Interest	1
Conscience	1	Consequences	8	Corporate Social Responsibility	5
Crisis	2	Critical Thinking	1	Defining Issues Test	7
Dilemma	*10*	*Disclosure*	*11*	Discreditable	2
Diversity	1	Duty(ies)	2	*Earnings Management*	*11*
Enron	7	Environmental	6	*Ethical*	*110*
Ethical Behavior	7	Ethical Development	2	Ethical Dimensions	1
Ethical Lapses	1	Ethical Perceptions	3	*Ethics*	*103*
Failure	1	Fairness	5	Faking	1
Fraud	8	Fraudulent	1	*Gender*	*13*
Harassment	1	*Independence*	*26*	*Integrity*	7
Justice	5	Manipulation	3	Materiality	3
Misleading	2	Misrepresentation	1	*Moral*	*46*
Moral Development	7	Moral Intensity	3	Moral Judgment	3
Moral Reasoning	*18*	Morality	3	Non-Compliance	1
Personal Values	2	Pressure	5	Professional Responsibility	1
Red Flag(s)	2	Reputation	3	Risk Assessment	1
SOX	*12*	Sensitivity	8	Social Desirability Response Bias	2
Social Responsibility	7	Stakeholder(s)	2	Tax Evasion	1
Taxpayer Compliance	1	Tone at the Top	3	Treadway Commission	1
Trust	5	Underreporting	1	Unethical	4
Values	*11*	Violations	2	Virtue	5
Whistleblowing	*14*	Culture	3	Distress	1
Ethical Decisions	6	Harm	1	Intervention	3
Questionable	2	Socialization	2	Threat	8
Agency Theory	1	Corrupt(ion)	3	Tax Avoidance	1
Legitimacy	2	Plagiarism	2	*Responsibility*	*14*

well and only 14 key words had double-digit frequency. Ethical was found 110 times (21.4 percent of papers) and Ethics was found another 103 times (20.04 percent) so that 41.64 percent of papers contained either one of these terms. Moral was found in the title of 46 papers (8.95 percent). Fifty percent of papers had ethical, ethics or moral in the title.

Independence was in 26 paper titles (5 percent) and two were presented at the independence themed 5th Symposium. Five papers were presented at the 6th Symposium, indicating that faculty research agendas may take more time to focus on a new topic. The 7th Symposium had three independence papers but there were five independence papers at the Enron-themed 8th Symposium. The potential conflict of interest of provision of non-audit services by the company auditor was a main feature of the Enron scandal. This topic is no longer a frequently researched topic with only one paper at the 9th Symposium, two at the 10th and one at the 13th. There is a bit of a renewal of this topic with two papers at the 17th and the 18th Symposia and one at the 20th.

Ethics is a noun but both ethical and moral are adjectives. Further analysis of what the adjectives modified was performed and is shown in Table 7. Bernardi et al. (2008) included the following modifiers for ethical: behavior, development, dimensions, failure, intensity, lapses, perceptions, and training. Decision was added as an ethical modifier in Bernardi and Bean (2010).

Panel A lists the 56 ethical modifiers used in Symposia paper titles and reflects the diversity of ethical topics researched. Symposia researchers used 42 ethical modifiers not in Bernardi and Bean's (2010) listing and did not use three on their list – failure, intensity, and training. Decision-making was used nine times and decisions six times, for a total of 15 papers focused on ethical decisions. Dilemmas was used seven times, sensitivity six times, and behavior six times.

Moral had the following modifiers in Bernardi et al. (2008): autonomy, development, intensity, judgment, problem, and reasoning. No additional moral modifiers were added in the Bernardi and Bean (2010) paper. Panel B lists the 17 moral modifiers used by Ethics Symposium researchers, 11 more than in Bernardi et al. (2008). The most frequently used modifier was reasoning (18 times), followed by development (7 times). The remaining 15 modifiers were used infrequently and neither autonomy nor problem were used at all. Ethics and ethical were more frequently used than moral in Symposia paper titles. The large number of key words found in the Symposia paper titles indicates a broad range of topics presented at the Symposia.

Education Key Words and Ethics Education Research

Without abstracts, key words, or the papers themselves it was not possible to determine the methodology and subjects used for each paper.

Table 7. Ethical and Moral Modifiers in Ethics Symposia Paper Titles.

Panel A: Ethical Modifiers in Paper Titles

Ethical Modifier	Times	Ethical Modifier	Times
Decision Making	9	Culture	1
Dilemmas	7	Dimension	1
Decisions	6	Discourse	1
Sensitivity	6	Disposition	1
Behavior	6	Distance	1
Leaders(hip)	4	Education	1
Analysis	3	Fading	1
Attitudes	3	Firms	1
Considerations	3	Hypernorms	1
Judgments	3	Ideologies	1
Intentions	3	Implications	1
Issues	3	Intentions	1
Perceptions	3	Intervention Strategy	1
Reasoning	3	Issues	1
Development	2	Lapses	1
Environment	2	Management	1
Evaluations	2	Messages	1
Standard	2	Norms	1
Thinking	2	Orientation	1
Violations	2	Perspective	1
Acceptability	1	Predisposition	1
Accounting	1	Principles	1
Action	1	Prompts	1
Beliefs	1	Purpose	1
Consequences	1	Regulation	1
Content	1	Structure	1
Conviction	1	Theory	1
Corporate Citizenship	1	Values	1

Panel B: Moral Modifiers in Paper Titles

Moral Modifier	Times	Moral Modifier	Times
Reasoning	18	Awareness	1
Development	7	Intensity	1
Intensity	3	Hazard	1
Judgment(s)	3	Order	1
Identity	2	Right	1
Sensitivity	2	Solution	1
Abilities	1	Suasion	1
Evaluation	1	Relativism	1
Exemplars	1		

Examination of the paper titles found a great deal of education-related research. Further key word search was performed using education-related terms including those used by Holderness et al. (2014).

The most frequent education-related key word was student, which was used 44 times. Education was used 35 times and teaching 20 times. The individual course level of analysis was used a total of 24 times (18 courses and 6 classes). Holderness et al. (2014) found considerable case education research; however, only 12 Symposium papers were educational cases. In total there were 157 education-related key words in the 514 paper titles for 30.5 percent of the Symposia papers with accounting education as the topics (Table 8).

Further examination of accounting education research rankings of contributing authors and institutions was performed. Panel A of Table 9 shows the nine authors with a minimum of four Ethics Symposia presentations who were ranked in the top-100 accounting education researchers by Holderness et al. (2014). The overall ranking of total career accounting education articles is based on the intended use of the article (improving any aspect of accounting education or to facilitate teaching). The "other" ranking is all accounting education articles that do not use case methodology. Very few case papers are presented at the Ethics Symposium so that ranking is not shown.

Table 8. Education-Related Key Words in Symposia Paper Titles.

Education-Related Key Word	Times
Student	44
Education	35
Teaching	20
Course(s)	18
Case	12
Class	6
Faculty	5
Curriculum	4
Instruction	4
Training	4
Learning	2
Program	2
Extracurricular	1
Total education related	*157*
For Comparison: Auditor	*53*

Table 9. Ethics Symposium in Accounting Education Research Rankings in Holderness et al. (2014).

Panel A: Authors with at Least Four Papers at the Ethics Symposium

Author Name	Total Authorships Symposia	Career Education Research ranking	Non-Case Education Research ranking
Mintz, Steven	10	53	–
Abdolmohammadi, Ali	8	100	51
Fogarty, Timothy	8	13	4
Bailey, Charles	7	23	–
Reinstein, Alan	6	7	31
Fisher, Dann	5	100	–
Jones, Joanne	4	211	–
Porco, Barbara	4	211	120
Stuebs, Martin	4	53	–

Panel B: Institutions with At Least Four Papers at the Ethics Symposium

Institution	Total Author (ships)	Education Research Ranking		School
	Symposia	Career	Non-case	Type
Bentley University	8 (15)	3	11	Private, PhD
Brigham Young University	8 (8)	1	1	Private, PhD
Baylor University	9 (15)	9	51	Private
Georgia State University	3 (4)	9	22	Public
Kansas State University	4 (9)	14	8	Public
Case Western Reserve University	3 (10)	34	22	Private, PhD
Texas Tech University	6 (11)	9	–	Public, PhD
North Carolina State University	2 (7)	16	–	Public
San Diego State University	3 (4)	37	41	Public
Texas A & M	6 (11)	30	14	Public, PhD
Iowa State University	2 (4)	20	21	Public
California State Polytechnic University at San Luis Obispo	4 (10)	37	64	Public
Wayne State University	2 (6)	44	32	Public, PhD
University of Memphis	3 (9)	78	–	Public, PhD
University of North Texas	7 (12)	34	–	Public, PhD
Rutgers University	4 (5)	101	109	Public, PhD
University of Arkansas	4 (4)	129	–	Public, PhD
Bowling Green State University	2 (5)	–	109	Public

Three researchers, Steven Mintz, Ali Abdolmohammadi, and Dann Fisher, were also listed in Table 3, as being in the top-50 researchers in business ethics journals. Another six Ethics Symposia authors are listed in the top-100 accounting education researchers. Holderness et al. (2014) considered productivity at 6 years, 12 years, and total career, and the top-100 rankings are based on standings at those three points. Table 9, Panel A, shows the total career rankings from Holderness et al. (2014). (An author could rank a higher number than 100 on total career but is on the list due to being in the top 100 at 6 or 12 years.)

Sixteen authors were in the top-50 accounting ethics researchers list of Bernardi and Bean (2010) and another nine authors were in the top-100 accounting education listing of Holderness et al. (2014). A total of 25 of 40 authors with four or more Symposia papers, 62.5 percent of the most productive Symposia authors, are highly ranked and accomplished researchers. This indicates the Ethics Symposium attracts quality papers by accomplished authors.

Institutional rankings of accounting education research are also provided by Holderness et al. (2014) and five of the top-10 accounting education research schools were also strong ethics research centers. Panel B of Table 9 shows the 18 institutions that were ranked in Holderness et al. (2014) that had four or more Ethics Symposia authorships. These represent 30.5 percent of the institutions with more than four Symposia authorships. Fewer private schools (4) published accounting education research than did public schools (14). Three of the four private schools offer PhD programs, while 50 percent (7 of 14) public schools had PhD programs.

SUMMARY

The Symposium on Ethics Research in Accounting has played an important role in developing interest in accounting ethics research and provided a consistent, quality venue for researchers to present their work. Thirty-three of the top-50 accounting ethics researchers in Bernardi and Bean (2010) presented at least once at the Symposium. There exists an established set of productive researchers to provide mentorship for new researchers to enter the field of accounting ethics research. Most of the prolific accounting ethics researchers presented during all three sub-periods: Pre-Enron (1999–2002), Post-Enron (2003–2008), and Post-Madoff (2009–2015).

Research productivity is an important component of faculty promotion and tenure decisions. Bernardi and Bean (2010, p. 167) found an average of 14.5 ethics articles published per year in top-40 accounting journals (4.8 percent of co-author-adjusted articles per year). The higher ranking of authors in business ethics journals indicates the publication outlets for accounting ethics papers tend to be in ethics journals. This study supplies additional information on Ethics Symposium presence and productivity that may provide faculty additional evidence for faculty promotion and tenure decisions.

The institutional analysis identified those schools that have supported accounting ethics research at the Symposium. Forty-three schools had a minimum of four authorships at the Symposium. Although a lot of Texas schools presented at the Symposium there were schools from throughout the US and some international schools presenting as well. Of the 59 schools with four or more symposium authorships, 42 were public institutions of which 57 percent had PhD programs. About half of the private schools had historic or current religious affiliations.

The key word analysis demonstrated a broad range of ethical and moral topics explored by researchers. Topics and selection of accounting ethics as a research project were impacted by events in the business environment such as the Enron and Madoff scandals. Unfortunately some researchers do not persist in ethics research, at least in the venue of the Symposium on Ethics Research in Accounting, as seen by the researchers who present once at time of a major scandal. The large amount of ethics education research presented indicates that the Symposium is fulfilling the support of accounting ethics education part of the P&E Committee charge. It also indicates the impact on accounting students and the ethical aspect of their career development.

The Ethics Symposium continues to provide an opportunity for future accounting ethics research. Some productivity and ranking research mentioned the importance of AAA affiliation to faculty evaluation of publication outlets (Coyne et al., 2010, Holderness et al., 2014; Pickerd et al., 2011). The sponsorship of the Ethics Symposium by the AAA adds to the symposium's credibility. Basu (2012) asks how accounting research can be more innovative and accounting ethics research is one way that both the public interest and innovation could be achieved.

There are several apparent limitations to this study. The Bernardi and Bean (2010) ranking of accounting ethics researchers analyzed publications through 2008. The seven-year difference in data samples under measures the research productivity rankings of more recent researchers. Also, Bernardi and Bean (2010) heavily weighted sole authored articles in their rankings and many Symposia papers were co-authored.

In this study, all articles were treated as making equal contributions without consideration of the impact of a specific paper. Paper titles change as they proceed through the journal submission and review process, thus it was not possible to ascertain with certainty which papers were published in what journal.

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RANKING ACCOUNTING SCHOLARS PUBLISHING ETHICS RESEARCH IN ACCOUNTING AND BUSINESS ETHICS JOURNALS

Alexandra L. Ferrentino, Meghan L. Maliga, Richard A. Bernardi and Susan M. Bosco

ABSTRACT

This research provides accounting-ethics authors and administrators with a benchmark for accounting-ethics research. While Bernardi and Bean (2010) considered publications in business-ethics and accounting's top-40 journals this study considers research in eight accounting-ethics and public-interest journals, as well as, 34 business-ethics journals. We analyzed the contents of our 42 journals for the 25-year period between 1991 through 2015. This research documents the continued growth (Bernardi & Bean, 2007) of accounting-ethics research in both accounting-ethics and business-ethics journals. We provide data on the top-10 ethics authors in each doctoral year group, the top-50 ethics authors over the most recent 10, 20, and 25 years, and a distribution among ethics scholars for these periods. For the 25-year timeframe, our data indicate that only 665 (274) of the 5,125 accounting PhDs/DBAs (13.0% and 5.4% respectively) in

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Canada and the United States had authored or co-authored one (more than one) ethics article.

Keywords: Ranking ethics authors; accounting-ethics and business-ethics journals

INTRODUCTION

Journal rankings, scholar rankings, and doctoral program rankings have been a common theme in research topics over the past two decades. Rankings play a crucial part in establishing a faculty member's academic status, as well as, a university's academic status among its competitors. Research and publications have recently been used assessing faculty (Bernardi & Bean, 2010; Hasselback, Reinstein, & Abdolmohammadi, 2012; Holderness Myers, Summers, & Wood, 2014; Pickerd, Stephens, Summers, & Wood, 2011; Zamojcin & Bernardi, 2013) and departments (Hasselback & Reinstein, 1995; Holderness et al., 2014; Urbancic, 2009). Research rankings have implications for new faculty; individual rankings can provide insights into expectations with respect to tenure and promotion and where individuals might find colleagues with similar research interests (Beattie & Goodacre, 2004). After his original ethics rankings (Bernardi, 2005), he received several emails from colleagues who referred to his research as the "full professor list" (i.e., documenting their contributions to research for promotion). These rankings also provide an insight into schools that support for various types of research and an institution's research reputation, which is another consideration for new faculty (Ostrowsky, 1986).

While Bernardi (2005) ranked accounting-ethics authors over a 30-year period using 22 ethics journals, Bernardi and Bean (2010) updated Bernardi's rankings using 26 ethics journals and added accounting's top-40 journals for the period 1986 through 2008. This research also documents the continued growth (Bernardi & Bean, 2007) of accounting-ethics research in both accounting-ethics and business-ethics journals. Bernardi noted that This study considers research in eight accounting-ethics and public-interest journals as well as 34 business-ethics journals between 1991 and 2015. Our data provide accounting-ethics authors and administrators a benchmark for accounting-ethics research.

LITERATURE REVIEW

Background of Business-Ethics Research

Ethics research has developed in several academic disciplines; in a comparison including the accounting, finance, and marketing disciplines, Bernardi, Melton, Roberts, and Bean (2008) found that ethics research in the finance discipline was significant lower than in either the accounting or marketing disciplines. The accounting profession has been embarrassed by scandals at Enron and Worldcom and the demise of Arthur Anderson (Donaldson, 2003). Due to the number of failed audits, there is an emphasis on accounting-ethics studies published in journals in comparison to other business disciplines. Still, the study of ethics remains one of the less dominant topics published when compared to other business fields; for example, Efendi, Mulig, and Smith (2006, p. 124) found that the areas of professional education and ethics accounted for only 3.2% of the journal articles. For example, while it is not unusual to find economics, finance, accounting, marketing, or management professors who publish three or more articles a year, it is extremely rare to find a business-ethics scholar who publishes this frequently (Serenko & Bontis, 2009).

Methodologies in Article Counts

Many published authors have provided logical modes of valuing the PhD and DBA programs and their rankings. Authors refer to Hasselback's directory and keyword searches to locate appropriate journals and other scholars (Bernardi & Bean, 2007; Bernardi, Bean, & Williams, 2005; Bernardi et al., 2008; Sabrin, 2002). When assessing research productivity and/or publication quality, authors evaluate individual authors and/or programs using an approach that includes one or more of the following: counting analysis, citation analysis, and survey of journal quality (Hasselback et al., 2012). Counting is considered objective and cost-effective because it compiles the number of articles published by faculty members; however, it ignores the article's quality (Hasselback et al., 2012). Authors have also used the method of creating area-specific listings that help to exclude irrelevant journals from the listing for a given area (Herron & Hall, 2004). Finally, Serenko and Bontis (2009) and Hasselback et al. (2012) use a method of indexes to compute a scaling or weightings for different journals.

Accounting Research Background

There is an ongoing theme in the accounting profession uncovering publication trends that favor top universities offering graduate level degrees (Andrews & McKenzie, 1978). Faculty at institutions that also grant doctoral degrees in accounting produce more articles than faculty at institutions without doctoral programs (Campbell & Morgan, 1987). Faculty at teaching institutions that grant only bachelors' degrees also publish fewer articles than faculty at institutions that grant masters' and doctoral degrees (Andrews & McKenzie, 1978). Moreover, graduates of top accounting institutions have a greater chance of being published by top journals (Andrews & McKenzie, 1978). Additionally, faculty with less than 10 years since graduation outperform those who received their doctorates more than 10 years ago (Hasselback et al., 2012).

The focus on elite journals (i.e., the best-40 journals listed in Hasselback et al., 2012) limits the potential for accounting scholarship to contribute to the profession and to teaching (Reinstein & Calderon, 2006), which supports Efendi et al.'s (2006) finding that these areas account for only about 3.2% of publications. Finally, institutions seeking AACSB accreditation need to emphasize publishing (St. Pierre, 2007).

Research Questions

Bernardi and Bean (2007) traced the growth of accounting-ethics research over a 45-year from 1960 to 2004. Their research provides hypothesized reasons for the inflection points in the data; for example, the initial Ethics Symposium and the introduction of two accounting journals focusing on ethics research. Subsequently, the ethics and public-interest areas of the American Accounting Association have merged and new journals have been introduced. Our first goal is to determine whether the growth in accounting-ethics research noted by Bernardi and Bean has continued. Our first research question is then:

RQ1. *Has accounting-ethics research continued to grow over time?*

Two prior studies have ranked accounting authors in the area of ethics research (Bernardi, 2005; Bernardi & Bean, 2010). Bernardi (2005) ranked authors in 22 ethics journals with data taken from a 30-year period. Bernardi and Bean (2010) updated Bernardi's original research: however, the data for this study was current only through 2008 and now requires updating. Our second goal is to provide an updated listing of the most published authors in accounting-ethics research. Given this goal, our basic research question can be stated:

RQ2. *Who are the most prolific authors in accounting-ethics research?*

METHODOLOGY

Journal-Selection Process

The initial phase of this research focused on determining which set of journals to examine and the time period to cover. While Bernardi (2005) focused his research exclusively on ethics journals in a 30-year study, Bernardi and Bean (2010) provide a longitudinal extension of the research and expanded the journal base by adding accounting's top-40 journals to their data set. Given the rapid expansion in the number of journals focusing on ethics research, we decided to use Bernardi and Bean's methodology for identifying ethics articles and to search the web for new journals that these prior studies had not identified. In the journal-selection process, we limited our examination to ethics and public-interest journals. One of our considerations was the number of public-interest publications in accounting that are not included in accounting's top-40 list of journals.[1]

The 42 journals included in this research are listed in Table 1; we separated these journals into two groups – accounting-ethics journals and business-ethics journals.[2] The eight journals in Panel A of Table 1 include accounting-ethics journals and other accounting journals dealing with the public interest. We also included the 2014 volume of *Advances in Business Ethics Research* as its content was exclusively focused on "Accounting for the Public Interest." Of the 34 business-ethics journals in Panel B of Table 1, six journals (Bernardi & Bean, 2007) have ceased publication (highlighted journals).[3] Since Bernardi and Bean (2010), *Global Virtual Ethics Review* and *Research on Ethical Issues in Organizations* have resumed publication.

Article Search Process

The article search process involved three distinct steps that required: identifying subject areas that relate to ethics; identifying articles written by accounting authors; and determining whether these articles had a significant

Table 1. Journals by Area.

Panel A: Accounting-Ethics Journals		
1.	*Accounting and the Public Interest*	None
2.	*Accounting, Auditing and Accountability*	1.19
3.	*Advances in Business Ethics Research*[a]	None
4.	*Advances in Public Interest Accounting*	None
5.	*Critical Perspectives in Accounting*	None
6.	*Journal of Accounting Ethics and Public Policy*	None
7.	*Leadership, Accounting, and Ethics*	None
8.	*Research on Professional Responsibility and Ethics in Accounting*[b]	None
Panel B: Business-Ethics Journals		
1.	*African Journal of Business Ethics*	None
2.	*Asian Journal of Business Ethics*	None
3.	*Business and Professional Ethics Journal*	None
4.	*Business and Society*	1.22
5.	*Business and Society Review*	None
6.	*Business Ethics Quarterly*	2.70
7.	*Business Ethics: A European Review*	0.91
8.	*Electronic Journal of Business Ethics and Organization Studies*	None
9.	*Ethics and Behavior*	0.88
10.	*Ethics and Critical Thinking*	None
11.	*Ethics and Information Technology*	None
12.	*Ethical Theology and Moral Practice*	None
13.	*Global Virtue Ethics Review*	None
14.	*International Business Ethics Review*	1.71
15.	*International Journal of Business Governance and Ethics*	None
16.	*Journal of Academic & Business Ethics*	None
17.	*Journal of Academic Ethics*	None
18.	*Journal of Business Ethics*	1.33
19.	*Journal of Business Ethics Education*	None
20.	*Journal of International Business Ethics*	None
21.	*Journal of Leadership, Accountability, & Ethics*	None
22.	*Journal of Markets and Morality*	None
23.	*Journal of Religion and Business Ethics*	None
24.	*Moral Sense: The Journal of Ethics in Finance*	0.90
25.	*Mustang Journal of Business and Ethics*	None
26.	*Research on Ethical Issues in Organizations*	None
27.	*Southern Journal of Business and Ethics*	0.33
28.	*International Journal of Value Based Management*	
29.	*Journal of Power and Ethics*	
30.	*Online Journal of Ethics*	
31.	*Organ. Ethics: Healthcare, Business and Policy*	
32.	*Professional Ethics Journal*	
33.	*Teaching Business Ethics*	
34.	*Ethikos*	

Highlighted journals are no longer published.
[a]Special issue devoted to "Accounting for the Public Interest."
[b]Formerly Research on Accounting Ethics.

ethics component. Using the data from Bernardi and Bean (2010) as our starting point, we updated the data for the common journals in their study and for this study added the period of 2009 through 2015. For the new ethics and public-interest journals, we identified articles dealing with ethics since their initial publication.

Articles published in accounting-ethics or business-ethics journals are by definition ethics articles; consequently, all of the articles in these journals were searched for accounting authors. For the public-interest journals, we used the same methodology for identifying ethics articles that Bernardi and Bean (2010) used to avoid introducing "*substantial subjectivity into the analysis*" (Cooley & Heck, 2005). This process involved updating Bernardi and Bean's (2010) list of keywords for identifying ethics articles to ensure the articles in ethics journals and public-interest journals are comparable.[4]

The next step was to identify ethics articles in ethics journals and articles written by accounting faculty in other than ethics journals, which were identified using the updated key words list. For identified articles in other than ethics journals, the article was reviewed to determine whether it contained a significant ethical component. We did not include book reviews, articles that commented on another article, rejoinders to these comments or journal introduction articles by guest editors and editors (Bernardi & Zamojcin, 2013; Urbancic, 2009). We used Hasselback's (2015) *Accounting Faculty Directory* to identify accounting authors with doctorates who were teaching at institutions in Canada and the United States.

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 three authors. For example, while the keywords "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 identified had some form of the word ethics in the title or abstract (i.e., we counted it as an ethics article).

While Hasselback's *Accounting Faculty Directory* was our primary means of identifying accounting authors, there remained accounting authors listed in Hasselback directory who were not associated with a university. To further identify these authors, we searched the web using various combinations of the author's name and the words accounting and/or faculty. We also contacted the unidentified author's coauthor(s) via emails to attempt to locate these authors and determine whether they were still actively teaching, were retired, or were deceased. For the authors who still could not be located, we backtracked from Hasselback's (2015) directory to determine their last institution. We then called the business school to attempt to locate these individuals; this usually resulted in locating the individual or determining that they had either retired or were deceased.

Article Count

For each identified article, we counted the number of authors to determine how to assign credit for the research. Each author on an article received one full-credit article count regardless of the number of authors. However, our second measure of credit coauthor-adjusted article count considers the number of authors for each journal. To perform this we considered the number of authors per article to score for coauthor-adjusted articles. For example, if there were three (four) authors on an article, each author would receive one-third (one-fourth) credit.

Time Period

One of our goals was to determine whether accounting-ethics research was growing or declining since Bernardi and Bean's (2007) article on the growth of accounting-ethics research from 1960 and 2004. To do this, we used the data we gathered from the 42 journals in Table 1. The data in Panel A of Fig. 1 shows the growth of accounting-ethics research for the period from 1991 through 2015. This data also indicate the low level of accounting research between 1971 and 1990; in fact, there were only 23 full-credit articles during this period. Additionally, 1991 was the first time that the number of full-credit articles exceeded 10; since that year, the number of full-credit articles has remained well above 10. Consequently, we decided that we would focus our research on the 25-year period between 1991 and 2015 (Panel B of Fig. 1).

Bernardi and Zamojcin (2013) noted that more academic institutions are becoming AACSB and that this increase in accreditation positively associated with an increase in the number of authors who had an accounting-education publication within 10 years after graduating. Using this and the fact that Bernardi's (2005) original list provided justification for several colleagues promotion to full professor, we decided to provide listings at the 10, 20, and 25-year points. The 10 (20) year rankings provide documentation to our new (established) scholars who are seeking tenure and promotion to associate professor (promotion to full professor). Our 25-year rankings acknowledge the contributions of our original group of ethics scholars.

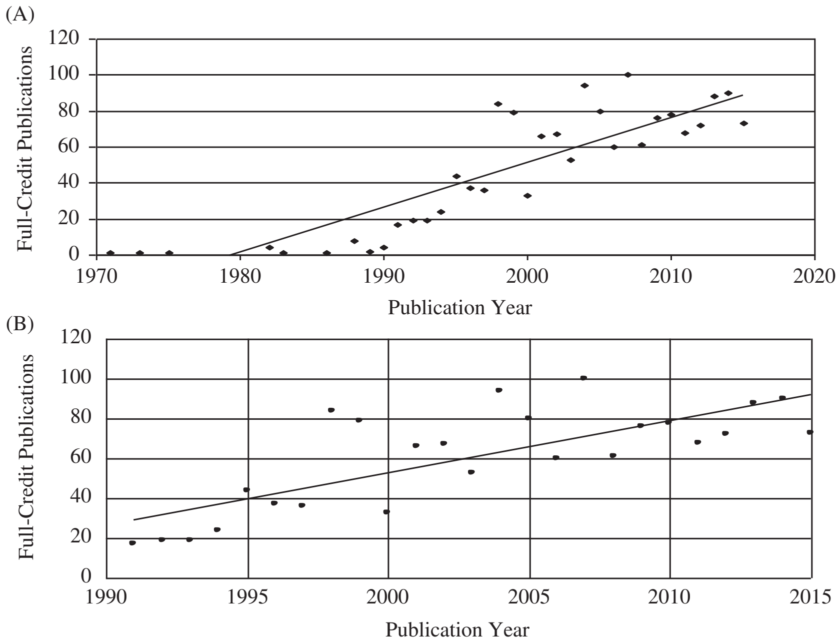


Fig. 1. Growth in the Number of Full-Credit Ethics Articles over Time. (A) Growth in the Number of Full-Credit Ethics Articles between 1971 and 2015. (B) Growth in the Number of Full-Credit Ethics Articles between 1991 and 2015.

DATA ANALYSIS

Overview

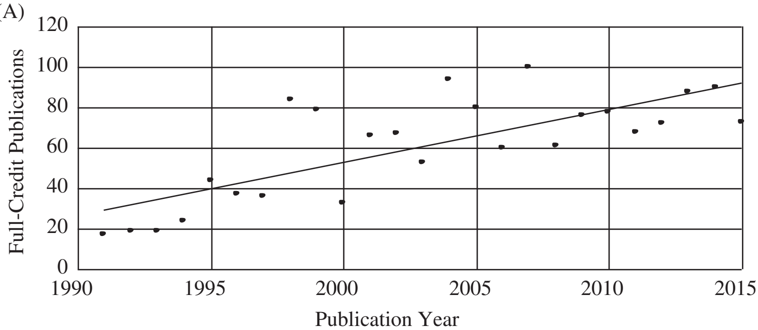
The first part of the analysis section provides tests of our first research question on whether the ethics-area of research has continued to grow since Bernardi and Bean's (2007) research. The second part of the data analysis section responds to our second research question in three parts that provide: rankings of the top 10 authors by doctoral year group; the top-50 authors for each of three time periods (10, 20, and 25 years) and percentage distributions of accounting-ethics authors by the number of publications for the same three periods. We believe that this data is useful to accounting authors to document their contributions in the area of ethics research, as well as, for administrators to demonstrate institutional accomplishments and evaluate faculty members' research records.

Growth of Accounting-Ethics Research (RQ1)

The data in Panel A of Fig. 2 show the growth in the number of accounting-ethics studies (RQ1). The data indicate that, over the 25 years of this study (e.g., 1991 through 2015), accounting-ethics research increased by 2.6 full-credit accounting-ethics publications per year. Panel B shows the regression model for the number of publications and indicates that time was significant ($p < 0.000$) and explained 55.7% of the variation (adjusted R^2).

The data in Fig. 3 show the increase in the number of full-credit publications in accounting ethics by journal type. While Panels A and B show the data for accounting-ethics journals, Panels C and D show the data for business-ethics journals. The regression models for both accounting-ethics journals and business-ethics journals indicate that the number of full-credit publications in both sets of journals increased with time ($p = 0.022$ and $p < 0.000$, respectively). The regression models also indicates that time explained 17.4% (44.5%) of the variation for accounting-ethics (business-ethics) publications.

(A)



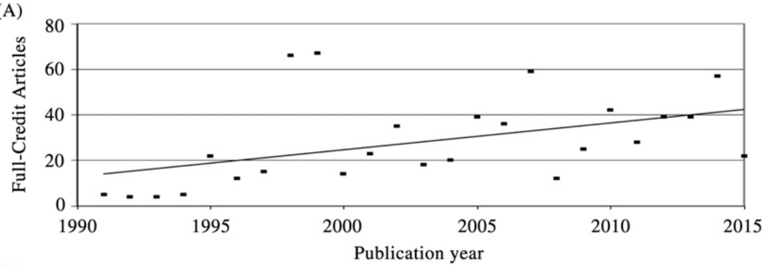
(B)

Model	R^2	Adjusted R^2		
Regression	0.575	0.557		
Source	DF	Sum of Squares	F Factor	Prob F
Model	1	8,887.1	31.1	<0.000
Error	23	6,565.9		
Total	24	15,453.0		
Term	Coefficient	T Stat	*p*-value	
Intercept	29.34	4.47	<0.000	
Time	2.61	5.58	<0.000	

Time: Coded from zero (1991) through 24 (2015)

Fig. 2. Growth in Ethics Publications between 1991 and 2015. (A) Growth in the Number of Overall Ethics Publications. (B) Model for the Growth in the Number of Overall Ethics Publications (Panel A Data).

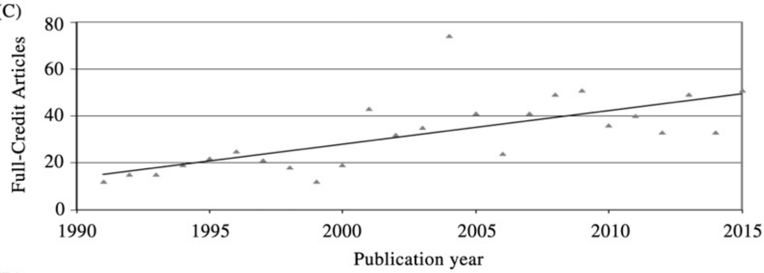
(A)



(B)

Model	R^2	Adjusted R^2		
Regression	0.208	0.174		
Source	DF	Sum of Squares	F Factor	Prob F
Model	1	1,829.0	6.0	0.022
Error	23	6,964.4		
Total	24	8,793.4		
Term	Coefficient	T Stat	*p*-value	
Intercept	14.08	2.08	0.048	
Time	1.19	2.46	0.022	

(C)



(D)

Model	R^2	Adjusted R^2		
Regression	0.467	0.443		
Source	DF	Sum of Squares	F Factor	Prob F
Model	1	2,652.7	20.2	<0.000
Error	23	3,027.3		
Total	24	5,680.0		
Term	Coefficient	T Stat	*p*-value	
Intercept	15.26	3.43	0.048	
Time	1.43	4.49	<0.000	

Time: Coded from zero (1991) through 24 (2015)

Fig. 3. Growth in Ethics Publications by Journal Type. (A) Growth in the Number of Accounting-Ethics Publications. (B) Model for the Growth in the Number of Accounting-Ethics Publications (Panel A data). (C) Growth in the Number of Business-Ethics Publications. (D) Model for the Growth in the Number of Business-Ethics Publications (Panel C Data).

Research Rankings (RQ2)

Top Authors by Graduation Year

For this analysis, we used the same procedure employed by Bernardi and Bean (2010). Table 2 lists the top 10 Ethics Authors in each year group in the order of their combined full-credit ethics articles using the co-authored adjusted articles count and alphabetical last names in the case of ties for each graduation year. In addition, Table 2 provides data on the number of publications in the eight accounting-ethics journals and the 34 business-ethics journals; it also indicates each author's combined totals of full-credit and co-author adjusted article counts. Finally, Table 2 provides current institution status for each of the authors from Hasselback's (2015) directory. The data are arranged sequentially in order of doctoral year groups between 1969 and 2013.

Top Ethics Authors

The data in Tables 3a–3c show the top-50 accounting faculty members with publications between 2006 and 2015 in accounting journals (Table 3a), business-ethics journals (Table 3b) and the combination of the data from both groups of journals (3c). Similarly, the data in Tables 4a–4c and Tables 5a–5c) show the top-50 accounting faculty members with publications between 1996 and 2015 (1991 and 2015) in accounting journals (Table 4a/5a), business-ethics journals (Table 4b/5b) and the combination of the data from both groups of journals (Table 4c/5c). The sequencing and time periods for our tables are the following: Tables 3a–3c present data for the past 10 years; Tables 4a–4c for the past 20 years; and Tables 5a–5c for the past 25 years.

Percentages of Ethics Authorship

For authors who are not individually identified in Tables 3–5 as a top-50 author, we provide the data in Table 6 as an overall benchmarking tool for their ethics research. This table shows the distribution for accounting faculty with ethics publications in the journals considered in this research. Authors seeking to benchmark their productivity can reference any of the three panels in Table 6 depending on the time period they wish to evaluate by subtracting the cumulative percentage for the authors with one less full-credit article than they have from 100%. Consequently, one is part of the percentage of authors not included in the cumulative group of authors with fewer articles. For instance, an author who has two full-credit accounting-ethics articles during the 2006 through 2015 (Panel A of Table 6) timeframe

Table 2. Ranking by Graduation of Accounting PhDs and DBAs in Ethics.

Year/Name	Accounting		Business		Combined		2015 Institution
	Full	CAA	Full	CAA	Full	CAA	
1962							
Zeff, Stephen A.	–	–	1	1.00	1	1.00	Rice
1968							
Jaggi, Bikki L.	–	–	1	0.50	1	0.50	Rutgers Univ
Nurnberg, Hugo	–	–	1	0.50	1	0.50	CUNY Baruch
1969							
Killough, Larry N.	–	–	4	1.83	4	1.83	Virginia Tech
Brenner, Vincent C.	1	0.50	–	–	1	0.50	Stetson
Strawser, Robert H.	1	0.33	–	–	1	0.33	Texas A&M
1970							
Loeb, Stephen E.	2	1.50	6	4.50	8	6.00	Maryland
Lampe, James C.	2	1.50	3	2.00	5	3.50	Missouri
Nichols, Donald R.	–	–	3	1.33	3	1.33	Texas Christian
Hillman, A. Douglas	–	–	1	0.25	1	0.25	Drake
1971							
Sundem, Gary L.	1	0.50	–	–	1	0.50	Univ Washington
1972							
Keithley, John P.	–	–	1	0.50	1	0.50	St. Louis
Lindquist, Stanton C.	–	–	1	0.50	1	0.50	Grand Valley
1973							
Sennetti, John T.	2	0.67	1	0.50	3	1.17	Nova SE
Epstein, Marc J.	1	0.50	1	1.00	2	1.50	Rice
Rockness, Howard O.	1	0.50	1	0.50	2	1.00	N Car-Wilmington
Miller, Robert L.	–	–	1	1.00	1	1.00	Fullerton
Lambert, Joyce C.	1	0.33	–	–	1	0.33	New Orleans
Lambert, S. Joseph, III	1	0.33	–	–	1	0.33	New Orleans
1974							
Stanga, Keith G.	3	1.50	1	0.50	4	2.00	Tennessee
Liao, Woody	2	0.67	–	–	2	0.67	Univ Cal-Riverside
Michenzi, Alfred R.	1	1.00	–	–	1	1.00	Loyola-Maryland
Jablonsky, Stephen F.	1	0.33	–	–	1	0.33	Penn St.
1975							
Tinker, Tony	8	5.83	1	0.50	9	6.33	CUNY Baruch
Raiborn, Cecily A.	1	0.50	6	2.83	7	3.33	Texas St.
Baker, C. Richard	4	4.00	1	0.50	5	4.50	Adelphi
Freedman, Martin	5	2.50	–	–	5	2.50	Towson

Table 2. *(Continued)*

Year/Name	Accounting		Business		Combined		2015 Institution
	Full	CAA	Full	CAA	Full	CAA	
Flesher, Dale L.	3	1.17	–	–	3	1.17	Mississippi
McKee, Thomas E.	1	0.50	–	–	1	0.50	S. Car-Medica
Quintana, Olga	1	0.33	–	–	1	0.33	Miami
1976							
Englebrecht, Ted D.	1	0.25	–	–	1	0.25	Louisiana Tech
1977							
Williams, Paul F.	6	5.33	3	1.83	9	7.16	N. Carolina
Fellows, James A.	1	0.33	5	2.00	6	2.33	S. Fl-St. Pete
Stagliano, A. J.	4	2.00	–	–	4	2.00	St. Joseph
Ketz, J. Edward	3	2.50	–	–	3	2.50	Penn St.
Brown, Robert M.	–	–	3	0.78	3	0.78	Virginia Tech
McEnroe, John E.	2	1.33	–	–	2	1.33	DePaul
Murtuza, M. Athar	1	0.50	–	–	1	0.50	Seton Hall
Hussein, Mohamed E.	1	0.33	–	–	1	0.33	Univ of Conn
Oxner, Thomas H.	1	0.33	–	–	1	0.33	Arkansas
Platt, Marjorie B.	–	–	1	0.33	1	0.33	Northeastern
Saubert, Lynn K.	1	0.33	–	–	1	0.33	Radford
1978							
Mintz, Steven M.	12	8.83	4	2.83	16	11.67	Cal Poly-SLO
Frecka, Thomas J.	–	–	2	1.25	2	1.25	Univ Notre Dame
Giacomino, Don E.	2	1.00	–	–	2	1.00	Marquette
Reckers, Philip M.	–	–	2	0.83	2	0.83	Arizona St.
Farrar, Robert	1	0.33	1	0.25	2	0.58	Bryant
Davis, Harry Zvi	–	–	1	0.50	1	0.50	CUNY Baruch
Islam, Majidul	–	–	1	0.50	1	0.50	Concordia
Merchant, Kenneth A.	1	0.50	–	–	1	0.50	S. California
Marquis, Linda M.	–	–	1	0.33	1	0.33	N. Kentucky
Pany, Kurt J.	–	–	1	0.33	1	0.33	Arizona St.
1979							
Cooper, David J.	4	1.50	–	–	4	1.50	Alberta
Mensah, Yaw M.	1	0.50	1	1.00	2	1.50	Rutgers Univ
Ward, Dan R.	1	0.33	1	0.33	2	0.67	Lafayette
Morris, Donald	–	–	1	1.00	1	1.00	Springfield
Giroux, Gary A.	1	0.50	–	–	1	0.50	Texas A&M
Byrd, David	–	–	1	0.33	1	0.33	Missouri St.
Byrd, Sandra D.	–	–	1	0.33	1	0.33	Missouri St.
Wright, Arnold M.	–	–	1	0.33	1	0.33	Northeastern
1980							
Rockness, Joanne W.	1	0.50	2	1.00	3	1.50	N Car-Wilmington

Table 2. (*Continued*)

Year/Name	Accounting		Business		Combined		2015 Institution
	Full	CAA	Full	CAA	Full	CAA	
Reinstein, Alan	1	0.33	1	0.50	2	0.83	Wayne St.
Danese, Stephen P.	–	–	1	0.50	1	0.50	S Fl-St. Petersburg
Nixon, Clair J.	–	–	1	0.50	1	0.50	Texas A&M
Pfeiffer, Glenn M.	–	–	1	0.33	1	0.33	Chapman
1981							
Hooks, Karen L.	3	1.50	1	1.00	4	2.50	Florida Atlantic
Gordon, Irene M.	1	0.50	2	1.33	3	1.83	Simon Fraser
Bailey, Charles D.	3	1.17	–	–	3	1.17	Memphis
Nitterhouse, Denise	–	–	1	1.00	1	1.00	DePaul
Martin, Charles L., Jr.	–	–	1	0.50	1	0.50	Towson
Murray, Dennis F.	1	0.50	–	–	1	0.50	Colorado – Denver
Parker, Larry M.	1	0.50	–	–	1	0.50	Case Western Res
Adams, Barbara L.	–	–	1	0.33	1	0.33	S. Carolina
Chow, Chee W.	–	–	1	0.33	1	0.33	San Diego
Greenberg, Robert R.	–	–	1	0.33	1	0.33	Washington St.
1982							
Kaplan, Steven E.	2	1.00	11	4.83	13	5.83	Arizona St.
Abdolmohammadi, M.J.	6	4.08	6	2.66	12	6.75	Bentley
Finn, Don W.	3	1.67	3	2.00	6	3.67	North Texas
Thompson, James H.	1	0.33	3	1.33	4	1.66	Cent Washington
Gaa, James C.	1	1.00	2	1.25	3	2.25	Univ of Alberta
Kermis, George F.	–	–	2	1.00	2	1.00	Canisius
Huss, H. Fenwick	1	0.33	1	0.50	2	0.83	CUNY Baruch
Rees, David A.	1	0.33	1	0.33	2	0.66	Southern Utah
Heaston, Patrick H.	–	–	2	0.58	2	0.58	Drake
Srivastava, Rajendra P.	1	1.00	–	–	1	1.00	Kansas
1983							
Smith, L. Murphy	4	1.42	2	0.83	6	2.25	Murray St.
Pitman, Marshall K.	1	0.50	2	1.50	3	2.00	Tex-San Antonio
Tackett, James A.	1	0.33	1	0.33	2	0.67	Youngstown
Srivastava, Rajendra P.	1	1.00	–	–	1	1.00	Kansas
Stark, Andrew	–	–	1	1.00	1	1.00	Manchester
Engle, Terry J.	1	0.50	–	–	1	0.50	S. Florida
Guithues-Amrhein, D.	–	–	1	0.50	1	0.50	St. Louis
Lindblom, Cristi K.	–	–	1	0.50	1	0.50	Bentley
Schmutte, James L.	1	0.50	–	–	1	0.50	Ball St.
Harsha, Phillip D.	–	–	1	0.33	1	0.33	Missouri St.
Tully, Gregory J.	–	–	1	0.33	1	0.33	Marist
1984							
Rodgers, Waymond	–	–	5	2.50	5	2.50	Texas-El Paso

Table 2. (*Continued*)

Year/Name	Accounting		Business		Combined		2015 Institution
	Full	CAA	Full	CAA	Full	CAA	
Stanley, Charles W.	2	1.00	1	0.33	3	1.33	Baylor
Murdoch, Brock G.	–	–	2	1.00	2	1.00	Cal St-Chico
Wilkerson, Jack E.	–	–	2	0.67	2	0.67	Wake Forest
Pincus, Karen V.	1	1.00	–	–	1	1.00	Arkansas
Schweikart, James A.	–	–	1	1.00	1	1.00	Rhode Island
Younkins, Edward W.	–	–	1	1.00	1	1.00	Wheeling
Banham, Richard L.	1	0.50	–	–	1	0.50	Tennessee St.
Wolfe, Christopher J.	1	0.50	–	–	1	0.50	Texas A&M
6 tied at 1 and 0.33							
1985							
Reiter, Sara A.	4	3.50	3	2.50	7	6.00	SUNY-Bingham
Rezaee, Zabiholiah	1	0.50	4	1.67	5	2.17	Memphis
Moffeit, Katherine S.	2	0.67	1	0.50	3	1.17	West Georgia
Strawser, Jerry R.	1	0.50	2	0.66	3	1.16	Texas A&M
Bergevin, Peter M.	–	–	2	2.00	2	2.00	Redlands
Lehman, Cheryl R.	2	1.33	–	–	2	1.33	Hofstra
Miller, Jeffrey R.	1	0.25	1	1.00	2	1.25	Sam Houston
Baldwin, Jane N.	2	1.00	–	–	2	1.00	Baylor
Bline, Dennis	1	0.33	1	0.25	2	0.58	Bryant
Czyzewski, Alan B.	–	–	1	0.50	1	0.50	Indiana
Pavelka, Deborah D.	–	–	1	0.50	1	0.50	Roosevelt
1986							
McGee, Robert W.	116	105.41	5	4.33	121	109.74	Fayetteville
Pasewark, William R.	0	0.00	5	2.50	5	2.50	Texas Tech
Ritter, David E.	0	0.00	5	2.17	5	2.17	Texas A&M
Risgby, John T.	2	0.67	1	0.33	3	1.00	Mississippi St.
Smith, Kenneth J.	–	–	3	0.83	3	0.83	Salisbury
Church, Bryan K.	1	0.33	1	0.25	2	0.58	Georgia Tech
Aghimien, Peter A.	1	0.50	–	–	1	0.50	Indiana-S. Bend
Krishnan, Gopal V.	–	–	1	0.50	1	0.50	American Univ
Ott, Richard L.	1	0.50	–	–	1	0.50	Kansas St.
1987							
Cohen, Jeffrey R.	1	0.33	15	6.00	16	6.33	Boston Col.
Roberts, Robin W.	5	2.41	10	5.16	15	7.57	Central Florida
Patten, Dennis M.	5	2.67	3	1.66	8	4.33	Illinois St
Sutton, Steve G.	6	2.00	1	0.50	7	2.50	Central Florida
Sharp, David J.	1	0.33	5	1.83	6	2.17	Western Ontario
Beets, S. Douglas	1	1.00	4	3.33	5	4.33	Wake Forest
Lewellyn, Patsey A.	–	–	4	2.75	4	2.75	S. Carol-Aiken
Tyson, Thomas N.	2	0.83	2	1.50	4	2.33	St. John Fisher
Welsh, Mary J.	1	1.00	2	1.00	3	2.00	La Salle

Table 2. (*Continued*)

Year/Name	Accounting Full	Accounting CAA	Business Full	Business CAA	Combined Full	Combined CAA	2015 Institution
Malone, J. David	–	–	3	1.50	3	1.50	Webster St.
Christensen, David S.	2	0.67	1	0.33	3	1.00	Southern Utah
1988							
Geiger, Marshall A.	2	0.83	3	1.33	5	2.17	Richmond
Borkowski, Susan C.	–	–	3	1.50	3	1.50	La Salle
Sisaye, Seleshi	1	1.00	1	0.50	2	1.50	Duquesne
Oakes, Leslie S.	2	1.33	–	–	2	1.33	New Mexico
George, Nashwa E.	1	0.50	1	0.50	2	1.00	Bentley
Deis, Donald R., Jr.	1	0.50	1	0.33	2	0.83	Texas A&M
Gordon, Gus A.	1	0.33	1	0.50	2	0.83	Texas-Tyler
Trompeter, Gregory M.	–	–	2	0.83	2	0.83	Central Florida
Weatherholt, Nancy D.	1	0.50	1	0.33	2	0.83	Miss-Kansas City
Roxas, Maria L.	–	–	2	0.67	2	0.67	Central Conn
Cory, Suzanne N.	1	0.33	1	0.33	2	0.67	St. Mary's-Texas
1989							
Shaub, Michael K.	5	3.33	3	2.00	8	5.33	Texas A&M
Ravenscroft, Sue P.	2	1.00	4	1.50	6	2.50	Iowa St.
Arnold, Vicky	6	2.00	–	–	6	2.00	Central Florida
Neu, Dean	2	1.33	3	1.33	5	2.67	York Univ
Magnan, Michel L.	1	0.50	4	1.25	5	1.75	Concordia-CA
Herremann, Irene M.	–	–	5	1.67	5	1.67	Univ Calgary
Fogarty, Timothy J.	2	1.50	2	1.25	4	2.75	Case Western Res
Stevens, Kevin T.	1	0.33	3	1.16	4	1.50	DePaul
Anderson, Margaret L.	1	0.50	2	1.00	3	1.50	N. Dakota
Jeffrey, Cynthia G.	2	1.00	1	0.33	3	1.33	Iowa St.
1990							
Pava, Moses L.	1	0.50	24	21.33	25	21.83	Yeshiva
Neill, John D, III	2	0.83	7	2.50	9	3.32	Abilene
Hill, Nancy T.	2	0.83	2	0.66	4	1.50	DePaul
Shapiro, Brian P.	2	1.50	1	0.50	3	2.00	St. Thomas-Minn
Rao, Hema	2	0.83	1	0.50	3	1.33	SUNY-Oswego
McMillan, Jeffrey J.	–	–	3	1.17	3	1.17	Clemson
Rama, Dasaratha V.	2	0.58	1	0.50	3	1.08	Florida Internat'l
Ruf, Bernadette M.	1	0.33	2	0.53	3	0.87	Delaware
Carcello, Joseph V.	1	0.33	1	1.00	2	1.33	Tennessee St.
Gupta, Sanjay	2	0.83	–	–	2	0.83	Michigan St.
O'Shaughnessy, John	1	0.50	1	0.33	2	0.83	San Francisco St.
1991							
Yuthas, Kristi	4	2.50	10	4.33	14	6.83	Portland St.

Table 2. (*Continued*)

Year/Name	Accounting		Business		Combined		2015 Institution
	Full	CAA	Full	CAA	Full	CAA	
Cullinan, Charles P.	6	3.66	3	1.08	9	4.75	Bryant
Young, Joni J.	4	3.50	1	0.50	5	4.00	New Mexico
Persons, Obeau S.	1	1.00	2	2.00	3	3.00	Rider
Jamal, Karim	–	–	3	2.00	3	2.00	Univ Alberta
Sun, Huey-Lian	–	–	2	1.00	2	1.00	Morgan St.
Foster, Benjamin P.	2	0.83	–	–	2	0.83	Louisville
Hodge, Thomas G.	1	0.33	1	0.50	2	0.83	La Monroe
Ragothaman, Srinivasan C.	1	0.50	1	0.33	2	0.83	S. Dakota
Simons, Kathleen A.	2	0.83	–	–	2	0.83	Bryant
Oglesby, Rodney A.	1	0.33	1	0.50	2	0.83	Drury
1992							
Bernardi, Richard A.	18	9.33	25	11.95	43	21.28	Roger Williams
Radtke, Robin R.	3	1.50	6	3.83	9	5.33	Clemson
Fisher, Dann G.	4	3.00	2	1.00	6	4.00	Kansas St.
Coate, Charles J.	1	0.50	5	2.50	6	3.00	St. Bonaventure
Sweeney, John T.	2	1.50	3	1.33	5	2.83	Kansas
Kurtenbach, James M.	3	1.17	–	–	3	1.17	Iowa St.
Nichols, Dave L.	–	–	3	0.75	3	0.75	Mississippi
Price, Jean B.	2	1.00	–	–	2	1.00	Marshall
Lowe, D. Jordan	–	–	2	0.83	2	0.83	Arizona St.
Stanko, Brian B.	1	0.33	1	0.50	2	0.83	Loyola-Chicago
1993							
Smith, Sheldon R.	4	3.00	2	2.00	6	5.00	Utah Valley
Morris, Roselyn E.	4	1.50	1	0.33	5	1.83	Texas St.
Kidwell, Linda A.	–	–	4	2.16	4	2.16	Wyoming
Louwers, Timothy J.	2	1.00	1	0.33	3	1.33	James Madison
Brody, Richard G.	–	–	3	1.17	3	1.17	New Mexico
Guess, A. K.	1	1.00	1	0.50	2	1.50	Samford
Malgwi, Charles A.	–	–	2	1.00	2	1.00	Bentley
Morris, David E.	1	0.50	1	0.50	2	1.00	N. Georgia
Rogers, Violet C.	–	–	2	1.00	2	1.00	Austin
Trussel, John M.	1	0.50	1	0.50	2	1.00	Tenn-Chattanooga
1994							
Mitschow, Mark C.	5	3.00	9	6.00	14	9.00	SUNY-Geneseo
Nagle, Brian M.	1	0.50	2	0.83	3	1.33	Duquesne
Patterson, Denise M.	–	–	2	1.50	2	1.50	Illinois St
Catanach, Anthony H, Jr.	2	1.00	–	–	2	1.00	Villanova
McCoy, Timothy L.	2	1.00	–	–	2	1.00	Lamar
Cote, Jane M.	–	–	2	0.83	2	0.83	Washington St.
Coulter, John M.	–	–	2	0.83	2	0.83	W. New England
Wilder, W. Mark	1	0.50	1	0.33	2	0.83	Mississippi

Table 2. (*Continued*)

Year/Name	Accounting		Business		Combined		2015 Institution
	Full	CAA	Full	CAA	Full	CAA	
Ehlen, Craig R.	1	0.33	1	0.33	2	0.67	Indiana
Buhr, Nola	1	1.00	–	–	1	1.00	Saskatchewan
Vera-Munoz, Sandra C.	–	–	1	1.00	1	1.00	Notre Dame
1995							
Fleischman, Gary M.	2	0.67	7	2.70	9	3.37	Texas Tech
Curtis, Mary B.	2	0.83	2	1.33	4	2.16	North Texas
Rogers, Rodney K.	1	0.50	3	1.00	4	1.50	Bowling Green
Radcliffe, Vaughan S.	1	1.00	2	0.83	3	1.83	Western Ontario
Asthana, Sharad C.	2	2.00	–	–	2	2.00	Tex-San Antonio
Yetmar, Scott A.	–	–	2	1.50	2	1.50	Cleveland St
Rhoades-Catanach, Shelley	2	1.00	–	–	2	1.00	Villanova
Houston, Richard W.	2	0.83	–	–	2	0.83	Alabama
Single, Louise E.	–	–	2	0.83	2	0.83	St. Edward's
Grambling, Audrey A.	1	0.50	1	0.33	2	0.83	Colorado St.
1996							
Thornton, John M.	4	3.33	–	–	4	3.33	Azusa Pacific
Almer, Elizabeth D.	1	0.50	2	0.66	3	1.16	Portland St.
Fuerman, Ross D.	2	1.50	–	–	2	1.50	Suffolk
Eaton, Tim V.	1	0.50	1	0.50	2	1.00	Miami-Ohio
Herron, Terri L.	1	0.50	1	0.50	2	1.00	Montana
Shapeero, Mike P.	–	–	2	1.00	2	1.00	Bloomsberg
Young, George R.	2	1.00	–	–	2	1.00	Florida Atlantic
Lowensohn, Suzanne H.	2	0.83	–	–	2	0.83	Colorado St.
Mulig, Elizabeth Vallery	1	0.33	1	0.33	2	0.66	Dallas
3 tied at 1 and 1.00							
1997							
Joyce, William B.	1	1.00	19	12.00	20	13.00	Bemidji St.
Thorne, Linda	8	3.42	12	6.00	20	9.41	York Univ
Mahoney, Lois S.	7	2.50	4	1.83	11	4.33	East Michigan
Elias, Rafik Z.	2	1.50	5	4.50	7	6.00	Cal St-Los Angel
Gendron, Yves	5	2.50	1	0.33	6	2.83	Univ Laval
Massey, Dawn W.	3	1.58	3	1.17	6	2.75	Fairfield
Shoaf, Vivtoria	–	–	5	2.00	5	2.00	St. John's-NYC
Bay, Darlene D.	–	–	4	2.33	4	2.33	Brock Univ
Rau, Stephen E.	1	0.50	3	1.33	4	1.83	Duquesne
Mobus, Janet	3	2.50	–	–	3	2.50	Pacific Lutheran
1998							
Chung, Janne F.	–	–	2	1.00	2	1.00	New York Univ

Table 2. *(Continued)*

Year/Name	Accounting		Business		Combined		2015 Institution
	Full	CAA	Full	CAA	Full	CAA	
Shome, Anamitra	–	–	2	1.00	2	1.00	Brock Univ
Styles, Alan K.	2	1.00	–	–	2	1.00	Cal St-San Marcos
White, Craig G.	–	–	2	1.00	2	1.00	New Mexico
Wempe, William F	–	–	2	0.83	2	0.83	Texas Christian
Rose, Jacob M.	–	–	1	1.00	1	1.00	Bentley
10 tied at 1 and 0.50							
1999							
Felo, Andrew J.	2	2.00	1	1.00	3	3.00	Nova SE
Shortridge, Rebecca T.	–	–	2	0.67	2	0.67	N. Illinois
Arya, Avinash C.	–	–	1	0.50	1	0.50	William Paterson
Chiang, Bea	1	0.50	–	–	1	0.50	Col. New Jersey
Savage, Arline	1	0.50	–	–	1	0.50	Alabama
Strong, Joel M.	1	0.50	–	–	1	0.50	St. Cloud
Brown, Philip A.	–	–	1	0.33	1	0.33	Harding
Clements, Curtis E.	–	–	1	0.33	1	0.33	Abilene
Harrast, Steven	–	–	1	0.25	1	0.25	Central Michigan
Tam, Kinsun	–	–	1	0.25	1	0.25	SUNY-Albany
2000							
Cianci, Anna M.	–	–	3	1.17	3	1.17	Wake Forest
Uddin, Nancy	–	–	2	0.83	2	0.83	Monmouth
Chambers, Valrie	1	0.50	1	0.14	2	0.64	Texas A&M
Bowrin, Anthony R.	1	1.00	–	–	1	1.00	Saginaw Valley
Jeffers, Agatha E.	–	–	1	1.00	1	1.00	Montclair St.
Pittman, Jeffrey A.	1	1.00	–	–	1	1.00	Memorial Univ
Lee, Chih-Chen	–	–	1	0.50	1	0.50	N. Illinois
Rentfro, Randy W.	1	0.50	–	–	1	0.50	Tampa
Yang, Simon S. M.	–	–	1	0.50	1	0.50	Adelphi
Kanagaretnam, Kiridaran	–	–	1	0.33	1	0.33	York Univ
Stott, David M.	1	0.33	–	–	1	0.33	Bowling Green
2001							
Everett, Jeffery	3	1.17	2	1.33	5	2.50	York Univ
Huber, W. Dennis	2	2.00	–	–	2	2.00	Sarasota
Janvrin, Diane J.	2	0.83	–	–	2	0.83	Iowa St.
Pope, Kelly R.	–	–	2	0.83	2	0.83	DePaul
Parsons, Linda M.	–	–	2	0.54	2	0.54	Alabama
Meisel, Scott I.	1	1.00	–	–	1	1.00	Morehead
Xu, Yin	–	–	1	1.00	1	1.00	Old Dominion
Daneshfar, Alireza	1	0.50	–	–	1	0.50	New Haven
Elson, Raymond J.	1	0.50	–	–	1	0.50	Valdosta St.
Kim, Yongtae	–	–	1	0.50	1	0.50	Santa Clara

Table 2. (*Continued*)

Year/Name	Accounting		Business		Combined		2015 Institution
	Full	CAA	Full	CAA	Full	CAA	
Lanis, Roman	–	–	1	0.50	1	0.50	Texas Sydney
2002							
Shawver, Tara J.	5	2.17	1	0.50	6	2.67	King's Col.
Holder-Webb, Lori L.	–	–	5	1.83	5	1.83	W. New England
Mitra, Santanu	2	1.50	2	1.50	4	3.00	Wayne St.
Clements, Lynn H.	2	0.83	1	0.50	3	1.33	Florida St.
Wilkinson, Brett R.	3	1.33	–	–	3	1.33	Kansas St.
Schwarzkoph, David L.	–	–	2	1.25	2	1.25	Bentley
Woolley, Darryl J.	–	–	1	1.00	1	1.00	Idaho
Coyne, Michael P.	–	–	1	0.50	1	0.50	Fairfield
Jenkins, David S.	1	0.50	–	–	1	0.50	Delaware
Zabriskie, Fern	1	0.50	–	–	1	0.50	Pacific Lutheran
2003							
Roybark, Helen M.	8	7.25	–	–	8	7.25	Radford
Stovall, Scott	1	0.50	5	1.83	6	2.33	Abilene
Fischer, Dov	2	1.33	1	0.33	3	1.67	CUNY Brooklyn
Beams, Joseph D.	1	0.33	1	0.33	2	0.67	New Orleans
Burnett, Royce D.	2	0.67	–	–	2	0.67	Southern Illinois
Johnson, Debra	–	–	1	1.00	1	1.00	Montana-Billings
Lafond, C. Andrew	1	1.00	–	–	1	1.00	La Salle
Leitsch, Deborah L.	–	–	1	1.00	1	1.00	Goldey-Beacom
Perkins, Jon D.	1	0.50	–	–	1	0.50	Iowa St.
Troy, Carmelita	–	–	1	0.50	1	0.50	Andrews
2004							
Yang, Rong	2	1.50	1	0.50	3	2.00	Rochester Tech
Samuels, Janet A.	–	–	3	0.92	3	0.92	Thunderbird
Nikitkov, Alexei	–	–	2	1.00	2	1.00	Brock Univ
Zheng, Lin	2	0.83	–	–	2	0.83	Indiana
Buchan, Howard F.	–	–	1	1.00	1	1.00	SUNY-Oneonta
Jackson, Kevin E.	–	–	1	1.00	1	1.00	Illinois
Lin, Beixin	1	1.00	–	–	1	1.00	Montclair St.
Magilke, Matthew J.	1	1.00	–	–	1	1.00	Claremont
Belal, Ataur	1	0.50	–	–	1	0.50	Aston Univ
Kelly, Patrick T.	1	0.50	–	–	1	0.50	Providence
Kraten, Michael L.	1	0.50	–	–	1	0.50	Providence
2005							
Stuebs, Martin T., Jr.	8	4.75	2	0.83	10	5.58	Baylor
Chen, Jennifer C.	1	0.33	2	0.83	3	1.17	BYU-Hawaii
Graham, Cameron	2	1.00	–	–	2	1.00	York Univ
DiGabriele, James A.	1	1.00	–	–	1	1.00	Montclair St.

Table 2. (*Continued*)

Year/Name	Accounting		Business		Combined		2015 Institution
	Full	CAA	Full	CAA	Full	CAA	
Thornburg, Steven W.	1	1.00	–	–	1	1.00	Wisconsin
Daniels, Bobbie W.	–	–	1	0.50	1	0.50	Jackson St.
D'arcy, John	–	–	1	0.50	1	0.50	Delaware
Garcia, Andy	1	0.50	–	–	1	0.50	Bowling Green
Kerler, Williams A. III	–	–	1	0.50	1	0.50	N Car-Wilmington
Mintchik, Natalia	–	–	1	0.50	1	0.50	Cincinnati
2006							
Kelton, Andrea S.	3	1.50	–	–	3	1.50	Wake Forest
Heltzer, Wendy	2	1.33	–	–	2	1.33	DePaul
Patelli, Lorenzo	–	–	2	1.00	2	1.00	Denver
Taylor, Eileen Z	1	0.50	1	0.50	2	1.00	N. Carolina
Fleming, Damon M.	1	0.50	1	0.33	2	0.83	San Diego
Seifert, Deborah L.	2	0.83	–	–	2	0.83	Illinois St
Jones, Joanne C.	–	–	2	0.67	2	0.67	York SAS
Denison, Christine A.	1	0.50	–	–	1	0.50	Iowa St.
Park, Jong	–	–	1	0.50	1	0.50	Old Dominion
Wang, Li	–	–	1	0.50	1	0.50	Akron
2007							
Lopez, Katherine J.	1	1.00	3	1.83	4	2.83	St. Edward's
Desai, Renu V.	2	0.50	1	0.50	3	1.00	Nova SE
Murphy, Pamela	–	–	2	0.83	2	0.83	Queens
Desai, Vikram	2	0.50	–	–	2	0.50	Nova SE
Yen, Ai-Ru	1	1.00	–	–	1	1.00	Northeast Illinois
Brown, Jennifer L.	–	–	1	0.50	1	0.50	Arizona St.
Farag, Magdy S.	1	0.50	–	–	1	0.50	Cal Poly-Pomona
Li, Li	–	–	1	0.50	1	0.50	Marist
Ling, Qianhua	1	0.50	–	–	1	0.50	Marquette
Rixon, Daphne	–	–	1	0.50	1	0.50	St. Mary's-Canada
2008							
Peytcheva, Marietta	1	0.50	2	0.83	3	1.33	Lehigh
Swanson, Nancy J.	2	0.83	1	0.33	3	1.17	Valdosta St.
LaGore, William	3	1.00	–	–	3	1.00	East Michigan
Hong, Yongtao	1	0.50	1	0.50	2	1.00	N. Dakota
Blazovich, Janell L.	2	0.83	–	–	2	0.83	St. Thomas-Texas
Robertson, Jesse C	1	0.50	1	0.33	2	0.83	North Texas
Beaudoin, Cathy	–	–	2	0.67	2	0.67	Vermont
Brink, Alisa G.	1	1.00	–	–	1	1.00	Virginia Common
Fredin, Amy	0	0.00	1	1.00	1	1.00	St. Cloud
3 tied at 1 and 0.50							

Table 2. (*Continued*)

Year/Name	Accounting		Business		Combined		2015 Institution
	Full	CAA	Full	CAA	Full	CAA	
2009							
Hageman, Amy M.	2	0.83	4	1.50	6	2.33	Kansas St.
Gerard, Joseph	1	0.50	2	0.70	3	1.20	Wisc-Whitewater
Tschopp, Daniel J.	–	–	3	1.17	3	1.17	St. Leo
Zhou, Mingjun	2	1.50	–	–	2	1.50	DePaul
Asare, Kwadwo N.	1	1.00	–	–	1	1.00	Bryant
Grimm, Stephanie D.	1	0.50	–	–	1	0.50	St. Thomas-Minn
Seymour, Susan M.	–	–	1	0.50	1	0.50	St. Leo
Mindak, Mary P.	1	0.33	–	–	1	0.33	DePaul
Lail, Bradley	–	–	1	0.25	1	0.25	Baylor
Wood, David A.	–	–	1	0.25	1	0.25	Brigham
2010							
Dalton, Derek	–	–	2	1.00	2	1.00	Clemson
Ames, Daniel A.	2	0.83	–	–	2	0.83	Illinois St.
Rodrigue, Michelle	–	–	2	0.58	2	0.58	Univ Laval
Adams, Mollie T.	1	1.00	–	–	1	1.00	Bradley
Alon, Anna	–	–	1	0.50	1	0.50	Rollins
Chen,Yu	1	0.50	–	–	1	0.50	Texas A&M
Ortegren, Marc A.	–	–	1	0.50	1	0.50	Southern Illinois
Presley, Theresa J.	–	–	1	0.50	1	0.50	Kansas St.
Ren, Yi	1	0.50	–	–	1	0.50	Illinois St
Xian, Chunwei	1	0.33	–	–	1	0.33	Northeast Illinois
2011							
Singhvi, Meghna	4	2.00	–	–	4	2.00	Loyola-Marymnt
Munsif, Vishal	3	1.00	–	–	3	1.00	Cal St-San Bernad
Hyde, Julie C.	2	0.67	–	–	2	0.67	Adventist Univ
Steele, Logan	–	–	2	0.67	2	0.67	Wisconsin
Strauss, Ronald	–	–	1	1.00	1	1.00	Montclair St.
Trainor, Joseph E.	–	–	1	0.50	1	0.50	St. John's-NYC
Strickland, Pamela J.	1	0.33	–	–	1	0.33	Methodist
2012							
Wang, Lei	–	–	2	1.00	2	1.00	East Washingotn
Scott, Irana J.	2	0.67	–	–	2	0.67	Elon Univ
Barnes, Jeffrey N.	1	0.33	1	0.17	2	0.50	Southern Utah
Bai, Ge	–	–	1	1.00	1	1.00	Washing & Lee
Black, William H.	1	0.50	–	–	1	0.50	Emory
Cagle, Corey	–	–	1	0.50	1	0.50	N. Alabama
Murray, Susan	–	–	1	0.50	1	0.50	St. Edward's
Noel, Christine Z. J.	–	–	1	0.50	1	0.50	Metro St.
5 Tied at 1 and 0.33							

Table 2. (*Continued*)

Year/Name	Accounting		Business		Combined		2015 Institution
	Full	CAA	Full	CAA	Full	CAA	
2013							
Byrd, James D.	2	0.67	–	–	2	0.67	Alabama-Birming
Yasmin, Sofia	1	0.33	1	0.33	2	0.67	Bradford
Copeland, Mary Kay	1	1.00	–	–	1	1.00	St. John Fisher
Holderness, Darin	–	–	1	0.33	1	0.33	West Virginia
Haight, Timothy	–	–	1	0.25	1	0.25	Loyola-Marymnt
Hoopes, Jeffery R.	–	–	1	0.25	1	0.25	Ohio State
2014							
Mayse, Adrian L.	–	–	1	0.50	1	0.50	Mid Tennessee St.

Table 3a. 2006–2015 Rankings for Actively Teaching Authors in Accounting-Ethics Journals.

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
1	McGee, Robert W.	48	39.91
2	Bernardi, Richard A.	11	5.08
3	Roybark, Helen M.	8	7.25
4	Stuebs, Martin T., Jr.	8	4.75
5	Mintz, Steven M.	7	6.50
6	Mahoney, Lois S.	6	2.00
7	Cullinan, Charles P.	5	3.33
8	Thorne, Linda	5	1.67
9	Patten, Dennis M.	4	2.17
10	Singhvi, Meghna	4	2.00
11	Shawver, Tara J.	4	1.83
12	Williams, Paul F.	3	3.00
13	Roberts, Robin W.	3	1.58
14	Kelton, Andrea S.	3	1.50
15	Stanga, Keith G.	3	1.50
16	Sun, Li	3	1.50
17	Bailey, Charles D.	3	1.17
18	Smith, L. Murphy	3	1.08
19	Munsif, Vishal	3	1.00
20	LaGore, William	3	1.00
21	Baker, C. Richard	2	2.00
22	Huber, W. Dennis	2	2.00
23	Young, Joni J.	2	2.00
24	Fogarty, Timothy J.	2	1.50
25	Fuerman, Ross D.	2	1.50

Table 3a. (*Continued*)

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
26	Mitra, Santanu	2	1.50
27	Shapiro, Brian P.	2	1.50
28	Zhou, Mingjun	2	1.50
29	Abdolmohammadi, M.	2	1.33
30	Fischer, Dov	2	1.33
31	Heltzer, Wendy	2	1.33
32	McEnroe, John E.	2	1.33
33	Thornton, John M.	2	1.33
34	Catanach, Anthony H.	2	1.00
35	Duncan, James R.	2	1.00
36	Mitschow, Mark C.	2	1.00
37	Rhoades-Catanach, S.	2	1.00
38	Wilkinson, Brett R.	2	1.00
39	16 Tied at 2 and 0.83		

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
1	McGee, Robert W.	39.91	48
2	Roybark, Helen M.	7.25	8
3	Mintz, Steven M.	6.50	7
4	Bernardi, Richard A.	5.08	11
5	Stuebs, Martin T., Jr.	4.75	8
6	Cullinan, Charles P.	3.33	5
7	Williams, Paul F.	3.00	3
8	Patten, Dennis M.	2.17	4
9	Mahoney, Lois S.	2.00	6
10	Singhvi, Meghna	2.00	4
11	Baker, C. Richard	2.00	2
12	Huber, W. Dennis	2.00	2
13	Young, Joni J.	2.00	2
14	Shawver, Tara J.	1.83	4
15	Thorne, Linda	1.67	5
16	Roberts, Robin W.	1.58	3
17	Kelton, Andrea S.	1.50	3
18	Stanga, Keith G.	1.50	3
19	Sun, Li	1.50	3
20	Fogarty, Timothy J.	1.50	2
21	Fuerman, Ross D.	1.50	2
22	Mitra, Santanu	1.50	2
23	Shapiro, Brian P.	1.50	2
24	Zhou, Mingjun	1.50	2

Table 3a. (*Continued*)

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
25	Abdolmohammadi, M.	1.33	2
26	Fischer, Dov	1.33	2
27	Heltzer, Wendy	1.33	2
28	McEnroe, John E.	1.33	2
29	Thornton, John M.	1.33	2
30	Bailey, Charles D.	1.17	3
31	Smith, L. Murphy	1.08	3
32	Munsif, Vishal	1.00	3
33	Catanach, Anthony H.	1.00	2
34	Duncan, James R.	1.00	2
35	Mitschow, Mark C.	1.00	2
36	Rhoades-Catanach, S.	1.00	2
37	Wilkinson, Brett R.	1.00	2
38	22 Tied at 1.00 and 1		

Table 3b. 2006–2015 Rankings for Actively Teaching Authors in Business-Ethics Journals.

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
1	Bernardi, Richard A.	16	7.50
2	Cohen, Jeffrey R.	8	3.33
3	Kaplan, Steven E.	8	2.83
4	Pava, Moses L.	7	6.50
5	McGee, Robert W.	5	4.33
6	Thorne, Linda	5	2.83
7	Rodgers, Waymond	5	2.50
8	Ritter, David E.	5	2.17
9	Roberts, Robin W.	5	2.17
10	Fellows, James A.	5	2.00
11	Holder-Webb, Lori L.	5	1.83
12	Mitschow, Mark C.	4	2.50
13	Joyce, William B.	4	1.83
14	Hageman, Amy M.	4	1.50
15	Neill, John D. III	4	1.50
16	Herremann, Irene M.	4	1.17
17	Lopez, Katherine J.	3	1.83
18	Radtke, Robin R.	3	1.83
19	Rezaee, Zabiholiah	3	1.33
20	Bay, Darlene D.	3	1.33

Table 3b. *(Continued)*

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
21	Cianci, Anna M.	3	1.17
22	Stovall, Scott	3	1.17
23	Tschopp, Daniel J.	3	1.17
24	Shoaf, Vivtoria	3	1.00
25	Samuels, Janet A.	3	0.92
26	Fleischman, Gary M.	3	0.70
27	Elias, Rafik Z.	2	2.00
28	Persons, Obeau S.	2	2.00
29	Beets, S. Douglas	2	1.33
30	Frecka, Thomas J.	2	1.25
31	Schwarzkoph, David	2	1.25
32	Anderson, Margaret L.	2	1.00
33	Coate, Charles J.	2	1.00
34	Dalton, Derek	2	1.00
35	Kermis, George F.	2	1.00
36	Malgwi, Charles A.	2	1.00
37	Nikitkov, Alexei	2	1.00
38	Patelli, Lorenzo	2	1.00
39	Raiborn, Cecily A.	2	1.00
40	Shome, Anamitra	2	1.00
41	Sun, Li	2	1.00
42	Wang, Lei	2	1.00
43	14 Tied at 2 and .83		

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
1	Bernardi, Richard A.	7.50	16
2	Pava, Moses L.	6.50	7
3	McGee, Robert W.	4.33	5
4	Cohen, Jeffrey R.	3.33	8
5	Kaplan, Steven E.	2.83	8
6	Thorne, Linda	2.83	5
7	Rodgers, Waymond	2.50	5
8	Mitschow, Mark C.	2.50	4
9	Roberts, Robin W.	2.17	5
10	Ritter, David E.	2.17	5
11	Fellows, James A.	2.00	5
12	Elias, Rafik Z.	2.00	2
13	Persons, Obeau S.	2.00	2
14	Holder-Webb, Lori L.	1.83	5
15	Joyce, William B.	1.83	4
16	Lopez, Katherine J.	1.83	3

Table 3b. (*Continued*)

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
17	Radtke, Robin R.	1.83	3
18	Hageman, Amy M.	1.50	4
19	Neill, John D., III	1.50	4
20	Bay, Darlene D.	1.33	3
21	Rezaee, Zabiholiah	1.33	3
22	Beets, S. Douglas	1.33	2
23	Frecka, Thomas J.	1.25	2
24	Schwarzkoph, David	1.25	2
25	Herremann, Irene M.	1.17	4
26	Cianci, Anna M.	1.17	3
27	Stovall, Scott	1.17	3
28	Tschopp, Daniel J.	1.17	3
29	Shoaf, Vivtoria	1.00	3
30	Anderson, Margaret L.	1.00	2
31	Coate, Charles J.	1.00	2
32	Dalton, Derek	1.00	2
33	Kermis, George F.	1.00	2
34	Malgwi, Charles A.	1.00	2
35	Nikitkov, Alexei	1.00	2
36	Patelli, Lorenzo	1.00	2
37	Raiborn, Cecily A.	1.00	2
38	Shome, Anamitra	1.00	2
39	Sun, Li	1.00	2
40	Wang, Lei	1.00	2
41	27 Tied at 1.00 and 1		

but is not individually listed in Panel A of Table 3a can state that he/she is in the top 28.4% (100%−71.8%) of the authors in accounting-ethics publications. Similarly, an author who has two full-credit business-ethics articles during the 1996 through 2015 (Panel B of Table 6) timeframe but is not listed in Table 4a can state that he/she is in the top 32.0% (100%−68.0%) of the authors in business-ethics publications. Similar procedures can be used for the other tables in this group.[5]

DISCUSSION

This research provides accounting authors and administrators a benchmark for accounting-ethics research. We analyzed the contents of our 42 journals

Table 3c. 2006–2015 Rankings for Actively Teaching Authors in Total Sets of Journal.

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
1	McGee, Robert W.	53	44.24
2	Bernardi, Richard A.	27	12.58
3	Stuebs, Martin T., Jr.	10	5.58
4	Thorne, Linda	10	4.50
5	Roybark, Helen M.	8	7.25
6	Mintz, Steven M.	8	6.83
7	Roberts, Robin W.	8	3.74
8	Cohen, Jeffrey R.	8	3.33
9	Mahoney, Lois S.	8	2.83
10	Kaplan, Steven E.	8	2.83
11	Pava, Moses L.	7	6.50
12	Cullinan, Charles P.	7	3.91
13	Mitschow, Mark C.	6	3.50
14	Patten, Dennis M.	6	2.83
15	Fellows, James A.	6	2.33
16	Hageman, Amy M.	6	2.33
17	Sun, Li	5	2.50
18	Rodgers, Waymond	5	2.50
19	Shawver, Tara J.	5	2.33
20	Ritter, David E.	5	2.17
21	Neill, John D., III	5	2.00
22	Holder-Webb, Lori L.	5	1.83
23	Fleischman, Gary M.	5	1.37
24	Lopez, Katherine J.	4	2.83
25	Singhvi, Meghna	4	2.00
26	Rezaee, Zabiholiah	4	1.83
27	Joyce, William B.	4	1.83
28	Stovall, Scott	4	1.67
29	Herremann, Irene M.	4	1.17
30	Persons, Obeau S.	3	3.00
31	Williams, Paul F.	3	3.00
32	Baker, C. Richard	3	2.50
33	Elias, Rafik Z.	3	2.50
34	Shapiro, Brian P.	3	2.00
35	Abdolmohammadi, M.	3	1.83
36	Curtis, Mary B.	3	1.83
37	Radcliffe, Vaughan S.	3	1.83
38	Radtke, Robin R.	3	1.83
39	Fogarty, Timothy J.	3	1.75
40	Finn, Don W.	3	1.67
41	Fischer, Dov	3	1.67

Table 3c. *(Continued)*

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
42	Anderson, Margaret L.	3	1.50
43	Coate, Charles J.	3	1.50
44	Kelton, Andrea S.	3	1.50
45	Raiborn, Cecily A.	3	1.50
46	Stanga, Keith G.	3	1.50
47	Clements, Lynn H.	3	1.33
48	Peytcheva, Marietta	3	1.33
49	Bay, Darlene D.	3	1.33
50	Gerard, Joseph	3	1.20

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
1	McGee, Robert W.	44.24	53
2	Bernardi, Richard A.	12.58	27
3	Roybark, Helen M.	7.25	8
4	Mintz, Steven M.	6.83	8
5	Pava, Moses L.	6.50	7
6	Stuebs, Martin T., Jr.	5.58	10
7	Thorne, Linda	4.50	10
8	Cullinan, Charles P.	3.91	7
9	Roberts, Robin W.	3.74	8
10	Mitschow, Mark C.	3.50	6
11	Cohen, Jeffrey R.	3.33	8
12	Persons, Obeau S.	3.00	3
13	Williams, Paul F.	3.00	3
14	Lopez, Katherine J.	2.83	4
15	Kaplan, Steven E.	2.83	8
16	Mahoney, Lois S.	2.83	8
17	Patten, Dennis M.	2.83	6
18	Sun, Li	2.50	5
19	Rodgers, Waymond	2.50	5
20	Baker, C. Richard	2.50	3
21	Elias, Rafik Z.	2.50	3
22	Fellows, James A.	2.33	6
23	Hageman, Amy M.	2.33	6
24	Shawver, Tara J.	2.33	5
25	Ritter, David E.	2.17	5
26	Neill, John D., III	2.00	5
27	Singhvi, Meghna	2.00	4
28	Shapiro, Brian P.	2.00	3
29	Gaa, James C.	2.00	2

Table 3c. (*Continued*)

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
30	Huber, W. Dennis	2.00	2
31	Loeb, Stephen E.	2.00	2
32	Young, Joni J.	2.00	2
33	Holder-Webb, Lori L.	1.83	5
34	Joyce, William B.	1.83	4
35	Rezaee, Zabiholiah	1.83	4
36	Abdolmohammadi, M.	1.83	3
37	Curtis, Mary B.	1.83	3
38	Radcliffe, Vaughan S.	1.83	3
39	Radtke, Robin R.	1.83	3
40	Fogarty, Timothy J.	1.75	3
41	Stovall, Scott	1.67	4
42	Finn, Don W.	1.67	3
43	Fischer, Dov	1.67	3
44	Stanga, Keith G.	1.50	4
45	Anderson, Margaret L.	1.50	3
46	Coate, Charles J.	1.50	3
47	Kelton, Andrea S.	1.50	3
48	Raiborn, Cecily A.	1.50	3
49	5 Tied at 1.500 and 2		

for the 25-year period between 1991 through 2015 and provide analyses that indicate a positive growth in both accounting-ethics publications ($p = 0.022$) and business-ethics publications ($p < 0.000$) by accounting authors overtime. We also provide ranking data on: the top-10 ethics authors in each doctoral year group; the top-50 ethics authors in three timeframes; and, a distribution of ethics authors for these timeframes. For the 25-year combined journal total (Panel C of Table 6), our data indicate that only 665 (274) PhDs/DBAs of the 5,125 DBAs/PhDs who teach accounting at institutions located in Canada and the United States had authored or co-authored one (greater than one) ethics article; additionally, only 42 individuals have authored or co-authored more than five ethics articles.

For Table 2, only the top-10 authors were selected for each year. One important factor to note when analyzing this table is the increasing number of authors in each year group, which demonstrates an increase in the recognition of ethics as a research area. However, since 2009, there has been a dwindling number of authors in each year group. This suggests a tendency

Table 4a. 1996–2015 Rankings for Actively Teaching Authors in Accounting-Ethics Journals.

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
1	McGee, Robert W.	116	105.41
2	Bernardi, Richard A.	18	9.33
3	Mintz, Steven M.	12	8.83
4	Roybark, Helen M.	8	7.25
5	Stuebs, Martin T., Jr.	8	4.75
6	Thorne, Linda	8	3.42
7	Mahoney, Lois S.	7	2.50
8	Williams, Paul F.	6	5.33
9	Abdolmohammadi, M.	6	4.08
10	Cullinan, Charles P.	6	3.66
11	Tinker, Tony	5	4.50
12	Shaub, Michael K.	5	3.33
13	Mitschow, Mark C.	5	3.00
14	Patten, Dennis M.	5	2.67
15	Gendron, Yves	5	2.50
16	Roberts, Robin W.	5	2.41
17	Shawver, Tara J.	5	2.17
18	Baker, C. Richard	4	4.00
19	Young, Joni J.	4	3.50
20	Thornton, John M.	4	3.33
21	Fisher, Dann G.	4	3.00
22	Smith, Sheldon R.	4	3.00
23	Yuthas, Kristi	4	2.50
24	Singhvi, Meghna	4	2.00
25	Morris, Roselyn E.	4	1.50
26	Smith, L. Murphy	4	1.42
27	Arnold, Vicky	4	1.33
28	Sutton, Steve G.	4	1.33
29	Mobus, Janet	3	2.50
30	Reiter, Sara A.	3	2.50
31	Massey, Dawn W.	3	1.58
32	Duncan, James R.	3	1.50
33	Freedman, Martin	3	1.50
34	Kelton, Andrea S.	3	1.50
35	Stagliano, A. J.	3	1.50
36	Stanga, Keith G.	3	1.50
37	Sun, Li	3	1.50
38	Wilkinson, Brett R.	3	1.33
39	Bailey, Charles D.	3	1.17
40	Cooper, David J.	3	1.17
41	Everett, Jeffery	3	1.17

Table 4a. (*Continued*)

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
42	Flesher, Dale L.	3	1.17
43	Kurtenbach, James M.	3	1.17
44	Munsif, Vishal	3	1.00
45	LaGore, William	3	1.00
46	Asthana, Sharad C.	2	2.00
47	Felo, Andrew J.	2	2.00
48	Huber, W. Dennis	2	2.00
49	10 tied at 2 and 1.50		

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
1	McGee, Robert W.	105.41	116
2	Bernardi, Richard A.	9.33	18
3	Mintz, Steven M.	8.83	12
4	Roybark, Helen M.	7.25	8
5	Williams, Paul F.	5.33	6
6	Stuebs, Martin T., Jr.	4.75	8
7	Tinker, Tony	4.50	5
8	Abdolmohammadi, M.	4.08	6
9	Baker, C. Richard	4.00	4
10	Cullinan, Charles P.	3.66	6
11	Young, Joni J.	3.50	4
12	Thorne, Linda	3.42	8
13	Shaub, Michael K.	3.33	5
14	Thornton, John M.	3.33	4
15	Mitschow, Mark C.	3.00	5
16	Fisher, Dann G.	3.00	4
17	Smith, Sheldon R.	3.00	4
18	Patten, Dennis M.	2.67	5
19	Mahoney, Lois S.	2.50	7
20	Gendron, Yves	2.50	5
21	Yuthas, Kristi	2.50	4
22	Mobus, Janet	2.50	3
23	Reiter, Sara A.	2.50	3
24	Roberts, Robin W.	2.41	5
25	Shawver, Tara J.	2.17	5
26	Singhvi, Meghna	2.00	4
27	Asthana, Sharad C.	2.00	2
28	Felo, Andrew J.	2.00	2
	Huber, W. Dennis	2.00	2
30	Massey, Dawn W.	1.58	3

Table 4a. (*Continued*)

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
31	Morris, Roselyn E.	1.50	4
32	Duncan, James R.	1.50	3
33	Freedman, Martin	1.50	3
34	Kelton, Andrea S.	1.50	3
35	Stagliano, A. J.	1.50	3
36	Stanga, Keith G.	1.50	3
37	Sun, Li	1.50	3
38	Elias, Rafik Z.	1.50	2
39	Fogarty, Timothy J.	1.50	2
40	Fuerman, Ross D.	1.50	2
41	Ketz, J. Edward	1.50	2
42	Lampe, James C.	1.50	2
43	Loeb, Stephen E.	1.50	2
44	Mitra, Santanu	1.50	2
45	Shapiro, Brian P.	1.50	2
46	Yang, Rong	1.50	2
47	Zhou, Mingjun	1.50	2
48	Smith, L. Murphy	1.42	4
49	Arnold, Vicky	1.33	4
50	Sutton, Steve G.	1.33	4

Table 4b. 1996–2015 Rankings for Actively Teaching Authors in Business-Ethics Journals.

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
1	Bernardi, Richard A.	25	11.95
2	Pava, Moses L.	24	21.33
3	Joyce, William B.	19	12.00
4	Thorne, Linda	12	6.00
5	Cohen, Jeffrey R.	12	4.83
6	Kaplan, Steven E.	11	4.83
7	Yuthas, Kristi	10	4.33
8	Mitschow, Mark C.	9	6.00
9	Roberts, Robin W.	9	4.66
10	Fleischman, Gary M.	7	2.70
11	Neill, John D. III	7	2.50
12	Radtke, Robin R.	6	3.83
13	Raiborn, Cecily A.	6	2.83
14	Abdolmohammadi, M.	6	2.66

Table 4b. (*Continued*)

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
15	Elias, Rafik Z.	5	4.50
16	McGee, Robert W.	5	4.33
17	Coate, Charles J.	5	2.50
18	Rodgers, Waymond	5	2.50
19	Ritter, David E.	5	2.17
20	Fellows, James A.	5	2.00
21	Shoaf, Vivtoria	5	2.00
22	Holder-Webb, Lori L.	5	1.83
23	Stovall, Scott	5	1.83
24	Lewellyn, Patsey A.	4	2.75
25	Bay, Darlene D.	4	2.33
26	Kidwell, Linda A.	4	2.17
27	Mahoney, Lois S.	4	1.83
28	Rezaee, Zabiholiah	4	1.67
29	Ravenscroft, Sue P.	4	1.50
30	Hageman, Amy M.	4	1.50
31	Magnan, Michel L.	4	1.25
32	Herremann, Irene M.	4	1.17
33	Reiter, Sara A.	3	2.50
34	Beets, S. Douglas	3	2.33
35	Mintz, Steven M.	3	2.33
36	Loeb, Stephen E.	3	2.00
37	D'Aquila, Jill M.	3	1.83
38	Lopez, Katherine J.	3	1.83
39	Williams, Paul F.	3	1.83
40	Patten, Dennis M.	3	1.67
41	Borkowski. Susan C.	3	1.50
42	Geiger, Marshall A.	3	1.33
43	Killough, Larry N.	3	1.33
44	Nichols, Donald R.	3	1.33
45	Rau, Stephen E.	3	1.33
46	Sweeney, John T.	3	1.33
47	7 Tied at 3 and 1.17		

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
1	Pava, Moses L.	21.33	24
2	Joyce, William B.	12.00	19
3	Bernardi, Richard A.	11.95	25
4	Mitschow, Mark C.	6.00	9
5	Thorne, Linda	6.00	12
6	Cohen, Jeffrey R.	4.83	12

Table 4b. (*Continued*)

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
7	Kaplan, Steven E.	4.83	11
8	Roberts, Robin W.	4.66	9
9	Elias, Rafik Z.	4.50	5
10	Yuthas, Kristi	4.33	10
11	McGee, Robert W.	4.33	5
12	Radtke, Robin R.	3.83	6
13	Raiborn, Cecily A.	2.83	6
14	Lewellyn, Patsey A.	2.75	4
15	Fleischman, Gary M.	2.70	7
16	Abdolmohammadi, M.	2.66	6
17	Neill, John D., III	2.50	7
18	Coate, Charles J.	2.50	5
19	Rodgers, Waymond	2.50	5
20	Reiter, Sara A.	2.50	3
21	Beets, S. Douglas	2.33	3
22	Bay, Darlene D.	2.33	4
23	Mintz, Steven M.	2.33	3
24	Ritter, David E.	2.17	5
25	Kidwell, Linda A.	2.17	4
26	Fellows, James A.	2.00	5
27	Shoaf, Vivtoria	2.00	5
28	Loeb, Stephen E.	2.00	3
29	Persons, Obeau S.	2.00	2
30	Smith, Sheldon R.	2.00	2
31	Holder-Webb, Lori L.	1.83	5
32	Stovall, Scott	1.83	5
33	Mahoney, Lois S.	1.83	4
34	D'Aquila, Jill M.	1.83	3
35	Lopez, Katherine J.	1.83	3
36	Williams, Paul F.	1.83	3
37	Rezaee, Zabiholiah	1.67	4
38	Patten, Dennis M.	1.67	3
39	Hageman, Amy M.	1.50	4
40	Ravenscroft, Sue P.	1.50	4
41	Borkowski, Susan C.	1.50	3
42	Jamal, Karim	1.50	2
43	Mitra, Santanu	1.50	2
44	Pitman, Marshall K.	1.50	2
45	Yetmar, Scott A.	1.50	2
46	Yetmar, Scott A.	1.50	2
47	Geiger, Marshall A.	1.33	3
48	Killough, Larry N.	1.33	3
49	Nichols, Donald R.	1.33	3
50	Rau, Stephen E.	1.33	3

Table 4c. 1996–2015 Rankings for Actively Teaching Authors in Total-Ethics Journals.

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
1	McGee, Robert W.	121	109.74
2	Bernardi, Richard A.	43	21.27
3	Pava, Moses L.	25	21.83
4	Joyce, William B.	20	13.00
5	Thorne, Linda	20	9.41
6	Mintz, Steven M.	15	11.17
7	Mitschow, Mark C.	14	9.00
8	Roberts, Robin W.	14	7.07
9	Yuthas, Kristi	14	6.83
10	Abdolmohammadi, M.	12	6.75
11	Kaplan, Steven E.	12	5.33
12	Cohen, Jeffrey R.	12	4.83
13	Mahoney, Lois S.	11	4.33
14	Stuebs, Martin T., Jr.	10	5.58
15	Williams, Paul F.	9	7.16
16	Cullinan, Charles P.	9	4.75
17	Fleischman, Gary M.	9	3.37
18	Neill, John D., III	9	3.32
19	Roybark, Helen M.	8	7.25
20	Patten, Dennis M.	8	4.33
21	Elias, Rafik Z.	7	6.00
22	Radtke, Robin R.	7	4.33
23	Raiborn, Cecily A.	7	3.33
24	Reiter, Sara A.	6	5.00
25	Smith, Sheldon R.	6	5.00
26	Tinker, Tony	6	5.00
27	Fisher, Dann G.	6	4.00
28	Coate, Charles J.	6	3.00
29	Gendron, Yves	6	2.83
30	Massey, Dawn W.	6	2.75
31	Shawver, Tara J.	6	2.67
32	Ravenscroft, Sue P.	6	2.50
33	Fellows, James A.	6	2.33
34	Hageman, Amy M.	6	2.33
35	Stovall, Scott	6	2.33
36	Baker, C. Richard	5	4.50
37	Young, Joni J.	5	4.00
38	Loeb, Stephen E.	5	3.50
39	Shaub, Michael K.	5	3.33
40	Everett, Jeffery	5	2.50
41	Rodgers, Waymond	5	2.50

Table 4c. (*Continued*)

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
42	Sun, Li	5	2.50
43	Geiger, Marshall A.	5	2.17
44	Rezaee, Zabiholiah	5	2.17
45	Ritter, David E.	5	2.17
46	Shoaf, Vivtoria	5	2.00
47	Holder-Webb, Lori L.	5	1.83
48	Morris, Roselyn E.	5	1.83
49	Sutton, Steve G.	5	1.83
50	2 tied at 5 and 1.75		

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
1	McGee, Robert W.	109.74	121
2	Pava, Moses L.	21.83	25
3	Bernardi, Richard A.	21.27	43
4	Joyce, William B.	13.00	20
5	Mintz, Steven M.	11.17	15
6	Thorne, Linda	9.41	20
7	Mitschow, Mark C.	9.00	14
8	Roybark, Helen M.	7.25	8
9	Williams, Paul F.	7.16	9
10	Roberts, Robin W.	7.07	14
11	Yuthas, Kristi	6.83	14
12	Abdolmohammadi, M.	6.75	12
13	Elias, Rafik Z.	6.00	7
14	Stuebs, Martin T., Jr.	5.58	10
15	Kaplan, Steven E.	5.33	12
16	Reiter, Sara A.	5.00	6
17	Smith, Sheldon R.	5.00	6
18	Tinker, Tony	5.00	6
19	Cohen, Jeffrey R.	4.83	12
20	Cullinan, Charles P.	4.75	9
21	Baker, C. Richard	4.50	5
22	Mahoney, Lois S.	4.33	11
23	Patten, Dennis M.	4.33	8
24	Radtke, Robin R.	4.33	7
25	Fisher, Dann G.	4.00	6
26	Young, Joni J.	4.00	5
27	Loeb, Stephen E.	3.50	5
28	Fleischman, Gary M.	3.37	9
29	Neill, John D., III	3.33	9

Table 4c. (*Continued*)

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
30	Raiborn, Cecily A.	3.33	7
31	Shaub, Michael K.	3.33	5
32	Beets, S. Douglas	3.33	4
35	Thornton, John M.	3.33	4
34	Coate, Charles J.	3.00	6
35	Mitra, Santanu	3.00	4
36	Felo, Andrew J.	3.00	3
37	Persons, Obeau S.	3.00	3
38	Gendron, Yves	2.83	6
39	Lopez, Katherine J.	2.83	4
40	Massey, Dawn W.	2.75	6
41	Lewellyn, Patsey A.	2.75	4
42	Shawver, Tara J.	2.67	6
43	Ravenscroft, Sue P.	2.50	6
44	Sun, Li	2.50	5
45	Everett, Jeffery	2.50	5
46	Rodgers, Waymond	2.50	5
47	Mobus, Janet	2.50	3
48	Fellows, James A.	2.33	6
49	Hageman, Amy M.	2.33	6
50	Stovall, Scott	2.33	6

to become involved in ethics research following tenure and/or the focus on financial research in accounting's doctoral programs.

When comparing the top-50 authors from the three different time periods in Tables 3–5, it is clear that the first authors listed have received accounting-ethics full-credit scores and co-authored-adjusted scores that are dramatically higher than those on the preceding list. An example of this can be seen in Panel A of Tables 3a–3c where the top eight authors have five or more articles and a total of 98 articles, while the remaining 30 authors have a total of only 75 articles. Additionally, the top-five authors in both panels of Tables 3a–3c are the same individuals.

Tables 3a–3c shows the progression of the study of accounting-ethics (Table 3a), business-ethics (Table 3b), and the total combined (Table 3c) journal rankings from 2006 to 2015. There are six junior scholars (i.e., received their PHD or DBA within the last 10 years) in Table 3a who are listed in Panels A and B. This is important because it supports our contention that this time period is crucial to include as it gives the new scholars

Table 5a. 1991–2015 Rankings for Actively Teaching Authors in Accounting-Ethics Journals.

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
1	McGee, Robert W.	116	105.41
2	Bernardi, Richard A.	18	9.33
3	Mintz, Steven M.	12	8.83
4	Roybark, Helen M.	8	7.25
5	Tinker, Tony	8	5.83
6	Stuebs, Martin T., Jr.	8	4.75
7	Thorne, Linda	8	3.42
8	Mahoney, Lois S.	7	2.50
9	Williams, Paul F.	6	5.33
10	Abdolmohammadi, M.	6	4.08
11	Cullinan, Charles P.	6	3.66
12	Arnold, Vicky	6	2.00
13	Sutton, Steve G.	6	2.00
14	Shaub, Michael K.	5	3.33
15	Mitschow, Mark C.	5	3.00
16	Patten, Dennis M.	5	2.67
17	Freedman, Martin	5	2.50
18	Gendron, Yves	5	2.50
19	Roberts, Robin W.	5	2.41
20	Shawver, Tara J.	5	2.17
21	Baker, C. Richard	4	4.00
22	Reiter, Sara A.	4	3.50
23	Young, Joni J.	4	3.50
24	Thornton, John M.	4	3.33
25	Fisher, Dann G.	4	3.00
26	Smith, Sheldon R.	4	3.00
27	Yuthas, Kristi	4	2.50
28	Singhvi, Meghna	4	2.00
29	Stagliano, A. J.	4	2.00
30	Cooper, David J.	4	1.50
31	Morris, Roselyn E.	4	1.50
32	Smith, L. Murphy	4	1.42
33	Ketz, J. Edward	3	2.50
34	Mobus, Janet	3	2.50
35	Finn, Don W.	3	1.67
36	Massey, Dawn W.	3	1.58
37	Duncan, James R.	3	1.50
38	Hooks, Karen L.	3	1.50
39	Kelton, Andrea S.	3	1.50
40	Radtke, Robin R.	3	1.50
41	Stanga, Keith G.	3	1.50
42	Sun, Li	3	1.50
43	Wilkinson, Brett R.	3	1.33
44	Bailey, Charles D.	3	1.17
45	Everett, Jeffery	3	1.17

Table 5a. (*Continued*)

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
46	Flesher, Dale L.	3	1.17
47	Kurtenbach, James M.	3	1.17
48	Munsif, Vishal	3	1.00
49	LaGore, William	3	1.00
50	3 Tied at 2 and 2.00		

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
1	McGee, Robert W.	105.41	116
2	Bernardi, Richard A.	9.33	18
3	Mintz, Steven M.	8.83	12
4	Roybark, Helen M.	7.25	8
5	Tinker, Tony	5.83	8
6	Williams, Paul F.	5.33	6
7	Stuebs, Martin T., Jr.	4.75	8
8	Abdolmohammadi, M.	4.08	6
9	Baker, C. Richard	4.00	4
10	Cullinan, Charles P.	3.66	6
11	Reiter, Sara A.	3.50	4
12	Young, Joni J.	3.50	4
13	Thorne, Linda	3.42	8
14	Shaub, Michael K.	3.33	5
15	Thornton, John M.	3.33	4
16	Mitschow, Mark C.	3.00	5
17	Fisher, Dann G.	3.00	4
18	Smith, Sheldon R.	3.00	4
19	Patten, Dennis M.	2.67	5
20	Mahoney, Lois S.	2.50	7
21	Gendron, Yves	2.50	5
22	Freedman, Martin	2.50	5
23	Yuthas, Kristi	2.50	4
24	Ketz, J. Edward	2.50	3
25	Mobus, Janet	2.50	3
26	Roberts, Robin W.	2.41	5
27	Shawver, Tara J.	2.17	5
28	Arnold, Vicky	2.00	6
29	Sutton, Steve G.	2.00	6
30	Singhvi, Meghna	2.00	4
31	Stagliano, A. J.	2.00	4
32	Asthana, Sharad C.	2.00	2
33	Felo, Andrew J.	2.00	2
34	Huber, W. Dennis	2.00	2
35	Finn, Don W.	1.67	3
36	Massey, Dawn W.	1.58	3

Table 5a. (*Continued*)

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
37	Cooper, David J.	1.50	4
	Morris, Roselyn E.	1.50	4
39	Duncan, James R.	1.50	3
40	Hooks, Karen L.	1.50	3
41	Kelton, Andrea S.	1.50	3
42	Radtke, Robin R.	1.50	3
43	Stanga, Keith G.	1.50	3
44	Sun, Li	1.50	3
45	10 tied at 1.50 and 2		

Table 5b. 1991–2015 Rankings for Actively Teaching Authors in Business-Ethics Journals.

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
1	Bernardi, Richard A.	25	11.95
2	Pava, Moses L.	24	21.33
3	Joyce, William B.	19	12.00
4	Cohen, Jeffrey R.	15	6.00
5	Thorne, Linda	12	6.00
6	Kaplan, Steven E.	11	4.83
7	Roberts, Robin W.	10	5.16
8	Yuthas, Kristi	10	4.33
9	Mitschow, Mark C.	9	6.00
10	Fleischman, Gary M.	7	2.70
11	Neill, John D., III	7	2.50
12	Loeb, Stephen E.	6	4.50
13	Radtke, Robin R.	6	3.83
14	Raiborn, Cecily A.	6	2.83
15	Abdolmohammadi, M.	6	2.66
16	Elias, Rafik Z.	5	4.50
17	McGee, Robert W.	5	4.33
18	Coate, Charles J.	5	2.50
19	Pasewark, William R.	5	2.50
20	Rodgers, Waymond	5	2.50
21	Ritter, David E.	5	2.17
22	Fellows, James A.	5	2.00
23	Shoaf, Vivtoria	5	2.00
24	Holder-Webb, Lori L.	5	1.83
25	Sharp, David J.	5	1.83
26	Stovall, Scott	5	1.83

Table 5b. (*Continued*)

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
27	Herremann, Irene M.	5	1.67
28	Beets, S. Douglas	4	3.33
29	Mintz, Steven M.	4	2.83
30	Lewellyn, Patsey A.	4	2.75
31	Bay, Darlene D.	4	2.33
32	Kidwell, Linda A.	4	2.16
33	Killough, Larry N.	4	1.83
34	Mahoney, Lois S.	4	1.83
35	Rezaee, Zabiholiah	4	1.67
36	Ravenscroft, Sue P.	4	1.50
37	Hageman, Amy M.	4	1.50
38	Magnan, Michel L.	4	1.25
39	Reiter, Sara A.	3	2.50
40	Finn, Don W.	3	2.00
41	Jamal, Karim	3	2.00
42	Lampe, James C.	3	2.00
43	Shaub, Michael K.	3	2.00
44	D'Aquila, Jill M.	3	1.83
45	Lopez, Katherine J.	3	1.83
46	Williams, Paul F.	3	1.83
47	Patten, Dennis M.	3	1.66
48	Borkowski. Susan C.	3	1.50
49	Malone, J. David	3	1.50
50	6 tied at 3 and 1.33		

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
1	Pava, Moses L.	21.33	24
2	Joyce, William B.	12.00	19
3	Bernardi, Richard A.	11.95	25
4	Mitschow, Mark C.	6.00	9
5	Cohen, Jeffrey R.	6.00	15
6	Thorne, Linda	6.00	12
7	Roberts, Robin W.	5.16	10
8	Kaplan, Steven E.	4.83	11
9	Loeb, Stephen E.	4.50	6
10	Elias, Rafik Z.	4.50	5
11	Yuthas, Kristi	4.33	10
12	McGee, Robert W.	4.33	5
13	Radtke, Robin R.	3.83	6

Table 5b. (*Continued*)

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
14	Beets, S. Douglas	3.33	4
15	Raiborn, Cecily A.	2.83	6
16	Mintz, Steven M.	2.83	4
17	Lewellyn, Patsey A.	2.75	4
18	Fleischman, Gary M.	2.70	7
19	Abdolmohammadi, M.	2.66	6
20	Neill, John D., III	2.50	7
21	Coate, Charles J.	2.50	5
22	Pasewark, William R.	2.50	5
23	Rodgers, Waymond	2.50	5
24	Reiter, Sara A.	2.50	3
25	Bay, Darlene D.	2.33	4
26	Ritter, David E.	2.17	5
27	Kidwell, Linda A.	2.16	4
28	Fellows, James A.	2.00	5
29	Shoaf, Vivtoria	2.00	5
30	Finn, Don W.	2.00	3
31	Jamal, Karim	2.00	3
32	Lampe, James C.	2.00	3
33	Shaub, Michael K.	2.00	3
34	Bergevin, Peter M.	2.00	2
35	Persons, Obeau S.	2.00	2
36	Smith, Sheldon R.	2.00	2
37	Holder-Webb, Lori L.	1.83	5
38	Sharp, David J.	1.83	5
39	Stovall, Scott	1.83	5
40	Killough, Larry N.	1.83	4
41	Mahoney, Lois S.	1.83	4
42	D'Aquila, Jill M.	1.83	3
43	Lopez, Katherine J.	1.83	3
44	Williams, Paul F.	1.83	3
45	Herremann, Irene M.	1.67	5
46	Rezaee, Zabiholiah	1.67	4
47	Patten, Dennis M.	1.66	3
48	Ravenscroft, Sue P.	1.50	4
49	Hageman, Amy M.	1.50	4
50	2 tied at 1.50 and 3		

Table 5c. 1991–2015 Rankings for Actively Teaching Authors in Total Sets of Journals.

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
1	McGee, Robert W.	121	109.74
2	Bernardi, Richard A.	43	21.27
3	Pava, Moses L.	25	21.83
4	Joyce, William B.	20	13.00
5	Thorne, Linda	20	9.41
6	Mintz, Steven M.	16	11.67
7	Cohen, Jeffrey R.	16	6.33
8	Roberts, Robin W.	15	7.57
9	Mitschow, Mark C.	14	9.00
10	Yuthas, Kristi	14	6.83
11	Kaplan, Steven E.	13	5.83
12	Abdolmohammadi, M.	12	6.75
13	Mahoney, Lois S.	11	4.33
14	Stuebs, Martin T., Jr.	10	5.58
15	Williams, Paul F.	9	7.16
16	Tinker, Tony	9	6.33
17	Radtke, Robin R.	9	5.33
18	Cullinan, Charles P.	9	4.75
19	Fleischman, Gary M.	9	3.37
20	Neill, John D., III	9	3.33
21	Roybark, Helen M.	8	7.25
22	Loeb, Stephen E.	8	6.00
23	Shaub, Michael K.	8	5.33
24	Patten, Dennis M.	8	4.33
25	Elias, Rafik Z.	7	6.00
26	Reiter, Sara A.	7	6.00
27	Raiborn, Cecily A.	7	3.33
28	Sutton, Steve G.	7	2.50
29	Smith, Sheldon R.	6	5.00
30	Fisher, Dann G.	6	4.00
31	Finn, Don W.	6	3.67
32	Coate, Charles J.	6	3.00
33	Gendron, Yves	6	2.83
34	Massey, Dawn W.	6	2.75
35	Shawver, Tara J.	6	2.67
36	Ravenscroft, Sue P.	6	2.50
37	Fellows, James A.	6	2.33
38	Hageman, Amy M.	6	2.33
39	Stovall, Scott	6	2.33
40	Smith, L. Murphy	6	2.25
41	Sharp, David J.	6	2.17

Table 5c. (*Continued*)

Panel A: Full-Credit Rankings

Rank	Author's Name	Full Credit	Coauthor Adjusted
42	Arnold, Vicky	6	2.00
43	Baker, C. Richard	5	4.50
44	Beets, S. Douglas	5	4.33
45	Young, Joni J.	5	4.00
46	Lampe, James C.	5	3.50
47	Sweeney, John T.	5	2.83
48	Neu, Dean	5	2.67
49	5 Tied at 5 and 2.50		

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
1	McGee, Robert W.	109.74	121
2	Pava, Moses L.	21.83	25
3	Bernardi, Richard A.	21.27	43
4	Joyce, William B.	13.00	20
5	Mintz, Steven M.	11.67	16
6	Thorne, Linda	9.41	20
7	Mitschow, Mark C.	9.00	14
8	Roberts, Robin W.	7.57	15
9	Roybark, Helen M.	7.25	8
10	Williams, Paul F.	7.16	9
11	Yuthas, Kristi	6.83	14
12	Abdolmohammadi, M.	6.75	12
13	Cohen, Jeffrey R.	6.33	16
14	Tinker, Tony	6.33	9
15	Loeb, Stephen E.	6.00	8
16	Elias, Rafik Z.	6.00	7
17	Reiter, Sara A.	6.00	7
18	Kaplan, Steven E.	5.83	13
19	Stuebs, Martin T., Jr.	5.58	10
20	Radtke, Robin R.	5.33	9
21	Shaub, Michael K.	5.33	8
22	Smith, Sheldon R.	5.00	6
23	Cullinan, Charles P.	4.75	9
24	Baker, C. Richard	4.50	5
25	Mahoney, Lois S.	4.33	11
26	Patten, Dennis M.	4.33	8
27	Beets, S. Douglas	4.33	5
28	Fisher, Dann G.	4.00	6
29	Young, Joni J.	4.00	5
30	Finn, Don W.	3.67	6
31	Lampe, James C.	3.50	5

Table 5c. (*Continued*)

Panel B: Coauthor-Adjusted Rankings

Rank	Author's Name	Coauthor Adjusted	Full Credit
32	Fleischman, Gary M.	3.37	9
33	Neill, John D., III	3.33	9
34	Raiborn, Cecily A.	3.33	7
35	Thornton, John M.	3.33	4
36	Coate, Charles J.	3.00	6
37	Mitra, Santanu	3.00	4
38	Felo, Andrew J.	3.00	3
39	Persons, Obeau S.	3.00	3
40	Gendron, Yves	2.83	6
41	Sweeney, John T.	2.83	5
42	Lopez, Katherine J.	2.83	4
43	Massey, Dawn W.	2.75	6
44	Fogarty, Timothy J.	2.75	4
45	Lewellyn, Patsey A.	2.75	4
46	Shawver, Tara J.	2.67	6
47	Neu, Dean	2.67	5
48	Sutton, Steve G.	2.50	7
49	Ravenscroft, Sue P.	2.50	6
50	5 Tied at 2.50 and 5		

an opportunity to be ranked. A longer time period would have included many articles written by authors who may no longer be active researchers (Serenko & Bontis, 2009). These rankings allow recently graduated scholars to have a benchmark for promotion, tenure, and review processes.

Table 4a shows the progression of the study of accounting-ethics journal rankings for the last 20 years (1996 through 2015). When comparing Table 4a with Table 4b, there is a significant difference between the top authors. For example, while the top author McGee has 116 full-credit articles in accounting-ethics journals, he has only five full-credit articles in business-ethics journals (i.e., his accounting-ethics publications appear to make him an outlier). On the other hand, Bernardi's publications in each set of journals is more consistent with 18 (25) full-credit articles in accounting (business) ethics journals. These findings are also prevalent on Tables 5a and 5c.

The full credit and the coauthor-adjusted scores from the 20 and 25-year span are almost identical (i.e., Tables 4a–4c and Tables 5a–5c). These similarities reflect the initial publication date for *Research on Accounting Ethics* (now *Research on Professional Responsibility and Ethics in Accounting*) of 1995 and the *Journal of Accounting Ethics and Public Policy* of 2001. In fact,

Table 6. Distribution of Accounting-Ethics Authors in Accounting and Business Ethics Journals.

Panel A: Between 2006 and 2015 (10 Years)

Number Articles	Number Faculty	Percent Faculty	Cumulative Percent
Accounting-ethics (229 authors)			
1	164	71.6	71.6
2	45	19.7	91.3
3	9	3.9	95.2
4	3	1.3	96.5
5	2	0.9	97.4
6	1	0.4	97.8
7	1	0.4	98.3
8	2	0.9	99.1
9	0	0.0	99.1
10	0	0.0	99.1
11+	2	0.9	100.0
Business-ethics (272 authors)			
1	202	74.3	74.3
2	44	16.2	90.4
3	10	3.7	94.1
4	5	1.8	96.0
5	7	2.6	98.5
6	0	0.0	98.5
7	1	0.4	98.9
8	2	0.7	99.6
9	0	0.0	99.6
10	0	0.0	99.6
11+	1	0.4	100.0
Accounting-& business ethics (434 authors)			
1	284	65.4	65.4
2	87	20.0	85.5
3	34	7.8	93.3
4	6	1.4	94.7
5	7	1.6	96.3
6	4	0.9	97.2
7	2	0.5	97.7
8	6	1.4	99.1
9	0	0.0	99.1
10	2	0.5	99.5
11+	2	0.5	100.0

Panel B: Between 1996 and 2015 (20 Years)

Number Articles	Number Faculty	Percent Faculty	Cumulative Percent
Accounting-ethics (353 authors)			
1	241	68.3	68.3
2	67	19.0	87.3

Table 6. (*Continued*)

Panel B: Between 1996 and 2015 (20 Years)

Number Articles	Number Faculty	Percent Faculty	Cumulative Percent
3	17	4.8	92.1
4	11	3.1	95.2
5	7	2.0	97.2
6	3	0.8	98.0
7	1	0.3	98.3
8	3	0.8	99.2
9	0	0.0	99.2
10	0	0.0	99.2
11+	3	0.8	100.0
Business-ethics (435 authors)			
1	296	68.0	68.0
2	80	18.4	86.4
3	27	6.2	92.6
4	9	2.1	94.7
5	9	2.1	96.8
6	3	0.7	97.5
7	2	0.5	97.9
8	0	0.0	97.9
9	2	0.5	98.4
10	1	0.2	98.6
11+	6	1.4	100.0
Accounting-& business ethics (663 authors)			
1	400	60.3	60.3
2	139	21.0	81.3
3	57	8.6	89.9
4	16	2.4	92.3
5	16	2.4	94.7
6	12	1.8	96.5
7	3	0.5	97.0
8	2	0.3	97.3
9	4	0.6	97.9
10	1	0.2	98.0
11+	13	2.0	100.0

Panel C: Between 1991 and 2015 (25 Years)

Number Articles	Number Faculty	Percent Faculty	Cumulative Percent
Accounting-ethics (368 authors)			
1	247	67.1	67.1
2	72	19.6	86.7
3	17	4.6	91.3
4	12	3.3	94.6
5	7	1.9	96.5
6	5	1.4	97.8
7	1	0.3	98.1

Table 6. (*Continued*)

Panel C: Between 1991 and 2015 (25 Years)

Number Articles	Number Faculty	Percent Faculty	Cumulative Percent
8	4	1.1	99.2
9	0	0.0	99.2
10	0	0.0	99.2
11+	3	0.8	100.0
Business-ethics (442 authors)			
1	298	67.4	67.4
2	77	17.4	84.8
3	29	6.6	91.4
4	11	2.5	93.9
5	12	2.7	96.6
6	4	0.9	97.5
7	2	0.5	98.0
8	0	0.0	98.0
9	1	0.2	98.2
10	2	0.5	98.6
11+	6	1.4	100.0
Accounting-& business ethics (665 authors)			
1	391	58.8	58.8
2	137	20.6	79.4
3	56	8.4	87.8
4	20	3.0	90.8
5	19	2.9	93.7
6	14	2.1	95.8
7	4	0.6	96.4
8	4	0.6	97.0
9	6	0.9	97.9
10	1	0.2	98.0
11+	13	2.0	100.0

of the six remaining accounting journals in Table 1, only *Critical Perspectives on Accounting* and *Accounting, Auditing and Accountability Journal* have initial publication dates before 1996. Additionally, of the top 10 authors in Tables 4a–4c, two have graduation dates between 1991 and 1995 and three have graduation dates after 1996.

There are five apparent limitations of this study. To start, the data collected were compiled manually using Hasselback's (2015) directory in addition to the internet. The reliance on the two methods for accumulating the data leads the authors to assume that this data is documented correctly.

While the data from Hasselback is updated annually, its accuracy is dependent on the responses of the chairs of each accounting department (Bernardi & Bean, 2010). It is also important to keep in mind that a majority of the academically qualified PhDs/DBAs will be from AACSB accredited schools and these institutions will have their faculty rosters updated annually. Next, the journal set was limited to the available journals within a certain timeframe. This narrowed the study to only eight accounting journals. Third, the research was done exclusively of authors from Canada and the United States. Consequently, this limitation allows for future research to expand in order include authors from other countries or faculty without PhDs/DBAs. The use of a quantitative measurement system limits the data analysis to a strictly numbers based approach and thus precluded an assessment of quality. In an ideal world, academic performance would be assessed based on expert review of the merit of individual research (Rosenstreich & Wooliscroft, 2009). With a limited budget and time constraints, counting analysis is the ideal approach; however, future studies may take survey of journals approach or a combination of these two approaches. Finally, while AACSB now focuses on the impact of an individual's research, we were only able to provide the impact factors for nine of the 42 journals (21.4%) we examined. When the impact factors for these journals are available, future studies could use these factors as quality indicators for weighting purposes.

NOTES

1. We included two journals from the Bernardi and Bean's (2010) list of Top-40 journals in this research – *Accounting, Auditing and Accountability Journal* and *Critical Perspectives on Accounting*.
2. We were only able to locate the Impact Factors of nine of the 42 journals (21.4%). The *International Journal of Value Based Management* and *Teaching Business Ethics* were both spun off from and then consolidated back into their parent journal – the *Journal of Business Ethics*. Consequently, one could assign the *Journal of Business Ethics'* Impact Factor to articles in these journals; still, this would only increase our journal count to 11 journals (26.2%).
3. *Ethikos* is no longer listed on the web and its editors did not respond to our emails requesting tables of contents.
4. The authors examined the tables of contents of the ethics journals included in the update and added key words that were not included in Bernardi and Bean's (2010) list.
5. The data in Table 6 reflect the number of ethics authors out of the 5,125 (Hasselback, 2015) DBAs/PhDs who taught accounting at institutions in Canada and the United States.

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HOW WORK-LIFE BALANCE, JOB PERFORMANCE, AND ETHICS CONNECT: PERSPECTIVES OF CURRENT AND FUTURE ACCOUNTANTS

Katherine T. Smith, L. Murphy Smith and Tracy R. Brower

ABSTRACT

Prior research has shown that a work environment that facilitates work-life balance not only benefits the personal lives of employees but also leads to better job performance and ethical decision-making. Allocation of time between career and personal life is an age-old challenge for working people. Work-life balance refers to the manner in which people distribute time between their jobs and other activities, such as family, personal pursuits, and community involvement. This study compares the work-life balance perspectives of current and future accountants. Three research questions are examined. The first relates to the importance accountants place on work-life balance. The second concerns how work-life balance perspectives of current practitioners compare to future accountants. The third considers how gender differences affect work-life balance perspectives.

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Data for analysis was obtained via a survey of current accounting practitioners and of future accountants (students near graduation). Findings indicate that both current and future accountants believe that a healthy work-life balance is connected to work satisfaction, work performance, and ethical decision-making.

Keywords: Work-life balance; ethics; accounting profession

INTRODUCTION

Since time immemorial the working person has struggled to make a satisfactory allocation of time between career and personal life. Work-life balance refers to the manner in which people distribute time between their jobs and other activities, such as family, personal pursuits, and community involvement. Prior research indicates that a work environment that facilitates work-life balance not only benefits the personal lives of employees but also leads to better job performance and ethical decision-making (Linnhoff, Smith, & Smith, 2014; Smith, Smith, & Brower, 2011).

Accountants face hefty time demands due to an evolving business environment, updates to professional standards, advances in information technologies, and ever-changing tax laws. The nature of accountants' work necessitates ongoing improvement in personal skills and abilities. At the same time, life is more than work. People in all fields of work, including accountants, are choosing to place priority on aspects of life other than work. The purpose of this study is to evaluate perceptions of current and future accountants regarding work-life balance, and how work-life balance is connected to job performance and ethical behavior.

The present study makes a large incremental contribution to this area of academic research, as no prior study offers an analysis of accounting practitioner perspectives on work-life balance and the ethics. The most recent prior work-life/ethics study of accounting practitioners was a work-life survey by Deloitte in 2007, almost 10 years ago. Further, the Deloitte study was not an academic study; the results were disseminated via practitioner and media outlets, not via an academic journal. Thus, the present study provides a current update and an academic perspective to the Deloitte findings regarding ethics and work-life balance. In addition, the present study compares practitioners with students; another unique and meaningful contribution of the current study.

Findings indicate that both current and future accountants believe that a healthy work-life balance is connected to work satisfaction, work performance, and ethical decision-making. In addition, findings show that current and future accountants consider work-life balance issues to be crucial in career decisions. Accountants prefer employers who provide flexible work arrangements. Both men and women accountants indicate that work-life balance matters are important.

FLEXIBLE WORK ARRANGEMENTS CONTRIBUTE TO WORK-LIFE BALANCE

Firms that offer flexible work arrangements enable employees to set up work schedules different from the tradition "8–5" work day. Flexible work schedules enable employees to take care of personal needs more conveniently. In addition, the employer may set up different work schedules to better address customer needs. The Bureau of Labor Statistics of the U.S. Department of Labor reports that 27.5% of all full-time employees had flexible working arrangements enabling employees to vary the time they started or stopped work (U.S. Department of Labor Statistics, 2004).

The following are types of flexible work arrangements:

- *Flex-time*: Typically, flex-time is an arrangement in which employees are expected to work certain hours of the day but have flexibility to select when they work other hours of the day. For example, an employee may be required to be at work from 10 am to 5 pm, and work an additional two hours, with the option of working those 2 hours at either 8–10 am or 5–7 pm.
- *Telecommuting*: A telecommuting arrangement generally enables employees some flexibility in their work location and hours. Using mobile telecommunications technology, an employee is able to work from locations other than the office.
- *Work-at-home options*: Using work-at-home (WAH) or work from home (WFH) options, telecommunication links replace the daily commute to the office.
- *Part-time*: Part-time work options allow employees to work less than full-time.
- *Job-sharing*: Job-sharing is an option in which two employees jointly fill the one job position, splitting the time and responsibility of the position.

- *Special summer or holiday work hours*: Summer or holiday hours have a different schedule from normal work hours.

Benefits to employers and employees derived from flexible work arrangements include the following (Schaefer, 2007):

- Improved job satisfaction, morale, and productivity.
- Enhanced employee recruitment and retention.
- Increased energy and creativity.
- Reduced absenteeism.
- Reduced stress and burn out.
- Improved balance of work and family life.

Numerous employers offer flexible work arrangements to their accounting employees. As shown in Table 1, flex-time is the flexible work arrangement most widely offered by employers. This is followed by part-time, telecommuting, work-at-home options, summer or holiday hours, and job--sharing, in that order. This table shows the percentage of employers who offer flex-time and the percentage of accountants who use or plan to use flex-time. A great majority, 64%, of accounting professionals use or plan to use flex-time, while 55% of employers offer flex-time. Job-sharing is the least used, with only 3% of employees using or planning to use this work arrangement. Job-sharing is offered by 10% of employers.

Employers in general, including accounting firms, industry firms, and government organizations, are responding to work-life balance concerns of accountants and other employees. Across all types of jobs, people expect their work-life balance preferences, such as flexible work arrangements, to be accommodated. This is true in the United States and in other countries (Linnhoff et al., 2014). Accounting firms, large and small, increasingly offer internship opportunities to students, thereby enabling them to experience

Table 1. Availability and Usage of Flexible Work Arrangements by Accounting Professionals.

Work Arrangement	Offered by Employer (%)	Used or Planning to Use (%)
Flex-time	55	64
Part-time	48	18
Telecommuting	26	20
Work-at-home options	20	23
Summer or holiday hours	16	20
Job-sharing	10	3

Source: Baldiga (2005).

what the work environment is like, and also to see first-hand how work-life balance preferences are accommodated.

In a discussion between one of this study's authors and a partner of a national CPA firm, she reported how her firm had even given her the flexibility to take summers off from work to be able to spend more time with her young children. While this time off naturally slowed down her progress toward partner, it did not prevent her from eventually attaining partner rank. Modern-day accountants increasingly show a belief that taking care of family and other priorities leads to a better quality of life. This in turn should enable accountants to more effectively carry out their professional and ethical responsibilities, as their self-worth and personal identity are not dominated by recognition at work.

RESEARCH QUESTIONS

This study poses the following three research questions regarding work-life balance:

> **RQ1.** Do both current and future accountants regard work-life balance issues as important in making job decisions?
>
> **RQ2.** How do current practitioners compare to future accountants in regard to their perspectives on work-life balance?
>
> **RQ3.** Is there a significant difference between the work-life balance perspectives of male and female accountants?

RESEARCH THEORY AND PRIOR STUDIES

Theoretical support for explaining why people strive to achieve a healthy work-life balance is found in two key theories, Maslow's hierarchy theory and McClelland's motivational needs theory (Grey & Antonacopoulou, 2004; Roberts, 1994). Perhaps, the most widely cited theory of motivation is Maslow's hierarchy theory. According to Maslow's theory, the central tenet is that behavior is influenced only by unsatisfied needs. A person's efforts on work alone will be unable to produce complete satisfaction with life; consequently, a healthy work-life balance is essential. According to McClelland's motivational needs theory, a person's need for affiliation leads to development of personal relationships, including those beyond the workplace. Thus, attaining a healthy work-life balance would be essential to attaining complete satisfaction with life.

Findings of an AICPA survey indicated that accountants working in both industry and public accounting are concerned about work-life balance, by gender, 87% of women and 78% of men (AICPA, 2007). Interest in work-life balance concern was especially high among parents with younger children, by gender, 91% of women and 83% of men in public accounting indicated great concern. Further, attaining work-life balance is highly correlated to employee retention. Findings of the survey indicated three key reasons for persons getting out of public accounting: (1) working conditions (schedule, hours, and assignments), (2) work-life balance, and (3) desire for change (Baldiga, 2005). A more recent survey in 2014 found that a significant number of workers from all generations are willing to take less pay in order to attain a more flexible work schedule (Wilson, 2014). The CPA Vision Project, which was developed by CPAs from across the United States, states that employers must increase flexible work arrangements and work-at-home options in order to hire and retain younger CPAs (Wilson, 2014).

Much of the research on work-life balance includes an analysis of gender differences. Physical and psychological differences between genders have been described by Gray (1992, 1993). His top-selling books describe the physical and psychological differences between men and women, such as intuition level, relationship building, and reaction to stress. According to gender theory, gender differences would be expected.

Gender differences have been identified regarding work-life balance and other business issues (Anxo et al., 2007). According to Emslie and Hunt (2009), both men and women feel the need for a better work-life balance when they are parents. However, this need is more complicated and lasts longer for women. Their research revealed gender differences in the way people negotiate home and work.

The challenge of attaining work-life balance and keeping money in right perspective is age-old. The wise king of ancient Israel, Solomon, writing about 930 B.C., said, "Those who love money will never have enough. How meaningless to think that wealth brings true happiness!" (Bible, 2007a). Numerous research studies have identified the "love of money" (greed) as a factor in fraud and financial scandals (Lo, 2011; Sharpe, Grossman, Smith, & Smith, 2013; Soltani, 2014; Weaver, 2004). About a millennium later, Jesus of Nazareth warned against devoting one's life to gaining material wealth above all else: "And what do you benefit if you gain the whole world but lose your own soul?" (Bible, 2007b).

Research has shown a connection between work-life balance, ethics, and religiosity (Keller, Smith, & Smith, 2007; Linnhoff et al., 2014; Sharpe et al., 2013). Burton, Talpade, and Haynes (2011) reported that students frequently involved in religious events were less likely to participate in unethical behavior than students who were less frequently involved. The positive impact of religious activity was further supported in a study of accounting students (Brenner, Watkins, & Flynn, 2012). Interestingly, accounting faculty have been identified as the most religious among faculty in the 20 largest disciplinary fields (Gross & Simmons, 2007).

Religiosity and corporate culture were linked in a study by Hilary and Hui (2008). In their research, employees were much more likely to join organizations with a religious environment similar to their prior place of employment, perhaps because they could personally identify with that religious environment. Ethics and religion are interconnected in an organization's culture. Research by Guitian (2009) evaluated the integration of work and family life in the context of a Catholic social teaching perspective. In this study, work-family balance was engendered by a set of normative propositions that cultivate work-family policies.

Positive benefits, such as employee morale, have been connected to spirituality in the workplace (Karakas, 2010). A study by Constantine, Miville, Warren, and Gainor (2006) evaluated interrelationships among religion, spirituality, and career development in African American college students. They built upon evidence that religion and spirituality influence a person's career decision-making and expanded this to say that religion and spirituality impacts a person while he or she is in college and developing their career path. A study by King and Williamson (2005) provided insights concerning the relationship among religious expression, religiosity, and job satisfaction. They found that religiosity affects a person's job satisfaction when the workplace was accepting of religious expression.

The term work-life balance was initially used in the United States in 1986 to help describe the trend of employees allocating more time to work-related activities, while decreasing time apportioned to other areas of life. During the past three decades, a notable increase has occurred in the time allocated to work. Some experts once predicted that technological innovations would improve people's productivity such that people would allocate more time to non-work activities. In contrast, people are actually working more hours, perhaps due to a consumerist culture that highly regards productivity while demeaning the value of other pursuits, such as parenting or donating one's time to social causes (Smith et al., 2011).

The extent to which work-life balance affects job performance, especially ethical decision-making, and employee well-being is a vital business matter. Research can help illuminate the benefits and costs of work-life balance. A prior study by Frame and Hartog (2003) evaluated the gap between company policies regarding work-life balance and the reality of what was expected from employees. Many managers expect employees to make their jobs a higher priority than one's personal life. Employees who devote more time to the company are considered more productive and loyal.

A study by Deloitte & Touche, a Big Four accounting firm, linked work-life balance to ethical behavior (AFP, 2007; Meyer, 2007; Schurr, 2007). This study led to extensive media attention on the subject of work-life balance. A key finding was that 91% of the employees surveyed agreed that workers are more likely to behave ethically when they have a good work-life balance. Deloitte & Touche Chairman of the Board at the time, Sharon Allen, suggested a reason for the relationship between ethics and work-life balance, as follows:

> If someone invests in all of their time and energy into their jobs, it may have the unintended consequence of making them depend on their jobs for everything – including their sense of personal worth. This makes it even harder to make a good choice when faced with an ethical dilemma if they believe it will impact professional success. (Schurr, 2007)

Numerous studies have examined the relationship of work-life balance and productivity. A study by Bloom and Van Reenen (2006) evaluated whether higher product-market competition and "Anglo-Saxon" management practices are connected to improved productivity only to the detriment of the work-life balance of employees. According to their, a survey of 732 medium-sized manufacturing firms in France, Germany, the United Kingdom, and the United States, better work-life balance outcomes are significantly connected to better management, such that well run businesses are both more productive and better for employees. In contrast to Bloom and Van Reenen (2006), White, Hill, McGovern, Mills, and Smeaton (2003) found a conflict between work-life balance and high-performance practices.

Work-life balance encompasses a variety of issues. This variety leads to complexities for which there are no easy solutions. Among work-life balance issues are the following: (1) spending high quality time with family members; (2) being able to relax in free time; (3) emotional well-being and health of family members; (4) high quality communication and support; (5) high quality child care and education; and (6) satisfaction with work and work load at home (Karakas & Lee, 2004). A study by Anxo et al. (2007) distinguishes between nine major cross-country comparable life stages categorized by age and family structure such as exiting parental home, union formation, parenthood, and retirement. Large discrepancies were found in the gender division of labor in the United States, France, Italy, and Sweden.

Allocating time between job and family is a problem confronting many professionals, including those working in accounting, business management, law, medicine, and other professions. In the accounting field, this work-life balance matters could be a factor explaining the smaller percentage of females who attain the partner level in public accounting firms. Challenges of work-life balance may also be a factor in the lower proportion of females in the accounting academic field (Feucht, Kratchman, Smith, & Smith, 2009). Generation X fathers are identified as more family-oriented than prior generations; they are spending more time with their children. To attain family-life goals, these fathers are more willing to forego pay, adjust work-related travel, and decline job relocations (Smith et al., 2011).

Regarding gender differences, recent research indicates that such differences may have become less significant or even nonexistent. Research on ethical viewpoints by Keller et al. (2007) concluded that no gender differences were found. Their finding differs from some prior studies, which identified gender differences in ethical decision-making (Ameen, Guffey, & McMillan, 1996; Franke, Crown, & Spake, 1997; Keller et al., 2007; Ones & Viswesvaran, 1998). Keller et al. (2007) suggest that the similarities of genders in ethical viewpoints could be explained by the growing participation of women in accounting educational programs and in the workforce.

Some prior studies indicate that gender differences will be found in perspectives of current and future business professionals regarding work-life balance (Linnhoff, Smith, & Smith, 2015; Smith, 2010; Smith et al., 2011). On the other hand, there are studies that indicate that gender differences could be either diminishing or nonexistent (Jones & Kavanagh, 1996; Keller et al., 2007; Werner & Kay, 2006; Wilson, Carter, Tagg, & Shaw, 2007). The present study will examine whether there are gender differences in accountants regarding work-life balance.

A number of helpful resources regarding work-life balance are available on the website of the American Institute of CPAs (AICPA, 2014). The website offers information on flexible work arrangements, an employee retention guide, and personal success stories of practicing CPAs. The website indicates that flexible work arrangements are cited by CPAs as a key reason that they chose the accounting profession in the first place.

The American Accounting Association includes a number of specialized sections. One is the Gender Issues and Work-Life Balance (GIWB) Section. The GIWB Section promotes knowledge and encourages research in work-life balance issues by identifying areas in need of research, facilitating the exchange of ideas and findings, and providing opportunities for exposure of research results. Among its objectives, the GIWB Section aims to increase awareness of policies that help professionals successfully combine career and family (Gender Issues, 2014).

SURVEY RESULTS: PERSPECTIVES OF CURRENT AND FUTURE ACCOUNTANTS

An assessment of the importance of work-life balance issues to current accountants is derived from a survey conducted in the current study, which is then compared to results of a survey of future accountants presented in a prior study. In both studies, the survey instrument was administered in a classroom setting. The survey instrument is provided in the appendix.

The prior study comprises 293 accounting senior-level and graduate students at a major university in the United States (Smith et al., 2011). Given their proximity to future accounting work careers, all would be expected to be giving some thought to work-life balance issues. All of the student respondents were full-time students. The current study involved 32 accounting practitioners who were attending a continuing professional education class in the United States. Table 2 shows the demographic data for the two samples.

The purpose of this paper is to compare the perspectives of accounting practitioners with those of future accountants (students). The survey instrument included questions designed to ascertain to what extent people consider work-life balance when choosing a job and if they think a healthy work-life balance will help them be a better employee, including being a

Table 2. Sample Demographics.

	Future Accountants (n = 293)	Current Accountants (n = 32)
Females	160	19
Males	133	13
Average age	22.3	42.4
Average work years	1.6	18.8

more ethical decision-maker. Questions were answered on a Likert scale, with 1 representing "strongly disagree" and 5 representing "strongly agree." The actual questionnaire is provided in the appendix.

Work-life balance is found to be important to both future and current accountants. Work-life balance is important to career-related decisions. Flexible work arrangements are an important consideration in choosing an employer. Accountants strongly agree that the availability of flexible work arrangements is vital to long-term job satisfaction and that flexible work arrangements are particularly relevant to employees with children. Table 3 lists mean scores to the survey questions. The average responses of future

Table 3. Perspectives of Future Accountants on Work-Life Balance.

		Overall	Future Accountants	Current Accountants
Q1	In choosing a career, I consider how my work-life balance will be affected.	4.4*	4.5*	3.8*
Q2	Availability of flexible work arrangements is an important consideration in choosing an employer.	4.2*	4.2*	4.2*
Q3	Availability of flexible work arrangements is important to long-term job satisfaction.	4.5*	4.5*	4.5*
Q4	Availability of flexible work arrangement is especially important to employees with children.	4.7*	4.7*	4.9*
Q5	A healthy work-life balance leads to better job performance.	4.6*	4.6*	4.7*
Q6	A healthy work-life balance leads to better ethical decision-making.	4.3*	4.4*	4.1*
In my future job, the availability of the following flexible work arrangements will be very important to me:				
Q7	Flex-time. (There are certain hours of the day when employees must work, while the rest of the day is "flex-time" in which employees choose when to work.)	4.2*	4.2*	4.1*
Q8	Part-time work.	3.5*	3.5*	2.9 n.s.
Q9	Job-sharing. (Two employees share the same position; splitting the time and responsibility	3.0 n.s.	3.1 n.s.	2.6 n.s.
Q10	Work-at-home options.	4.1*	4.1*	3.6*
Q11	Special summer or holiday hours	4.3*	4.3*	4.2*
Q12	Telecommuting	4.0*	4.1*	3.7*

Note: Scores were on a range from 1 = strongly disagree to 5 = strongly agree; the survey included 293 senior or graduate-level accounting students, and 32 accounting practitioners. n.s. = not significant.

*$p < .01$.

accountants and current accountants are shown, along with the overall averages. *T*-tests were employed to determine if the overall (combined future and current accountants) responses to each statement were significantly different from neutral (score = 3), and all were except for Statement 9 regarding job-sharing.

The first research question is: Do both current and future accountants regard work-life balance issues as important in making job decisions? Findings indicate that the answer is strongly affirmative. Both future and current accountants regard a healthy work-life balance as a contributor to better job performance. They indicate that a healthy work-life balance facilitates ethical decision-making. Responses averaged 4.3 to Statement 6: A healthy work-life balance leads to better ethical decision-making. This matches findings of the Deloitte study that linked ethical behavior and work-life balance (AFP, 2007; Meyer, 2007; Schurr, 2007).

Respondents were queried as to which of the following flexible work arrangements would be important to them in their future job: flex-time, part-time work, job-sharing, work-at-home options, special summer or holiday hours, or telecommuting. Future and current accountants are particularly interested in the availability of special summer or holiday hours, and the availability of flex-time. Of lesser interest is the availability of job-sharing and part-time work.

The second research question is: How do current practitioners compare to future accountants in regard to their perspectives on work-life balance? Findings suggest that the answer is the two groups: future and current accountants are quite similar regarding views of work-life balance. Both future and current accountants are in agreement that all the work-life balance issues are important (significantly different from neutral) with the exception of part-time work (for current accountants only) and job-sharing (both future and current accountants).

The third research question is: Is there a significant difference between the work-life balance perspectives of male and female accountants? Findings reveal that the answer is mostly "yes" to the third research question; however, the future accountants primarily drive the results. While there are differences between male and female accounting practitioners, the differences are not significant. The relative importance of work-life balance issues becomes about the same between males and females after years of practice. Average years of practice were 18.8 years for the current accountants in the study, while the future accountants averaged only 1.6 years of work experience. Younger female accountants are likely to place higher

Table 4. ANOVA Results of Analysis by Gender.

Question	Gender	*N*	Mean	Sig.
Q1	Male	146	4.2	*
	Female	179	4.6	
	Total	325	4.4	
Q2	Male	146	4.0	*
	Female	179	4.4	
	Total	325	4.2	
Q3	Male	146	4.3	*
	Female	179	4.6	
	Total	325	4.5	
Q4	Male	146	4.6	*
	Female	179	4.9	
	Total	325	4.7	
Q5	Male	146	4.5	n.s.
	Female	179	4.7	
	Total	325	4.6	
Q6	Male	146	4.2	*
	Female	179	4.5	
	Total	325	4.3	
Q7	Male	146	4.0	*
	Female	179	4.4	
	Total	325	4.2	
Q8	Male	146	3.1	*
	Female	179	3.8	
	Total	325	3.5	
Q9	Male	146	2.9	*
	Female	179	3.2	
	Total	325	3.0	
Q10	Male	146	3.9	*
	Female	179	4.3	
	Total	325	4.1	
Q11	Male	146	4.1	*
	Female	179	4.5	
	Total	325	4.3	
Q12	Male	146	3.9	*
	Female	179	4.2	
	Total	325	4.0	

Note: Scores were on a range from 1 = strongly disagree to 5 = strongly agree; the survey included 293 senior or graduate-level accounting students, and 32 accounting practitioners. n.s. = not significant.
*$p < .01$.

value on work-life balance as they are more likely involved with or anticipate more future involvement with care for infants and young children.

An ANOVA analysis was used to identify where significant differences occur between genders. Results of the ANOVA analysis are summarized in Table 4. ANOVA was also employed to ascertain the effect of age and work experience, but there were no significant differences. Female accountants regard work-life balance matters to be more important than their male colleagues. Male respondents widely agree that a healthy work-life balance is beneficial, but female answers averaged significantly higher than the male answers (as previously noted, driven by the future accountants), except for Statement 5, where both males and females responded very positively (4.5 and 4.7, respectively) to the statement: "A healthy work life balance leads to better job performance."

The single highest response score to any survey item was Statement 4 regarding the importance of flexible working arrangement for employees with children; female responses averaged 4.9, males averaged 4.6. The difference is significant, but clearly both genders regard this as an important work-life issue. For all the flexible work arrangements, female accountants regard them to be significantly more essential than their male counterparts. On a five-point scale, the female responses averaged about .4 higher than the male responses. The most notable difference between male and female responses concerned part-time work (Statement 8). Male respondents were essentially neutral, with responses averaging 3.1, while female responses averaged 3.8.

SUMMARY AND CONCLUSIONS

Findings of the study show that current and future accountants believe that a healthy work-life balance has a positive impact on their job satisfaction, job performance, and ethical decision-making. In addition, findings show that current and future accountants both consider work-life balance issues as very important to career decision-making. While both genders regard work-life balance issues to be important, females generally have significantly higher scores in rating the importance of work-life balance; however, future accountants drive this result, likely due to their greater focus on current or anticipated future care of young children. Gender differences still exist among current practitioners, but these differences are not significant.

To facilitate a healthy work-life balance, accounting employers offer the following flexible work arrangements: flex-time, part-time work, job-sharing, work-at-home options, summer or holiday hours, and telecommuting. Flex-time is of relatively high importance to both future and current accountants. In addition, future and current accountants prefer employers who offer special summer or holiday hours. Enabling people to achieve work-life balance makes the accounting field attractive to future and current accountants.

Work-life balance is a global issue. Prior research in the United States and other countries has shown that accounting firms, industry firms, and government organizations, are striving to address work-life balance concerns of their accountants and other employees. The increasing use of internships by accounting firms provide students with opportunities to experience the work environment and, in the process, gain a better understanding of work-life balance issues. Research has shown that attaining a healthy work-life balance should enable accountants to more effectively carry out their professional and ethical duties.

LIMITATIONS AND FUTURE RESEARCH

As with all survey studies, this study is limited by the biases of the survey respondents. The study is therefore limited to the extent that survey respondents are representative of current accounting practitioners and of future accountants (students). This study offers a benchmark for future studies that evaluate the degree to which work-life balance continues to be a concern to accounting practitioners and to future accountants. The study was limited to the demographic variables (e.g., age and gender) and work-life balance connections (e.g., job satisfaction and ethical decision-making) included on the survey instrument. Future studies could include additional demographic factors and work-life balance connections not included in the current study.

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APPENDIX: WORK-LIFE BALANCE SURVEY INSTRUMENT

What is your current position? (Check one)

_____ a. Accounting student

_____ b. Business student, Major: ______________________________

_____ c. Other, please specify _________________________________

Age: ____

Gender: ___ M ___ F

Years of work experience: ___________

Work-life balance refers to people spending sufficient time at their jobs while also spending enough time on other pursuits, such as family, hobbies, and community involvement. Please indicate the extent to which you agree or disagree with the following statements:

Scale: 1 = Strongly Disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = Strongly Agree.

	SD	D	N	A	SA	
(1)	1	2	3	4	5	In choosing a career, I consider how my work-life balance will be affected.
(2)	1	2	3	4	5	Availability of flexible work arrangements is an important consideration in choosing an employer.
(3)	1	2	3	4	5	Availability of flexible work arrangements is important to long-term job satisfaction.
(4)	1	2	3	4	5	Availability of flexible work arrangements is especially important to employees with children.
(5)	1	2	3	4	5	A healthy work-life balance leads to better job performance.
(6)	1	2	3	4	5	A healthy work-life balance leads to better ethical decision-making.
In my [future/current[a]] job, the availability of the following flexible work arrangements will be important to me:						
(7)	1	2	3	4	5	Flex-time. (There are certain hours of the day when employees must work, while the rest of the day is "flex-time" in which employees choose when to work.)
(8)	1	2	3	4	5	Part-time work.
(9)	1	2	3	4	5	Job-sharing. (Two employees share the same position; splitting the time and responsibility required for the job.)
(10)	1	2	3	4	5	Work-at-home options.
(11)	1	2	3	4	5	Special summer or holiday hours.
(12)	1	2	3	4	5	Telecommuting. (Employees have flexibility in where and when they work by using mobile telecommunications technology.)

[a]The student survey said "future" and the practitioner survey said "current."