The Computer-Based CPA Exam: Have Changes Impacted Perceptions of the Prestige of CPA Certification?

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The Uniform CPA Examination is recognized as a premier professional licensing test and serves to protect the public interest by ensuring that only qualified individuals become licensed CPAs. In April 2004, the licensing process was changed with the launching of the computer-based uniform CPA exam. Switching from the paper-and-pencil exam to the new computer-based CPA exam marked one of the most significant changes in the history of the examination. The primary purpose of this paper is to report the findings of a survey given to accounting practitioners, accounting educators, graduate accounting students, and business professionals concerning the perceptions of the computer-based CPA Exam, in addition this paper will update, extend, expand, or revisit prior research. Survey results indicate that the switch to the computer-based exam has not had a negative impact on the prestige of the CPA designation.

INTRODUCTION

The designation of Certified Public Accountant (CPA) is one of the most recognized professional credentials in the business world. Among other requirements, CPAs are required to pass the Uniform CPA Examination. The CPA Exam is recognized as a premier professional licensing test and serves to protect the public interest by ensuring that only qualified individuals become licensed CPAs. The majority of states/jurisdictions require a minimum of 150 semester hours of education from an accredited college or university as a prerequisite to CPA certification. In April 2004, the accounting profession's licensing process was changed with the launching of the computer-based CPA Exam. Switching from the paper-and-pencil exam to the computer-based exam marked one of the most significant changes in the over 100-year history of the CPA Examination. The change in exam format had wide-reaching consequences, including altering the academic accounting curriculum at most colleges and universities.

The primary purpose of this paper is to report the findings of a survey given to accounting practitioners, accounting educators, graduate accounting students, and business professionals concerning the perceptions of the computer-based CPA Exam, in addition this paper will update, extend, expand, or revisit prior research. This survey examined the perceptions of respondents and these perceptions were not based on experience or direct knowledge. Survey results indicate that the switch from the paper-and-pencil exam to the computer-based CPA Exam has not had a negative impact on the perceptions about the prestige of the CPA designation. Also, survey respondents perceive that the questions on the computer-based exam are as rigorous as the previous version.

The development of the computer-based exam, a process that took more than five years to complete, was a collaborative effort by the American Institute of Certified Public Accountants (AICPA), the National Association of State Boards of Accountancy (NASBA), the technology-based testing service, Thomson Prometric, and the state boards of accountancy. The computer-based CPA Exam was developed to achieve a better alignment between the examination and professional-practice requirements. The new CPA Exam was developed carefully, with the changes based on evidence of practice necessities, with contributions from regulators, educators, and accounting professionals.

While the most notable change in the Exam was the transition from a paper-and-pencil exam to a computer-based exam, important content revisions were made as well. The computer-based exam has been revised to more closely align with an entry-level CPA's real-world professional responsibilities. These revisions included amended content, format and delivery, and a new case-study component called "simulations". The result was a computer-based exam with four sections: (1) Auditing and Attestation (AUD), (2) Financial Accounting & Reporting (FAR), (3) Regulation (REG), and (4) Business Environment & Concepts (BEC). Candidates may sit for the CPA Exam at any Thomson Prometric testing center. The subject areas tested in the paper-and-pencil section, Accounting & Reporting (taxation, governmental and nonprofit organizations, and managerial), have been separated and grouped with subject matter that is more logically related. Specifically, the topic of accounting and reporting for governmental and nonprofits has been placed in FAR; taxation and business law have been placed in REG; and managerial accounting has been placed in BEC. Exam candidates are required to demonstrate general business knowledge that is related to auditing and financial reporting in a new section, BEC, which tests candidates' knowledge of certain areas of economics, finance, strategy, and information technology.

In addition to the content changes, administration of the Exam has been updated with expanded testing opportunities and increased flexibility. Exam candidates now have more opportunities per year to take the Exam and are no longer required to take all four sections at one time. Pre-1994, the CPA Exam was given over a three-day period biannually in May and November at limited specified testing locations and totaled 19.5 hours. In May 1994, the CPA Exam was shortened to 15.5 hours given over two days, still biannually in May and November. Historically, a score of 75 percent was required to pass any given section and conditional requirements were placed on the scores of the remaining sections, which were established by the state boards of accountancy. Typically, a candidate also needed to obtain scores of at least 50 percent on each section and pass two sections with a score of 75 percent to receive credit for those sections. There are no such conditional requirements on the computer-based exam. With the computer-based format, individuals deemed as eligible candidates by their state boards of accountancy can schedule any or all sections in the first two months each quarter, throughout the year. Within broad constraints, candidates are able to choose the date, time, and test center most convenient for them. Once a section is passed, most jurisdictions require candidates to pass all remaining sections within 18 months to receive credit on the previously passed section(s).

Beginning in January 2011, other major changes were made to the CPA Exam. The AUD section was reduced by 30 minutes; while the BEC section was increased by 30 minutes to accommodate the addition of constructed response essays. The constructed response essays were removed from the other three sections of the Exam. Six to seven shorter task-based simulation problems replaced the longer simulations in REG, AUD and FAR. For the first time, candidates were responsible for knowing international standards. As happened before the move from the paper exam to the computerized exam, the number of candidates increased in the period prior to adoption of the new exam policy.

LITERATURE REVIEW & HYPOTHESES DEVELOPMENT

In 1997, AICPA and NASBA formed a joint committee called the Computerization Implementation Committee (CIC). This committee's primary responsibility was to develop and implement a computerized Uniform CPA Examination by 2003. The CIC identified several benefits in changing the CPA Exam to a computer-based examination:

1. Testing an expanded range of knowledge and skills that more closely reflects the current practice environment (e.g., research skills in an electronic environment).
2. Gathering more information about candidates and determining if there is bias towards any group of candidates.
3. Measuring candidate performance more effectively on a question-by-question basis.
4. Allowing questions to be more readily added, modified, or deleted.
5. Reducing subjectivity in grading.
6. Allowing candidates greater flexibility in sitting for the Examination by offering the Examination more frequently (AICPA, 1998).

One of the primary goals of the CIC was to establish a computer-based CPA Exam that provided reasonable assurance that successful candidates had the necessary knowledge and skills needed to perform in the current electronic business environment. In the late 1990s, the world was already technologically driven with the use of personal computers and the Internet. The CIC believed that a new computer-based exam was necessary for the accounting profession to help better prepare entry-level accountants for the more complex and demanding business environment. Therefore, the focus of the computer-based CPA Exam was on better serving entry-level accounting professionals and helping to ensure the continued success of the accounting profession. Based on the previous statements the following hypothesis stated in the alternative form was developed:

H1: The computerized CPA exam is perceived to better prepare new accounting professionals for the current business working environment compared to the previous paper-and-pencil version of the CPA exam.

Prior to the inception of the computed-based CPA Exam in 2004, Mankin (2000) conducted research by surveying the perceptions of members of the AICPA, NASBA, and business professionals about the change to a computerized CPA Exam. The following statement from the Illinois CPA Society in 1996 provided the motivation for the research:

> There is concern that a computerized exam will change the image of the CPA profession. The general public identifies the rigor of the CPA Examination with the prestige of the CPA. Passing the Exam is seen as a 'rite of passage'. If the exam is shortened or altered, there are serious concerns that the stature of the CPA designation will decline.

The results from the Mankin study suggested that a computerized exam may have a lower perception of prestige and difficulty than does a written CPA Exam:

1. In all cases the subjects indicated their perception of the prestige and difficulty of the written CPA Exam was higher than the perception of the computerized CPA Exam.
2. The AICPA members had a significantly lower perception of the prestige and difficulty of the computerized CPA Exam than did the other two groups.
3. Generally, there was no difference in the perception of prestige and difficulty of the written CPA Exam among the three groups (Mankin, 2000).

This study predicted that the forthcoming computerization of the CPA Exam could reduce the public's and the profession's perception of the Exam's prestige and difficulty. Based on the Mankin findings the following hypothesis stated in the alternative form was developed:

H2: The change to the computerized CPA exam has affected the public and professional perception of the prestige of the CPA designation in a negative manner.

In 2008, Howell and Heshizer published a paper in which they argued that the new computer-based exam testing format is less difficult than the old testing format; however, they did not provide any factual

empirical evidence on which to base this conclusion. They assumed that the characteristics necessary to be successful on the CPA Exam or to be successful as a public accountant have not changed and that the rigorous design of the old testing format would better reveal characteristics that contribute to passing the CPA Exam on fewer attempts. Their research used data collected from candidates who sat for the CPA Exam before the computer-based exam went into effect. To date, no additional research has been performed to validate or contradict their assumptions that the computer-based CPA Exam is easier than the old version or that the characteristics for successful candidates have not changed because of the exam format change. Based on the results in the Howell and Heshizer study, the following hypothesis stated in the alternative form was developed:

> *H3: The previous paper-and-pencil version of the CPA exam is perceived as more rigorous than the current computer-based CPA exam.*

In 2006, Specht and Sandlin performed a study to determine the impact the computer-based exam had on the accounting curriculum at colleges and universities. The survey included a listing of course content areas and learning activities designed to enhance student abilities as tested by the revised Exam. Educators were asked the extent to which they had incorporated the listed subject matter or activities into their courses and whether this had changed in response to the new CPA Exam content and requirements. The first set of questions included asked about the educators' use of learning activities designed to improve student research skills. The survey found that students were being instructed in the use of research methods to some extent by 72 percent of educators, and online research in accounting courses was required to some extent by 14 percent of educators. In addition, a large majority (83 percent) of accounting programs used case studies requiring student research and analysis as well as the exercise of personal judgment. Educators were asked the extent to which they had changed their course requirements in response to the format and content of the new computer-based CPA Exam. The largest increase was in research methods, with 46 percent of educators reporting increased focus on student use of research methods, and 40 percent reporting an increased focus on online research as well as student research and analysis.

Secondly, the Specht and Sandlin survey asked about communication skills assignments. Sixty-six percent of educators required in-class student presentations, 87 percent required the preparation of spreadsheets, and 68 percent assigned business communication papers. Only 40 percent of educators used timed in-class assignments. A third set of questions related to a candidate's ability to analyze and use information from various types of business pronouncements. In general, the findings revealed that the majority of programs used SEC filings, annual reports, authoritative pronouncements, and current business or accounting periodicals. Finally, the results indicated that AACSB-accredited programs (as compared to non-AACSB programs) added more business communication assignments and made more use of professional periodicals. Similarly, public universities (as compared to private universities) had increased their use of case studies for purposes of research and analysis, which might better prepare students for the testing of higher-level cognitive skills. The Specht and Sandlin study revealed that many accounting programs did change their curricula based on the computer-based CPA Exam. These results indicate that restructuring the CPA Exam affected what is being taught in colleges and universities.

The number of CPA Exam candidates increased dramatically prior to the introduction of the computerized exam and declined significantly in 2004 when the exam changed to a computer-based exam, which, according to the AICPA, was an expected result based on similar experiences for other high-stakes tests that converted to computer-based exams. In 2006, Weidman wrote an article entitled "Are we failing the exam?" concerning the lack of accounting graduates who are taking the CPA Exam. According to Weidman, it was clear that the dearth of individuals taking the CPA Exam was not due to fewer accounting graduates, because the number of accounting graduates had increased while the number of those sitting for the Exam had decreased. The AICPA stated that enrollment in accounting programs increased 19 percent between the years 2000 and 2004. Weidman came to the following three conclusions concerning why accounting graduates are not sitting for the CPA Exam:

1. Not enough time, specifically time to prepare for the Exam.
2. Accounting graduates do not believe certification is important or that it is aligned with their career goals.
3. The change to the computer-based CPA Exam (Weidman, 2006, pg. 29).

In June 2005, NASBA, AICPA, and Thomson Prometric released a study that found that the number of candidates taking the CPA Exam dropped almost 37 percent after the introduction of the computer-based CPA Exam, with the primary reason given by candidates for not taking the Exam was that they were too busy. Weidman developed his conclusions based on his own experiences from speaking at numerous colleges. Another explanation might be that the rush of candidates to take the exam before the implementation of the computerized exam depleted the number of candidates taking under the new format. Moreover, NASBA's annual information about Exam candidates shows the following number of scored sections has increased dramatically since 2004: 2004 –107,954; 2005 –178,266; 2006 -202,354; 2007 –224,494; 2008 –247,351; 2009 –266,874; and 2010 – 307,573 (Board of Examiners Update, 2011). According to the AICPA 2008 Trends Report, the number of exam-takers has increased more than 50 percent since 2004 and continues to rise; the number of first-time candidates in 2004 – 44, 316 rose to 195,240. These statistics indicate that the number of accounting graduates sitting for the exam is moving in a positive direction. Undergraduate accounting enrollments also continue to increase: from 142,735 in 2003-2004 to 187,534 in 2009-2010 (AICPA Trends, 2011). While a number of factors have influenced this increase, changes to the CPA Exam appear to have had no negative impact on students' decisions to major in accounting.

There were concerns that major changes in the CPA Exam format might lead to a decline in the number of candidates sitting for the Exam. Although it appears as though the number of Exam candidates decreased sharply temporarily after the advent of the computerized format, comparison of these numbers may be misleading. Under the paper-and-pencil format, candidates who took the CPA Exam in both May and November were counted twice. With the computerized format of the CPA Exam, each candidate is counted only once per year regardless of how many times they attempt a section or in how many windows they test. In light of the way candidates were counted, it is likely that while the number of candidates initially decreased somewhat from the paper-and-pencil format, the decrease is much less pronounced than it might appear, and the numbers have moved toward parity with the pre-2004 numbers (AICPA, 2008). In July 2009, the computerized CPA Exam reached the one-million mark for tests administered, according to the AICPA, NASBA, and Thomson Prometric. "Delivering this exam one million times since it moved to computer in 2004 is a true testament to the success we've had with the delivery model," said Michael Brannick, president and CEO of Prometric, adding "exam candidates have truly embraced the user-friendly interface, as well as the flexibility it provides with regard to exam administration times and locations" (AICPA, 2009). Based on these facts, the following hypothesis stated in the null form was developed to investigate the perceptions about the impact the new format has had on the number of candidates sitting for the exam:

> *H4: The change to the computerized CPA exam has had no impact on the number of accounting graduates who are sitting for the CPA exam as perceived by those surveyed.*

An additional issue identified by survey responses in the Mankin study concerned the implication the switch to a computer-based CPA Exam would have on passing rates. According to the AICPA, the cumulative uniform CPA Examination passing rates for 2010 were as follows: (1) AUD - 47.80%, (2) BEC - 47.29%, (3) FAR - 47.81%, and (4) REG - 50.66%. These rates were much higher than the pass rates on sections of the previous pen-and-pencil exams. In addition, during the 3rd quarter of 2010, every individual section except AUD (49.40%) had passing rates in excess of 50 percent, which, historically, has not been the case. These increasing rates have caused some to question the difficulty of the computer-based exam compared to the old version, while others believe that the passing rates should be higher and

view the increases as a positive result. Based on the preceding information the following hypothesis stated in the null form was developed:

> *H5: The perception is that passing rates over 50 percent on any section of the CPA exam are not too high.*

In 2004, Snyder discussed the results of a pilot study conducted in the fall of 2003 where 80 CPA candidates, who had taken the last paper-based exam in November 2003, were introduced to the new computer-based CPA Exam and asked to provide feedback. Overall, the pilot study participants judged the computer-based CPA Exam to be a change for the better and that taking the Exam on a computer made more sense in the current business environment. Pilot study participants also had the following comments: (1) Familiarity with the computer is a big plus in taking the test; (2) The testing environment is much more comfortable; (3) Scheduling flexibility makes studying easier; (4) Using the tutorial is vital for success; and (5) Real-world experience is helpful.

RESEARCH METHODOLOGY

Surveys concerning the perceptions of the computer-based CPA exam (Appendix A) were given to accounting practitioners, accounting educators, graduate accounting students, and business professionals. Survey respondents included attendees of the American Accounting Association (AAA) Southeast Regional meeting, attendees of an alumni accountancy weekend at a major university, and graduate accounting students. The graduate accounting students had taken at least one section of the computer-based CPA exam. These groups were selected to be surveyed because they all have a stake in the perceived value of the CPA designation and their perceptions are vital to the continued future success of the CPA exam.

Two versions of the survey were distributed, the only difference between the versions concerned question number one. Question number one on the first version asked if the "questions on the computer-based CPA exam were as rigorous the questions on the previous paper-and-pencil version of the exam" and question number one on the second version asked if the "computer-based CPA exam is as rigorous as previous paper-and-pencil version of the exam". Survey respondents were unaware that separate versions of the survey questionnaire existed. Most subjects would have had actual experience with only one format of the exam, but the survey questions are not asking for knowledge, merely perceptions. The objective of using separate versions was to determine whether or not the format change (taking one section at a time) or the exam content itself was responsible for the perceptions of survey respondents.

DATA ANALYSIS & RESULTS

The survey respondents were asked to answer questions related to their perceptions of the CPA exam and the prestige of the CPA designation, Table 1 provides the average response by occupation for each survey question. The respondents were asked to answer the questions using a scale from 1 to 6, with the following values: 1=Strongly Agree, 2=Agree, 3=Somewhat Agree, 4=Somewhat Disagree, 5=Disagree, 6=Strongly Disagree. A total of 153 usable survey responses were collected from respondents. The average respondent had over 18 years of work experience and at least a Masters Degree. Of the 153 respondents, 125 were CPAs.

Hypothesis 1 corresponded to question 2 on the survey. Each version of the survey included the same question 2 and asked the respondents to give a score from 1 to 6 about whether the computer-based CPA exam better prepares young accounting professionals for the current working environment. A Chi-Square test was performed to determine whether the responses for question 2 were statistically different than the expected results. When using the survey midpoint value of 3.5 or equal expected frequencies for each response, results indicate statistical significance at $p<.05$. An ANOVA was also performed to determine if group differences existed and ANOVA results indicated statistical significance at $p<.01$ level. A post-hoc

procedure (Tukey's HSD) was performed to determine group differences and results indicated that the accounting students group was statistically different in their responses from the accounting educators group and the accounting professionals group at $p<.05$. Overall, these results support hypothesis one that the computerized CPA exam is perceived to better prepare new accounting professionals for the current business environment than the previous paper-and-pencil CPA exam, however it appears these results are being driven primarily by the accounting students group of respondents, which is the group intended to be targeted by the changes.

Hypothesis 2 corresponded to question 3 on the survey. Each version of the survey included the same question 3, which addressed whether the change to the computed-based CPA exam had affected the prestige of the CPA designation in a negative manner. A Chi-Square test was performed to determine whether the responses for question 3 were statistically different than the expected results. When using the survey midpoint value of 3.5 or equal expected frequencies for each response, results indicate statistical significance at $p<.001$. Therefore, based on these results hypothesis 2 is rejected and it can be concluded that the change to the computerized CPA exam has not affected the public and professional perception of the prestige of the CPA designation in a negative manner. These results were consistent across all groups of respondents.

Hypothesis 3 corresponded to question 1 on the survey. Separate versions of the survey included a different question 1 which addressed the difficulty level of the two versions of the CPA exam. One version of the survey compared the questions on the separate exams, while the other version compared the exams in their entirety. A Chi-Square test was performed to determine whether the responses for question 1A and 1B were statistically different than the expected results. Results indicate that respondents believe that the computer-based CPA exam is not as rigorous as the previous paper-and-pencil version at $p<.05$ level. However, results also indicate that survey respondents believe that the questions on the computer-based CPA exam are as rigorous as the previous exam questions. In addition, an ANOVA was performed on the two versions of question 1 and the average responses for question 1A and 1B were statistically significantly different at $p<.001$ across all groups. One respondent commented "The questions on the new CPA exam are every bit as rigorous as the old exam. However, taking one part at a time is much easier than taking four parts at one time". On the other hand the following comment was given concerning the computer-based format, "Not being able to go back to a previous question because the candidate realizes a previous answer was wrong hides that candidate's intelligence and is not reflective of the real world or professional practice". These results partially support hypothesis 3 that the paper-and-pencil version of the CPA exam was more rigorous, although the questions are perceived to be the same difficulty. This mixed result is driven by the format and testing flexibility of the new exam and not the difficulty level of the exam questions.

Hypothesis 4 corresponded to question 5 on the survey. Each version of the survey included the same question 5 which addressed the impact the changing of exams has had on the number of accounting graduates sitting for the CPA exam. A Chi-Square test was performed to determine whether the responses for question 5 were statistically different than the expected results. When using the survey midpoint value of 3.5 or equal expected frequencies for each response, results were not statistically significant. These results do not lead to rejection of hypothesis 4. The conclusion is that the change to the computer-based CPA exam has not impacted the number of accounting graduates sitting for the CPA exam as perceived by the respondents.

Hypothesis 5 corresponded to question 4 on the survey. Each version of the survey included the same question 4 which addressed whether passing rates over 50 percent on any individual section of the CPA are too high. A Chi-Square test was performed to determine whether the responses for question 4 were statistically different than the expected results. When using the survey midpoint value of 3.5 or equal expected frequencies for each response, results were not statistically significant. Accounting Educators were the only group below the midpoint value of 3.5. This result does not lead to rejection of hypothesis 5. The conclusion is that passing rates over 50 percent on any individual section of the CPA are not too high.

Several demographic characteristics were collected from the survey respondents. To determine whether the demographic variables affected the survey results, a series of one-way ANOVA procedures was used. Each demographic variable was used as an independent variable to determine the effect on the dependent variables, results were not statistically different based on demographic variables, and therefore they were excluded during the analysis process.

CONCLUSIONS & COMMENTS

The primary purpose of this paper is to report the findings of a survey given to accounting practitioners, accounting educators, graduate accounting students, and business professionals concerning the perceptions of the computer-based CPA Exam, in addition this paper will update, extend, expand, or revisit prior research. Few studies have been published that relate to the changes in the CPA Examination. One study found negative reactions to the anticipated changes. However, to date no follow-up research has been published to determine the actual impact, the computed-based CPA Exam has had on the perceptions of the CPA designation. Sufficient time has passed since the implementation of the computerized exam to allow for expiration of initial negative responses that change often generates. It is timely to retest these perceptions to assure that the CPA Examination continues to be a premier professional examination. If the predicted perceptions have not reversed, then the AICPA would need to enhance its efforts to educate and assure their audiences of the quality of the computerized exam because perceptions are important.

Survey results indicate that the switch from the paper-and-pencil exam to the computer-based CPA Exam has not had a negative impact on the professional and public perception of the prestige of the CPA designation, contradicting the earlier expectation findings. Also, survey respondents perceive that the questions on the computer-based CPA are as rigorous as the previous version, however overall the previous paper-and-pencil exam is perceived to be more rigorous than the computer-based exam.

In addition, survey results indicate that the computerized CPA Exam better prepares new accounting professionals for the current business working environment compared to the previous paper-and-pencil version of the CPA Exam. However, these results were driven by the accounting students group and if their responses were removed from the data, the results were not statistically significant. Respondent comments concerning this issue included the following statements: "Ability to find information needed to do accounting is emphasized to a greater extent on the computerized exam than it was on the paper-and-pencil exam and this is very important in today's environment," and "I believe the computerized exam allows you to learn the material more thoroughly by concentrating on one section at a time, which better prepares you for work." These results support one of the primary goals of the CIC during the development of the computer-based CPA Exam, which was to create an exam that better served the needs of entry-level accounting professionals. Survey results indicate that accounting students believe that the computer-based CPA Exam better prepares them for the current business environment.

Results also indicate that the switch to the computer-based exam is not perceived to have had a negative impact on the number of accounting graduates sitting for the exam. However, some survey respondents believed otherwise and made the following comments: "It seems to me that the new exam format – as it pertains to exam attempts – is causing fewer attempts. Under the old format the exam was given at the same time each year and everyone could plan for it," and "Opportunity to sit for the exam more frequently than twice a year, seems to have created a lack of 'sense of urgency' to prepare for and complete the exam." When discussing the one-millionth exam section milestone, AICPA president and CEO Barry Melancon stated the following; "More people are sitting for the CPA Exam because the CPA profession has enjoyed unprecedented growth as an attractive career choice and our research shows that colleges and universities are awarding more bachelor's and master's degrees in accounting than at any other time in history" (AICPA, 2009). Results also indicate that, in general, survey respondents do not believe that passing rates over 50 percent on any individual section are too high.

Not surprisingly, a natural bias seems to exist within these survey results. Individuals who have only had experience with the computer-based CPA Exam prefer this format, while older CPAs prefer the

paper-and-pencil format. Regardless of this bias, the results indicate that the perception of the CPA designation has not been tarnished by this change in format, contradicting earlier research findings based on expectations. Possibly the earlier negative reactions were motivated more by a resistance to change in general than the actual change itself. From a big picture perspective, the overall survey results seem to support a successful transition as envisioned by the CIC. The CIC wanted to create a new CPA Exam that better prepared entry-level accountants for the technologically-driven business environment. Results indicate that the computer-based exam is more attractive to younger, computer-savvy accounting students who believe the computer-based exam better prepares them for the working environment. Particularly in light of the finding that the prestige of the CPA designation has not been diminished, these results support the assertion that the new exam has accomplished many of the CIC goals, marking a successful transition. In addition, the computer-based format gives the exam greater flexibility and adaptability.

Regardless of an individual's viewpoint concerning the computer-based CPA Exam, it is certain that changing the exam format was a significant event that has impacted the accounting profession and accounting education. However, with the limited amount of empirical research performed on this topic, it is difficult to determine magnitude and direction of the change. These survey results refute earlier findings concerning the impact the computer-based CPA Exam would have on the prestige of the CPA designation. Additional research should be performed to evaluate the impact that the computer-based exam has had on the accounting profession, accounting education, and curriculum.

One issue in particular is whether the computerization of the CPA Exam has had any impact on recruiting students into accounting. The steady increases in both number of CPA Exam candidates and in accounting enrollments would suggest that there has not been a negative impact due to the changes in the exam. Students could perceive that a computerized exam is a mark of a more forward-looking and modern profession and would find the opportunity to take the exam in sections to be more appealing.

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TABLE 1
AVERAGE RESPONSE BY OCCUPATION

Survey Scale (1=Strongly Agree, 2=Agree, 3=Somewhat Agree, 4=Somewhat Disagree, 5=Disagree, 6=Strongly Disagree)					
Survey Questions	Accounting Student 28	Accounting Educator 74	Accounting Professional 36	Business Professional 15	Total 153
Q1A: The questions on the computer-based CPA exam are as rigorous as the previous paper-and-pencil version of the CPA exam.	2.34	2.29	2.84	2.70	2.59* N = 82
Q1B: The computer-based CPA exam is as rigorous as the previous paper-and-pencil version of the CPA exam.	3.60	3.67	5.50	4.60	3.83** N = 71
Q2: The computerized CPA exam better prepares young accounting professionals for the current business working environment compared to the previous paper-and-pencil version of the CPA exam.	2.57***	3.32	3.69	3.20	3.26* N = 153
Q3: The change to the computerized CPA exam has affected the public and professional perception of the prestige of the CPA designation in a negative manner.	4.71	4.57	4.08	4.20	4.44**** N = 153
Q4: Passing rates over 50 percent on any section of the CPA exam are too high.	4.04	3.45	3.53	3.93	3.62 N = 153
Q5: The change to the computerized CPA exam had a positive impact on the number of accounting graduates who are sitting for the CPA exam.	3.18	3.49	3.53	2.93	3.39 N = 153

* Statistically significant at p<.05 based on Chi-Square test.
**The average responses for question 1A and 1B were statistically significantly different at p<.001 based on ANOVA results.
***The accounting student respondents were statistically different from the accounting educators and professionals at the .05 level.
****Statistically significant at p<.001 based on Chi-Square test.

APPENDIX A

In 2004, the computer-based CPA exam replaced the paper-and-pencil version of the CPA exam.

Please evaluate the following statements by circling a number on the given scales.
(1=Strongly Agree, 2=Agree, 3=Somewhat Agree, 4=Somewhat Disagree, 5=Disagree, 6=Strongly Disagree)

1. The computer-based CPA exam is as rigorous as the previous paper-and-pencil version of the CPA exam. (*Please circle one number)*

1	2	3	4	5	6
Strongly Agree					Strongly Disagree

2. The computerized CPA exam better prepares entry-level accounting professionals for the current business working environment compared to the previous paper-and-pencil version of the CPA exam. (*Please circle one number)*

1	2	3	4	5	6
Strongly Agree					Strongly Disagree

3. The change to the computerized CPA exam has affected the public and professional perception of the prestige of the CPA designation in a negative manner. (*Please circle one number)*

1	2	3	4	5	6
Strongly Agree					Strongly Disagree

4. Passing rates over 50 percent on any section of the CPA exam are too high. (*Please circle one number)*.

1	2	3	4	5	6
Strongly Agree					Strongly Disagree

5. The change to the computerized CPA exam has had a positive impact on the number of accounting graduates who are sitting for the CPA exam. (*Please circle one number)*

1	2	3	4	5	6
Strongly Agree					Strongly Disagree

Please complete the demographic questions on the back

APPENDIX A

Instructions: Please place an X in the square or fill in the blank where appropriate.

1. Gender: _____ Male _____ Female

2. Age: _____ 18-24 _____25-34
   _____ 35-44 _____45-54
   _____ 55-64 _____Over 64

3. Highest Education Level: _____ High School _____Masters Degree
   _____ Some College _____Doctoral Degree
   _____ Bachelors Degree _____Law Degree

4. Occupation: _____ Student _____Accounting Educator
   _____ Accounting Professional _____Business Professional
   _____ Other, Please Specify:_____

5. Are you a CPA? _____Yes _____No (If Yes, please answer question 6)

6. Which version of the CPA exam did you pass?

   _____ Computer-based CPA Exam _____Paper-and-pencil CPA exam

7. How many years have you worked in the following areas of accounting?

   _____Public _____Education _____ Other, Please Specify:_____
   _____Industry _____Government

Comments: _____
_____
_____
_____

Thank you for your participation