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Continuing Professional Education for Licensed Accountants in Tennessee

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Continuing Professional Education for Licensed Accountants in Tennessee

A dissertation presented to the faculty of the Department of Educational Leadership and Policy Analysis East Tennessee State University

In partial fulfillment of the requirements for the degree Doctor of Education in Educational Leadership

by
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December 2017

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Keywords: Continuing Professional Education, Continuing Professional Development, Certified Public Accountant.
ABSTRACT

Continuing Professional Education for Licensed Accountants in Tennessee

by

Brian Lucas

Accounting is a professional occupation that is continually evolving and requires a dedication to continuing education to meet the legal demands of new regulations and to maintain professional competency. Continuing Professional Education (CPE) is required by state boards for certified public accountants (CPA) to meet these requirements and to maintain professional competence. CPAs are responsible for complying with all applicable CPE requirements, rules, and regulations of state boards of accountancy, as well as those of other professional organizations.

The purpose of this study was to determine the opinions of CPAs about the current requirements for CPE and to determine their level of satisfaction with the content and delivery of CPE instruction. CPE has come under scrutiny in recent years with some professionals questioning if the needs of accounting professional and the objectives of continuing education are being met.

This survey research included 23 Likert-type items and 5 demographic questions. The survey was administered to 203 licensed certified public accountants to obtain their opinions about continuing education. The 5 dimensions of the survey were: Value (cost benefit), Delivery (methods and quality), Benefit to Self, Benefit to Others, and Barriers (to obtaining CPE). These
dimensions were compared across the demographic variables of gender, years of experience, type of business, number of employees, and position with their employer.

No significant differences were found among the 5 dimensions between gender or among different positions. Significant differences did occur among the Dimension of Value opinions based on years of experience, among the Dimension of Value opinions based on type of business, among Dimension of Benefit to Self based on type of business, among the Dimension of Value based on number of employees, and among the Dimension of Benefit to Others based on number of employees.
DEDICATION

I dedicate this dissertation work to the loving memory of my parents, Dr. George J. Lucas and Margaret E. Lucas who both taught me the value of education. Through their personal lives, they taught me that education adds to the quality of life. Education is an abstract value that is priceless and can never be lost, stolen, or taken away. It lasts a lifetime and the knowledge can be shared freely.

My immediate family including my wife Pat and two daughters Rachel and Leah, also deserve special recognition and gratitude for tolerating me devoting time to my work and studies instead of devoting time to them as they deserved. I will have to make up time I owe to them in the future.
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Most importantly I wish to thank Jesus Christ for giving me the strength to continue my pursuit of education, as He helped to guide me on the new path that I had chosen.

I would also like to express my sincere appreciation to all the faculty of the Educational Leadership and Policy Analysis department at East Tennessee State University for their generosity for sharing with the students their knowledge and enthusiasm for education.

In addition, I would like to mention and give a special thanks to Ronnie Maye, a former ELPA student, who initially informed me about the program and inspired me to investigate it. Without him, I may have never known about the ELPA program in order for me to pursue my dream.
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CHAPTER 1
INTRODUCTION

The accounting profession is a complex technical field that is constantly changing because of new legislation, research, and business transactions evolving due to technology and international business. Members of the accounting profession must continually seek the new knowledge available to maintain their skills. Continuing Professional Education (CPE) is required by state boards for certified public accountants (CPA) to meet these requirements to maintain professional competence. CPAs are responsible for complying with all applicable CPE requirements, rules and regulations of state boards of accountancy, as well as those of other professional organizations. However, the CPE requirements vary from state to state.

CPAs in Tennessee are required to renew their licenses every two years. The general requirement for CPE is 80 hours of instruction in this two year period with a minimum of 20 hours each year. Two hours of the requirement must be a board approved state-specific course designed to familiarize the licensee with accountancy law and rules as well as professional ethics. Other instructional areas are attest, taxation, auditing, and management advisory services. CPAs may fulfill 50% of the CPE requirement by instructing classes. CPE credit may also be earned by reading journals and taking an exam on the material. Also, CPE credit is available for authoring a book or journal author on accounting.

A large number of professional certifications are included in the accounting profession including: Certified Public Accountant (CPA), Certified Management Accountants (CMA), Certified Internal Auditors (CIA), Certified General Accountant (CGA), Certified Fraud Examiner (CFE), Certified Information Systems Auditor (CISA), and Chartered Accountant (CA)
(Robert Half International, 2014). In the United States, the largest professional accounting group hold the Certified Public Accountant (CPA) designation, and some accounting professional hold multiple certifications. As of 2016, the number of CPAs in the United States according to the National Association of State Boards of Accountancy (NASBA) was to 664,532 (Sheridan, 2017). The group of accounting professionals that holds the official certification of CPA has been chosen for this study as this group originated required continuing education in the accounting profession, is the most widely recognized, and has a greater number of members than any other group of accounting professionals in the United States.

**Statement of the Problem**

Professional accountants are required to maintain ongoing professional education throughout their careers. States require continuing education, generally known as continuing profession education (CPE), with certified licensed professionals meeting this requirement in a variety of ways including traditional classes, seminars, and online courses. There has been limited research in how professionals view the value, benefit, and delivery of CPE hours.

The purpose of this study was to determine the opinions of Certified Public Accountants (CPAs) about the current requirements for Continuing Professional Education (CPE) and their level of satisfaction in accomplishing the purposes intended by these requirements. The researcher examined the perceptions of practicing CPAs about whether the current requirements are an appropriate means to maintain professional competency and other factors related to their opinions in obtaining required CPE including value, delivery, benefit to self, benefit to others, and barriers to obtaining CPE.
Research Questions

This researcher investigated opinions and preferences of professional accountants concerning continuing professional education requirements and examined whether these opinions and preferences vary among different demographic groups. The research questions were as follows:

1. Is there a significant difference in the mean scores for the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) between males and females?

2. Is there a significant difference in the mean scores for the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) among CPAs’ years of experience (1-9, 10-19, 20-29, 30-39, and 40 or more)?

3. Is there a significant difference in the mean scores on the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) among CPAs’ types of business (public practice, banking/finance/insurance, industry, government/education, and nonprofit/small business/other)?

4. Is there a significant difference in the mean scores on the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) among the firm sizes by the number of employees (1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more)?

5. Is there a significant difference in the mean scores on the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) among the positions held by CPAs within the company (self-employed, employee, manager, and partner/other)?
Significance of the Study

CPE continues to be a topic of discussion among educators and professionals with differing opinions about what the current requirements should be, what delivery methods are acceptable, and how compliance should be measured. Many proposed changes are currently under discussion and review by the AICPA. The issuance of periodic exposure drafts requesting professional opinions and comments for feedback indicates that change is currently in progress (Task Forces of the AICPA & NASBA, 2011).

As a result of this study some of the CPE needs of certain accounting groups may be identified. By asking the opinions of accounting professionals who are required to participate in CPE this study may contribute to the current understanding of the issues, including delivery methods and barriers to obtaining CPE credits. Studying the opinions of these professionals will also provide more information to those delivering CPE to accounting professionals.

Limitations and Delimitations

Participants in this study were limited to a subset of licensed professional accountants who attended a monthly regional chapter meeting of the Tennessee Society of CPAs in Kingsport, Knoxville, or Chattanooga. Given the limitations of the study population, the results of this study cannot be generalized to a larger population of CPAs in Tennessee or the United States.

Although highly unlikely given the geographic distances, it is possible that subjects attended multiple regional monthly meetings and completed the survey more than once. Attempts to avoid this potential duplication were made by explanation at the beginning of the meeting that it should not be repeated if it was completed in a different setting.

The interpretation of results is always limited by the validity and reliability of the instrument used. In this study the survey is based on the Likert-type survey developed by
Wessels (2007). Wessels used the original survey with accountants in North Carolina to examine their perceptions of continuing professional education requirements and barriers to obtaining CPE. She was seeking areas of weakness in continuing education and discussed possible improvements.

**Definitions of Terms**

Continuing Professional Development is somewhat broad in its definition because it can be inclusive of required hours of study but is ongoing development that is generally not required by statute for professional licensure. Instead the learning is simply personal development undertaken by individual to increase their knowledge and or competence. “Essentially, continuing professional development encompasses three types of activities: (1) Self-directed learning experiences, (2) formal professional development programs, and (3) organizational development strategies” (Caffarella & Zinn, 1999, pp. 242-243). The self-directed activities are those learning experiences planned, executed, and evaluated by the individuals. The second type of development programs are offered by third party organizations that include professional meetings, workshops and conferences aimed at continually developing the professional. The third type of activity, organizational development strategies, includes planned programs intended to bring about change within an organization rather than an individual. This type of continuing education is not based upon a prescribed number of hours to maintain a license, but typically the individual or organization does so in order to continually improve products or services in the professional field.

Continuing Professional Education (CPE) “is the education necessary after a person has fulfilled all the formal educational requirements for entrance” and continued membership in a
particular profession (Chatfield & Vangermeersch, 1996, p. 168). CPE is commonly known as the hours of education required by the state to maintain the professional license. Most accountants are committed to ongoing training and updates due to the dynamic nature of their profession, changing laws and regulations, to maintain a competitive advantage, and to provide accurate information and adequate services. Failure to provide accurate information can be costly for large businesses. The public is also provided some protection from accountants that would otherwise fail to maintain knowledge of the changing laws.

Overview of Study

Chapter 1 presents the accounting profession and introduces some of the stakeholders and decision makers including the AICPA, NASBA, the states of the United States, members of the accounting profession, and businesses that receive professional accounting services. This chapter also provides some explanation of the educational requirements of maintaining professional licensure in the accounting profession and why this is necessary. Chapter 2 presents a literature review of research that focuses on continuing education in the accounting profession. Chapter 3 presents the methodology of the research. Chapter 4 is used to present the data collected and the results of the analyses. In Chapter 5, the findings of the research are be discussed, including interpretations and potential impact. Suggestions for implementation and further research are also discussed.
CHAPTER 2
REVIEW OF LITERATURE

The American Institute of Certified Public Accountants (AICPA) was established in 1908 and serves as one of the rule and standard setting body for members of the accounting profession (AICPA, 2014), and plays a larger role in continuing education requirements than other organizations involved in accounting standards. Changes made to the rules of accounting practice apply to members of the AICPA and to licensed professionals across the United States. The AICPA’s control over members is secondary, however, as licensure is administered by the states. Another organization, the National Association of the State Boards of Accountancy (NASBA), was also established in 1908 to unite communication and decision making across the states.

The AICPA began providing continuing education for members in 1958. In 1971 the AICPA made continuing education a requirement for all licensed accountants, with state governments given the responsibility for enforcing this requirement. By 1994 all states had enacted the requirement of continuing education in order to maintain licensure (Chatfield & Vangermeersch, 1996). The International Federation of Accountants (IFAC) also instituted mandatory continuing professional development for all its members in 2006, extending the requirement for continuing professional education to a global scale (Wessels, 2007).

Continuing Education

Education to maintain and improve professional competence is called continuing professional education (CPE). Prior to the 1970s continuing professional education was rarely
discussed. Queeney (1992) stated that several decades ago the concept of continuing professional education was not a familiar one. People had the perception that once the initial professional education was completed, that was all the training necessary. In some circumstances there may have been an apprenticeship period served; but beyond that, they were always considered professionals. People assumed that professionals would learn what they needed to learn on their own.

The concept of continuing professional education began to grow in the 1960s as the public became concerned about the competence of professionals. Many professionals who were concerned about potential problems with carrying out their duties returned to the classroom as a quick fix for minor incompetency. As time progressed more and more professionals began to realize the need for continuing professional education programs (Queeney, 1992).

In the 1970s professionals were experiencing obsolescence in their fields, especially with the exponential changes occurring in technology. Professionals were not keeping up with the changes without self-motivated continuing professional development. When professional societies were reluctant to make changes to member requirements, politicians and legislators were motivated to show they cared about protecting the public, which brought about discussions for required CPE (Stern & Queeney, 1992).

This segment of education for adults, continuing education to maintain or improve professional competence, is a continually growing field, expanding requirements to more and more professions. Hunt (1992) reported that individuals who practice one of the many licensed professions will be required to obtain some form of continuing education, or lifelong learning, throughout their career in order to maintain competence and keep up with the ever changing complexity, technology, knowledge, skills, and regulations. In the early 1970s very few
professions had any specific requirements for continuing education. Now many occupations require continuing education for licensure. Even practitioners in professions that do not require licensure, such as auto mechanics, are required to keep pace with changing technologies and regulations or their performance fails acceptable requirements. Professionals in many occupations need to plan a career of lifelong learning in order to remain competitive and effective in their field (Becker, 2011). This increasing need has made continuing education a very interesting and dynamic field in education, with demand growing at an alarming rate (Hunt, 1992).

The traditional sole independent CPA who existed 30 to 40 years ago is less common, and larger firms with more employees are becoming the norm. This shift brings about a need to be able to manage a firm with a number of employees, and along with it, the need for management education for middle and upper level professionals (Walley, 1996).

Another area affecting most businesses today is the global market place (The Future of Learning, 2014). Businesses of all sizes and types are competing, trading, and expanding in the global market place. This rapidly expanding globalization is creating many new complex business transactions. Seventy-nine percent of CPA firms are projecting international growth, including half of all sole practitioners. Historically the accounting field was based on planning and certainty before going into a project. In these changing markets CPAs are required to use a “feeling your way” experimental approach (The Future of Learning, 2014). The new business environment requires a new mind shift and new approaches to learning and development.

In addition to changes occurring in the business world, education is also in the process of changing. The traditional classroom with an instructor feeding information to students is becoming obsolete. Future education will involve social interactive experiences and discussions
among peers. Education is still in a state of change and many uncertainties remain. According to Harvard professor John Richards educators will bring changes to education by experimenting with new teaching innovations, methods, and technologies (The Future of Learning, 2014). Determining new methods will involve taking risks, analyzing results, and remaining flexible.

The changes required are not going to come about easily. Not only are students experiencing change in how information is presented, teachers must also undergo change from a teacher input focus to one of student output. Instructors have their own style of teaching and people are often resistant to change. New teaching methods and learning styles must replace old styles that instructors have become used to and are comfortable with. Informal learning methods will be embraced, teachers will serve more as facilitators than lecturers, and technological devices will make learning available anytime and anywhere (The Future of Learning, 2014).

Continuing Education of the Accounting Profession

The purpose of continuing education for accountants is to maintain and continually improve the professional competence of members of the profession so that services performed and opinions formed are as accurate and beneficial as possible and to ensure those receiving services from CPAs licensed by the state are, in fact, receiving the services of qualified professionals. Thomas and Harper (2001) pointed out that in the United States continuing education requirements for professional certification are controlled by the states and the states are responsible for issuing and maintaining the licenses to practice. When we compare requirements across different states, vast differences exist. Although 40 hours of CPE per year tends to be the average requirement, differences occur in annual minimums, carry-overs, hours required in technical accounting areas like auditing and tax, and hours accepted outside of
technical accounting areas. The state mandated requirements of Tennessee are provided for review in Appendix A (State of Tennessee, Board of Accountancy, 2014).

The accounting profession carries with it a successful core business model, with each CPA demonstrating education and experience by passing a minimum competency exam and required continuing education. These traits make CPAs a commodity of value that will “deliver professional services that can be trusted to be high quality, accurate, and reliable” (Barry, 2014, p. 5).

States began to require continuing professional education in the 1980s to ensure uniform competency among professionals and to bolster the public’s confidence. Yet, the profession remained largely self-regulated until congress passed the Sarbanes-Oxley act of 2002 to create the PCAOB (Public Company Accounting Oversight Board). This led to CPA firms performing accounting services for the public being subject to peer review every 3 years, and reports submitted to the state for review. Prior to CPE requirements, reputation was just as important as the bottom line (making a profit), and typically a good reputation led to good profits (Barry, 2014).

In recent years leaders at the AICPA, a national accounting regulatory body, and NASBA, the national organization that joins the state regulatory bodies together, have discussed continuing education requirements for CPAs. These two major leaders in the accounting profession in the United States have worked together to develop task forces and discuss proposed changes. In August 2011 the joint organizations issued a proposal draft stating their plans for change, called an exposure draft (Task Forces of the AICPA and NASBA, 2011), requesting professionals to respond to the draft expressing their opinions.
Although these organizations can require their members to follow the new guidelines, the new guidelines have not yet been made official by the individual states that regulate licensure. For the guidelines to become official each state must determine what items and to what extent the new guidelines will be incorporated into its own licensing requirements. The authors do point out the difference between “should” and “must”; so that should indicates guidelines to strive for, while must indicates a requirement for certification. The proposed changes could take a while to be translated into licensing requirements because it took 23 years for the requirement of Continuing Professional Education to be incorporated into licensing requirements in all United States and territories.

The first CPE revision suggested by the joint committees applies to professional competence, stating that all continuing education credits should be associated with programs that increase or maintain professional competence (Task Forces of the AICPA and NASBA, 2011). This guideline is aimed at eliminating the practice of taking courses to fulfill required hours which do not improve the CPA’s job performance. Courses are often taken that are easy or familiar and, therefore, do not provide additional benefit. Sometimes course topics even fall outside of the CPA’s work responsibilities.

The next area of change focuses on what is required of CPE providers. Professional CPE sponsors are required to be certified by NASBA (with some exceptions for accredited schools), with new standards adding to the benefits provided to the CPAs. Continuing professional education may be obtained outside of NASBA certification, but then documentation falls upon the individual CPA. New requirements for CPE presenter qualifications and the expected benefits to be obtained by participants include objectives to be accomplished, knowledge level
aimed at addressing, and professional qualifications of the presenter (Task Forces of the AICPA and NASBA, 2011).

While the AICPA and the NASBA task forces are currently working on a new unified set of rules recommended for the future, the AICPA and its predecessor organization, the American Institute of Accountants, have been working on a Uniform Accountancy Act (AICPA and NASBA UAA Committees, 2014) since 1916. Although not as recent, the National Curriculum Project (Ciesick, 1985) is an example of the changes that continue in accounting and how various groups have attempted to create a structured and effective educational system to optimize the profession. The National Curriculum concept began in with the Texas Society of CPAs and was soon joined by the California, New York, and Illinois societies. From 1980 to 1982 these groups designed a new curriculum urged other state societies to adopt. For a time the AICPA embraced the curriculum and served as the primary coordinator of the project. The National Curriculum became a task of grand proportions that involved eight task forces and over 100 members of the profession from 40 states over several years. The grand size was difficult to manage (Ciesick, 1985).

The National Curriculum was a combination of 501 or more knowledge and skill areas within and pertinent to accountancy and fits each area into an overall structure. Each individual learning unit formed a CPE course that fits into a broader course of study. The accounting field was segregated into three categories: public practice, industry, and government. Depending upon the field of work, a specific course of study would be planned for professional to optimize their learning experience over the course of their careers. Each learning unit was described in detail giving a description, major topics covered, objectives, level of study (basic, intermediate, advanced, or update), and the degree of knowledge or experience required. Within the categories
of practice, industry, and government were six principal fields: accounting and auditing, taxation, advisory services, management, specialized knowledge and applications, and personal development. Specific groups of learning units would be designed to complement certain fields of study but allowed great flexibility to follow different paths to concentrate on more specific fields of study. For many years the National Curriculum was to be the professional map of the future and continued to have a strong hold in the industry until early in the new millennium (Ciesick, 1985).

Opinions About Current CPE Regulations

Researchers satisfied with current requirements discussed ways that participants can maximize their benefits within the current constraints existing system (eg. Korney, 2006). Some have suggested that the current requirements are minimum standards and successful participants will normally wish to learn far beyond the minimum requirements (eg. DeLange, Jackling & Basioudis, 2013; Knese, 2013). And in some cases, minor changes were recommended that still fit within the current structure (eg. Ramos, 2014).

The need for change group insists that the current structure of CPE is not adequate and not fulfilling the intended goals (e.g Clyde, 1998; McCabe 2015, Thomas & Harper, 2001). The current requirements are antiquated and have not kept up with the rapid changes occurring in the business world. Improvements are well past due and significant changes need to be made. The changes suggested would provide much more benefit to the public and to accountants than the current CPE requirements.

Knese (2013) was the chairman for the Institute of Management Accountants and is a promoter of continuous learning. He expressed that when a professional is well rounded in many
areas, the conversations are more interesting for clients as well as the accountants seeking business. Knese was satisfied with the current CPE requirements but believed that people should continually strive to go well beyond the minimum requirements. The combination of continuing professional education and continuous learning make a better professional and a more interesting person. In our daily work people want to deal with knowledgeable professionals who are interesting people.

Ramos (2014) is another CPA who considers the current CPE standards to be adequate but suggested approaches to maximize the benefits of the current system. His primary focus is not monetary return on investment (ROI) in the traditional accounting terminology, but rather the most efficient and effective ways to allocate CPE resources to get the most benefit. (These ways are examined further in the Suggestions for Improvement section of this paper).

In 2007 Wessels examined accountants’ opinions of CPE. A Likert-type survey of 1,957 accountants in North Carolina revealed that the participants felt CPE requirements were effective but many barriers were present that reduced the effectiveness. If these barriers could be minimized, effectiveness could be increased. The results of Wessels survey indicate 85.5% perceived their knowledge was increased and 85.2% agreed that they improve the image of the profession. In comparison only 48% agreed that CPE helps to protect the public, 31.2% agreed employability is increased, and 15.9% agreed earnings increased (Wessels, 2007).

DeLange’s (2013) research was conducted in Singapore, South Africa, Australia, the United Kingdom, and the United States to get an international perspective of accountants’ opinions. His findings indicate that most of the participants were of the opinion that the CPE required by legal statues should be considered minimum requirements and that true professionals should strive to achieve well beyond the minimum requirements.
McCabe’s 2015 research specified a desire for change to CPE and can be summarized with the following statement: “To fuel the passion for learning in the CPA profession, we must fundamentally change how regulation, professional development and CPE are structured, delivered and measured” (p. 1). Businesses rooted in tradition are constantly being challenged. Change is certain in the workplace today, and only those willing to adapt will survive and prosper in today’s marketplace. For this change to occur successfully, education is necessary. For the accounting business this change must occur at all levels; in the college programs and in CPE for the practicing accountants throughout their careers. The drive for changes in CPE began in 2008 during the recession and CPAs chose to save money by staying at home and taking courses online, eliminating the costs of travel, hotels, and live face-to-face classes. The home computer courses also saved time with busy schedules and allowed training to be more customized for individual needs.

Walley (1996) endorsed the definite benefits from CPE and the ongoing need for such requirements. He identified several areas of continuing education that need to change for the profession to get the intended benefits. For example, managing a firm and the associated personnel is a complex and difficult task and many people need to learn more so they are better equipped to do the job. CPE credit for firm management should be offered to fulfil requirements and be more easily obtainable for accountants.

Another area in need of CPE credit is the management of accounting engagements (Walley, 1996). When accounting services are provided to a client, the engagement must be properly planned and supervised, and appropriate conclusions reached. Resources must be assigned in a proper and effective manner. CPE courses and credit for engagement management would be beneficial.
The growing and extensive use of computer technology in accounting is the third area identified by Walley (1996) as requiring CPE courses and credit. This need for technology related knowledge and understanding adds a desperately needed component to the list of educational requirements.

According to Walley (1996) communication is the fourth area severely neglected in the education of accountants. For instance, the Continuing Education Development project found that accountants are often weak in communicating with clients (Queeney, 1992). Communication is not in the technical area of required CPE and many states do not give credit for communication courses, yet communication is necessary and critical factor in client engagements and management of CPA personnel. The primary cause of complaints against accounting firms is due to lack of communication. Lack of communication or poorly managed lines of communication in accounting firms is often the cause of failure for an organization.

When determining which courses receive credit and which ones do not, the crossover benefit of related courses is currently ignored. For example, a business advisory course that does award CPE credit can have crossover benefits to managing a CPA firm. A course in managing a CPA firm that does not allow for CPE credit can have crossover benefit for business advisory services. Providing credit for these related courses is Walley’s (1996) fifth area for recommended improvement.

The sixth and last area Walley (1996) identified as requiring change was the disparity in requirements among states. The requirements in one state can be vastly different from the requirements in another state. For example, some states allow credit for computer technology or management, while other states may only allow credit for the technical accounting related courses, i.e. financial accounting, auditing, tax, and business advisory. Accounting firm
management and computer technology should both be included in the annual requirements to maintain the CPA license. Of 40 hours CPE per year, Walley recommended 16 hours should be in accounting firm management, engagement management, and computer technology. The remaining 24 hours would continue to be in the classical technical accounting.

Another area in need of change is measuring what matters (The Future of Learning, 2014). The current focus on hours of input is far too indirect. There are many more direct approaches to measure the desired outcome. “There must be a shift in compliance that is authentic and relevant, and measures learner competency, development or performance” (The Future of Learning, 2014). Clyde (1998) stressed the need for change in the current system in “CPE is Broke; Let’s Fix It” (p. 77). She reiterated the message seen in other articles that current CPE requirements are viewed by many CPAs as “hours I get to keep my license” and “what I do to survive” (p. 77). This outlook is because the current system focuses on hours of input rather than focusing on changes or improvements in output or capabilities. There is no real focus on improvement or gain of skills or knowledge. The hours of class time input is a poor measurement tool to quantify learning.

Clyde (1998) stated that the future demands of the accounting profession will require CPAs to embrace lifelong learning. Continual changes in the accounting profession will demand the knowledge base and competencies to be continually improved. Hopefully, future changes to the profession will include focus upon increases in professional competency rather than an accumulation of hours in passive absorption hoping learning takes place.

While formal classes with instructors or online courses that confirm participation are more typically allowed for credit, this credit by licensing organizations does not coincide with the majority of the actual learning that occurs in the life of a professional. An AICPA member
survey in 2014 ranked on-the-job training as very important or extremely important (The Future of Learning, 2014); however, most organizations do not allow compliance credit for informal training. For the typical professional 70% of learning takes place as informal on-the-job, 20% as coaching and mentoring, and 10% in formally structured courses. The current system neglects the significant learning and knowledge attainment that naturally takes place with on the job training or self-directed readings or research. For example, during the course of working on a return, a tax return preparer may need to research the requirements and limitations for a loss carry back or when income averaging may be beneficial. Knowledge is gained but cannot be counted toward meeting requirement standards.

Timeliness and customization are two more factors that are important considerations when providing is CPE (The Future of Learning, 2014). If a new tax act is passed, timeliness would allow a new webinar to be created in a short time to deliver training to the home or office. Customization to meet specific training gaps is also an important feature and more customization is being demanded from those seeking training.

**Barriers to Obtaining Required CPE**

CPE is relatively new concept to some professionals and many lack the knowledge of how to choose appropriate educational programs, let alone how to create a long-term development plan. As practicing professionals realize deficiencies, they tend to remedy the situation with quick and convenient fixes and do not plan for a lifelong of learning for the profession. Areas of known deficiencies are addressed in an ad hoc fashion, and other areas are ignored completely. Because professionals were not initially prepared to become lifelong learners, their approach has been sporadic, ineffective, and inefficient. Queeney (1992) points
out that people in general, including professionals, do not always seek out that which is best for them. Some may choose the simplest and quickest path for convenience, cost, location, or timeliness with little regard for content.

In current times many regulators of CPE are questioning if CPAs are now more concerned with compliance rules and meeting the minimum required hours rather than improving competency as intended. Some regulators question if taking the same required ethics course repetitively is still taken seriously (Barry, 2014). If accountants do not perceive the CPE as being effective, they are less likely to fully participate in the program. For example, they may not pay attention to the presentation or may take less challenging courses. Some accountants refer to CPE as required “hours to keep my license” (Clyde, 1998, p. 77). In these circumstances the professional is seeking compliance rather than competency (Wessels, 2007).

From the providers perspective; courses, workshops, and other activities are developed on the basis of marketability and profitability with little if any planning for educational merit or professional development over time. Professional accountants are not a homogenous group, but a well-diversified group with many different needs. Each person has a different set of skills and a different set of experiences. These differences bring about variations in educational needs creating many small groups that are not satisfied by the profit hungry CPE providers that cater to the masses (DeLang, 2013).

Barriers to obtaining CPE are sometimes referred to as deterrents, and Wessels identified a number of these in her research and separated them into categories. The first category, Situational Deterrents, are barriers that occur outside of the participants control and include work requirements, family requirements, and costs. The second category is Dispositional Deterrents
which relate to a participant’s perceived value of the course. Institutional Deterrents include course content, quality, location, and accessibility. The final category is Informational Deterrents arising from lack of information (Wessels, 2007).

The U.S. Department of Education is interested in lifelong learning for adults and considers continuing education for professionals a very specific subset of lifelong learning that has different characteristics than other areas of lifelong learning for adults. Because of the growing need for this field of education, the Department of Education has taken a special interest in hopes of helping demand be met in a manner that is beneficial, especially for the learners. Some of the characteristics that need to be taken into consideration are that these learners are usually full-time working adults with families, schedules, and responsibilities that must be met and fulfilled in addition to class and homework schedules. These factors must be taken into consideration in the design of classes and coursework. The 1984 census indicated that over 8 million Americans participate in at least one job related educational opportunity, and we must consider the magnitude of this educational enterprise and its effect on the economy not only assisting with job performance, but also creating jobs (Hunt, 1992).

Stern and Queeney (1992) discussed some potential problem areas in CPE and attempt to identify some possible solutions or improvements to those problems. One of the first problem areas identified is that CPE is, as a whole, a part of a larger field of lifelong learning. In the arena of lifelong learning there are academicians who study professionals as learners and how to maximize the benefits of education for them. However, those providing CPE instruction are specialized professionals, such as accountants, lawyers, or physicians, who are experts in their fields but do not discuss or share information with the other professions nor with the academicians in the area of lifelong learning. They operate in groups analogous to silos in that
they are not sharing or receiving additional information from the collective group on how to maximize learning benefits to professionals.

Another problem area identified by Stern and Queeney (1992) is a gap that exists between expectations of academic promoters of continuing education and those of the continuing education providers. Some refer to this difference as research versus practice of CPE. On the academic side the education researchers expect continuing education to be a quality product following an organized set of guidelines that meet certain credentials. Those in higher education express CPE delivery lacks quality. Providers of CPE do not have to be professional educators and are often times businesses people that operate a business organized to make a profit. The profit motives are often times at odds with the student needs or the quality of delivery. The focus upon financial considerations as the driving force behind CPE could lead to decisions that are not in the best interest of the student-professionals serving the public. Arguments continue over whether mandatory CPE actually ensures competence or even assures learning has taken place.

Current Direction of CPE in Accounting

The AICPA (2014), an organization serving as the administration of the accounting profession, recognizes and acknowledges that a need for change exists and a task force has been assigned to focus on this goal. They seek input from all stakeholders in professional development, including anyone affected directly or indirectly. The AICPA task force includes public accounting firm leaders, industry CPAs, regulators, association leaders, and educators. They refer to their work of lighting the fire as a metaphor to describe the growing desire to feed the need to learn. They are examining the strategies available to increase the desire to learn and
make changes in continuing education that will keep up with the changing dynamics of businesses today (The Future of Learning, 2014).

While the AICPA is trying to inspire the profession as a whole to take action in bringing about the needed changes, barriers to change exist in people and in systems. For CPAs the compliance based nature of the business can feel detached from building professional competency. Some systems have begun to change by allowing shorter time increments for learning, new learning methods like self-study with a monitor, and models that measure competency. But uniform changes across the profession will take much time and effort to implement (The Future of Learning, 2014).

The Uniform Accountancy Act (UAA) is designed to be an authoritative rule book for the CPA profession and not intended to regulate state mandated CPE requirements or new learning methods (AICPA and NASBA UAA Committees, 2014. However, the document does provide general guidelines in many accounting areas including education along with other accounting functions it is attempting to control and standardize within the profession. A paragraph from the preamble for the section of statements on standards for continuing education aptly describes the accounting profession today and why CPE is so important: “The profession of accountancy is characterized by an explosion of relevant knowledge, ongoing changes and expansion, and increasing complexity. Advancing technology, globalization of commerce, increasing specialization, proliferating regulations, and the complex nature of business transactions have created a dynamic environment that requires CPAs to continuously maintain and enhance their knowledge, skills, and abilities” (AICPA and NASBA UAA Committees, 2014, Appendix B-6). The rules do not specifically give guidance for every possible situation, but instead are intended to be “evergreen” (AICPA and NASBA UAA Committees, 2014, Appendix B) by providing
broad, general guidelines that can be applicable to a variety of situations. The text explains further that the standards are broadly stated to allow for new developments such as innovative learning techniques and new learning theories that may include more emphasis on outcome-based learning.

Learning activities will no longer focus on hours of class time but instead will serve: “to maintain or improve professional competence” (AICPA and NASBA UAA Committee, 2014, p. Appendix B-8). The development of skills does not need to be restricted to current needs but may also address any field of service that could be needed in the future. To optimize the benefit of CPE, an accountant should develop an individualized learning plan that will close the gaps between current knowledge and skills and those that are needed in both the present and the planned future.

In an update to the classic CPE requirements, the UAA now allows states to accept independent study and self-study for CPE credit if they are overseen by a CPE program sponsor. In addition, self-study requires a follow-up test and independent study will require a contract of what will be accomplished during the independent study and a written report of what was learned and accomplished as outlined in the contract. In determining how many CPE credits are allowed for self-study, the CPE sponsors must perform a pilot test of completion time or computation using a prescribed word count formula (AICPA & NASBA UAA Committees, 2014).

CPAs are seeking courses that develop competency and are drifting away from the focus on completion of required hours. “Over the next decade, competition will increase, as game-changing new businesses challenge established players” (The Future of Learning, 2014). CPAs are making the change toward competency-based training to be more competitive, efficient, and productive. This type of training is also one of the focal points stressed by the Future of Learning
Task Force of the AICPA. The new focus is on training to improve rather than to maintain is a positive and beneficial change for the future of CPE.

Suggestions for Improvement

Although many CPAs may view statutory CPE requirements as a “necessary evil,” most agree that maintaining knowledge and skills is essential to a successful career in the ever changing environment of accounting. The accounting profession has been described as “an explosion of relevant knowledge, of a changing and expanding nature, and increasing complexity” (Thomas & Harper, 2001, p. 33). For these reasons the accounting profession demands CPAs continuously maintain and enhance their knowledge and skills through a lifelong program of learning activities. Professionals should also learn about new emerging subject areas, read a variety of business publications, and allocate time for topics less familiar (Knese, 2013).

In 2013 corporate spending on training increased by 15% and continues to rise in response to the growing skills gap due in part to the rising complexity of laws, regulations, and standards, as well as increased regulatory scrutiny (Ramos, 2014). CPA firms tend to focus on measurable economic benefit but return on educational expenses is difficult to measure directly and indirect measures are inaccurate. In frustration, CPA management tends to focus instead on the spending side and, often times, responds by cutting spending on education to improve return on investment (ROI).

To maximize the benefit of the educational dollars spent, attention needs to be placed on spending education dollars more wisely (Ramos, 2014). Ramos (2014) suggested tying the firm’s learning strategies to its business strategies, aligning training decisions across the firm, outsourcing training, and increasing the applicability of sessions by in-house trainers as
approaches to maximize ROI in continuing professional education. When CPE credit is received, the time should be spent on studies that will increase knowledge and not simply fulfill required hours. Knese (2013) made a number of recommendations for increasing participation by professionals at all levels of the organization to facilitate the commitment to continuous learning through CPE.

Students and educators should be involved in decisions about what will be the focus of responsibility, power, and authority over continuing professional education in accounting. We have to take into consideration the various groups planning CPE including higher education, CPE providers, professionals, and regulators such as the government. Successful continuing professional education requires higher education groups to work with professional associations, labor unions, employers, private enterprises, and other interested parties to increase the demand for the delivery of more effective, efficient, and quality programs (Stern & Queeney, 1992).

Those providing CPE courses should realize that CPE is very different from other areas of adult education. Take for instance initial professional education for groups like accountants or engineers. They are taught about the profession through an introductory program at the postsecondary level. Continuing professional education occurs at a post-tertiary level where programs include practice level educational needs. Teaching experienced and practicing professionals involves a different set of “pedagogical, organizational, political, and fiscal characteristics” (Stern & Queeney, 1992, p. 16). Because of these unique sets of circumstances, effective teaching of CPE requires knowledge, experience, and ideas from several perspectives, making the sharing of knowledge with other professional groups and educators all that more important and beneficial. Continuing education must have a more direct relationship with the practice of the profession. It must build on previous education and experience, address a broad
scope of practice, and offer opportunities to maintain competence, improve performance, and update knowledge. Professionals need a structured learning plan to become “intelligent consumers of continuing professional education” (Queeney, 1992, p. 36).

A curricular framework of instruction (Queeney, 1992) beneficial to professionals would plan coursework over a long period of time presented in a logical sequence. This structured education would incorporate differing educational needs that occur in various career stages and alternate career paths. Areas of specialization could be recognized and, by presenting a vast array of educational activities and choices, the curricular framework would allow professionals to discover areas in which they are not familiar. The AICPA has provided a great example by taking the initiative to create professionally designed coursework that is delivered to professionals in each area to provide a structured lesson that fits the needs of specialization in many areas.

The first step in developing a curricular framework is to determine the areas or professional specialties to be addressed within the accounting profession. The initial response by providers has typically been to single issues, such as the advancement of technology. But developers should be looking at the various specialties within the accounting spectrum and develop courses, including technology courses, around the subject matter in actual practice. For example, there are accountants in government, corporate business, finance, education, nonprofit, and other specialty fields like mining or retirement planning. There is a vast array of specialties that could benefit from utilizing new technologies within those applications (Stern & Queeney, 1992).

With any professional life cycle change, skills and knowledge learned in the past can become rusty or obsolete. As mid-career professionals move toward higher levels of
management, they take on more supervisory responsibility, more levels of authority, and more complex tasks. Experience may serve as their primary source of information, but courses can facilitate this knowledge, and sharing best practices through more education can benefit many managers in all areas of their work. When multiple practitioners are added to a firm, the senior staff move into more management and change the tasks performed and responsibilities held. Continuing education can provide smoother transitions in these circumstances and teach the new skills required. Employers and regulators must encourage learning skills of working with people, leadership, and business acumen in addition to the usual technical areas. Because these nontechnical skills are important for success of the individual and the profession, they should be included in the credit provided for compliance (Stern & Queeney, 1992).

As professionals perform more activities in a particular field and branch away from core practices, educational professionals should be prepared to fill the voids as new requirements emerge. If an accountant branches off into investment counseling, courses should be made available that teach the detail required by an investment professional and not just introductory material (Stern & Queeney, 1992).

When relevant areas for CPE are identified, providers can begin to develop professional education content by performing a competency needs assessment. Queeney (1992) stressed the importance of distinguishing between assessment of educational needs and a competency assessment as the educational approach is often too broadly focused and does not completely address what is needed. If continuing education providers do not adequately determine competency needs and develop programming to address them, they will be cheating the professionals they claim to serve. They might present programs that draw participants but they would not be providing meaningful content to enhance professional performance.
Delivery method of the course material is another important concept in professional education. There are many choices available for delivering course content. The most common method relies on the conventional lecture format. New learning theories suggest that adults learn better with an interactive environment, while computer delivered course work is gaining popularity and momentum due to its flexibility with time and location (Queeney, 1992).

Rahman and Velayutham (1998) compared CPE offered through pedagogy, with an instructor delivering course content, and andragogy, with the student being self-directed in the learning process, to determine which method was being used in CPE to address the two types of obsolescence. In the field of accounting knowledge obsolescence can occur when an accounting theory rule changes and the CPA fails to update knowledge as the change occurs. An example is provided from the 1970s when accounting principles started moving away from strict historical accounting and began to include inflationary accounting. CPE requirements were not well established at that time and years went by before most CPAs were aware of the change. Skills obsolescence occurs when established practices change, although the basic theory remains the same, and accountants are not aware of the change in practice (Rahman & Velayutham, 1998). An example of skills obsolescence is when the four primary statements; Income, Balance Sheet, Equity, and Sources of Funds; changed to Income, Balance Sheet, Equity, and Cash Flow. Many accountants continued to prepare the older group of statements as primary documents despite the change in requirements.

Rahman and Velayutham’s (1998) study found that both types of learning methods were still in use and successful in filling in the educational gaps but each had strengths in different areas. Andragogy was used more often and was more successful in teaching the core curriculum of accounting; taxation, auditing, financial accounting, and management accounting. Pedagogy
methodology was still used extensively but was more often used in and was more successful at teaching courses that were more peripheral or outside of mainstream accounting, such as law, finance, management, and information technology.

Motivation and interest in learning needs to be inspired and this can be accomplished with more face to face interactions, collaborations, and mentorship along with new technologies and innovation. More individualistic interactions help to teach each person at his or her own pace allowing him or hwe to learn more and appreciate what is learned in the process. A new job is typically learned by mimicking others doing the job. People learn to drive by watching others and then doing the task themselves. Sometimes people make mistakes and learning takes place by trial and error. When it is done right, one remembers. Then the driving can take place in public. This informal type of learning is becoming more prominent in education and a blended environment is more likely in the future (Rahman & Velayutham, 1998).

Although 54% of companies still advocate for the classroom instruction (The Future of Learning, 2014), instruction can be designed to connect with the students in a more personal way that connects to their jobs, goals, and lives. Students do not want the classroom experience all the time; nor do they want just online classes. They want a mixture of experiences that provides results that really matter and make a difference in their lives. This mixture of methods is referred to as “hybrid learning environments” (The Future of Learning, 2014).

The experience of babies learning to walk, imitating what they see, with trial and error is called experiential learning. When professionals immerse themselves in an unfamiliar task, it is learning by doing. This type of learning accounts for 70% of our total learning (The Future of Learning, 2014). Because experiential learning is such a large percentage, it should not be ignored and should be incorporated into the methods used to teach, including professional
development. Bagranoff, a member of the Future of Learning Task Force, has developed a successful method of experiential learning by having students compete in professional business presentations. It results in students working harder and learning much more than through ordinary homework (Future of Learning, 2014).

Becker’s 2013 research was conducted in a college classroom but the learning theories examined could be applicable to all accounting training and courses throughout one’s career in accounting. Her study was in response to a request from the Accounting Education Change Commission that made “learning to learn” a priority for inclusion in classroom training (Becker, 2013, p. 436). The study’s control group was taught accounting in the traditional manner, focusing solely on the accounting subject matter with related reading assignments, lectures, homework assignments, and homework review. The second group received similar instruction in accounting but also received instruction in the process of learning and how to learn more effectively. At the conclusion of the study the experimental group exhibited significantly better performance overall than the control group demonstrating that accounting and learning strategies can be taught in the same course without a reduction in the accounting concepts learned. Applied to CPE, this approach would allow professionals to develop approaches to learning more effectively and the new learning approaches could be applied to many different concepts or subjects.

If educators could provide information to students about the end purpose to be achieved from what is learned, thereby making the learning more relevant to students, their desire to learn would grow significantly. Other learning motivators include rewards, competition, and feedback. These ideas are fundamental to keeping gamers entertained and can be used in teaching to make learning more desirable and engaging (The Future of Learning, 2014).
With the lecture style of teaching on the decline, instructors will be refocusing and redesigning their classrooms with different perspectives. Some examples of these changes are flipped classrooms with the instructors serving more as course facilitators, mentors, and course engineers; and Technology Enabled Active Learning (TEAL), at MIT and Yale, where the students get a brief lecture and then separate into work groups to explore different topics on their own with the teacher serving as merely a mentor (The Future of Learning, 2014).

Other types of delivery methods include online approaches such as Massive Online Learning Classrooms (MOOCs). MOOCs allow classes to be available free to many students. It is a means of providing information free without cost or grading. CPAs are already participating in micro-learning by taking online seminars at their desks during lunch on a variety of topics. This allows learning to take place in smaller increments rather than the typical hours required for a classroom setting. Other possibilities available with new technology include mobile learning on electronic devices, even phones, and can be accomplished any time of any day. CPE providers can use technology as a leverage to accomplish much more in education (The Future of Learning, 2014).

Educators are taking advantage of new teaching methods and college graduates are learning collaboratively and interactively. These new developments require states to revisit their models for maintaining and improving competency. Some states have already made changes. Maryland now allows 10 minute intervals of “micro-learning” (Barry, 2014, p. 5) for CPE credit and New York is developing new on-line learning platforms with shorter time intervals and an online CPE tracker.

Thomas and Harper (2001) stated that “CPAs learn in different ways” (p. 33). Lawyers may learn best reading journals, and psychologists often prefer small group sessions with
cooperative learning and group feedback. In looking at the ways people naturally learn, The Future of Learning committee determined that 20% of learning is accomplished through peer-to-peer interactions (The Future of Learning, 2014). Business managers can explain what is learned and practiced today. Supervisors can act as mentors to help teach and encourage learners to pursue learning with a passion. ‘Just-in-time’ learning (The Future of Learning, 2014) is a natural form of learning for professionals that has not yet been officially allowed for CPE credit. An example of appropriate just-in-time learning is an accountant looking up the rules of a tax code while on the job to see if it can be used in a particular instance.

More consideration needs to be given to student needs, and not just fulfillment of required hours (Stern & Queeney, 1992). The AICPA’s vision for the future of CPE is to incorporate the multitude of ways to learn into meeting the requirements for mandatory CPE. Instead of counting the hours spent sitting in training, measure completion by establishing where we are now, where do we need to be, and what progress has been made toward closing this gap.

The first principle of Vela’s Twelve Principles of Effective Learning (Vela, 2002) is a needs assessment. When the instructor understands the students’ needs, then the course can be designed to more closely fulfill those needs and provide a more engaging environment for the students. The proposed new learning standards suggest that CPAs develop a learning plan by developing a brief assessment of the gap between current and needed knowledge, skills, and abilities, followed by setting learning objectives and developing an action plan to fill the objectives (Thomas & Harper, 2001).

Clyde’s 1998 research with CPAs involved developing a list of abilities and content required for certain positions within accounting, e.g. auditor, financial controller, and had accountants in those positions identify gaps in their knowledge or abilities. Coursework was then
prepared specifically to close the gaps identified. Later participants identified if their knowledge or skills were increased. Clyde referred to this as a competency-based structure rather than one based on hours of class time. Clyde’s competency-based approach offered the benefits of attention to learning versus hours of input, focus on competencies required, and a means to measure competencies and evaluate results. An individual’s gain in competency could be measured through a variety of methods including testing, simulations, direct observations, supervisor reports, client-customer evaluations, peer review, and self-administered assessments.

This new way of crediting continuing professional education will allow CPE credit toward requirements through self-directed learning. The new methods for receiving CPE credit would include reading professional publications, leadership in professional organizations, participation in professional committee meetings, participation in formal management training, special projects under mentor guidance, research on professional topics, and writing documents for publication (Thomas & Harper, 2001).

Although the AICPA is providing leadership to create learning strategies and structure in the profession, including new measurement approaches, some argue that these new methods will be more difficult to control and measure. But consider what was previously measured: time spent receiving input with little or no measure of output. The newly proposed learning methods will require the participants to identify what has been accomplished, what progress has been made, and what knowledge or skills has been improved. The new focus will be to learn in ways people naturally learn. Accountants can then focus on true improvements in knowledge and skills rather than obtaining an arbitrary number of hours to maintain their licenses (Thomas & Harper, 2001).

The Chartered Institute of Management Accounting (CIMA) in Europe provides an model that is competency based and driven. There are no minimum number of hours required.
Instead, each member identifies his/her own competency needs and participates in learning activities directly related to current and future roles. Participants are rewarded for competencies rather than compliance. Efficiencies in time, expense, and results allow this system to serve as an effective and efficient model (The Future of Learning, 2014). For this to occur in the United States, change must occur in the regulation of professional development, as well as in CPE structure, delivery, and measurement.

The final goal from the research of the AICPA is to create a unified, global competency framework. This goal is in support of the International Accounting Standards Committee (IASC) to develop one uniform global compliance standard. In the face of fast growing business globalization, the profession must recognize that today’s businesses are not just local. Although different currencies exist, investors must be able to compare one business to another by adjusting for currencies but without having to adjust for a multitude of differences in accounting standards. This can involve matters as simplistic as when revenue is recognized or when an expense is incurred; but without global standards, resolving these issues across nations can be complicated (The Future of Learning, 2014).

The goal of regulatory boards, and all those with an interest at stake, should be to make learning a lifelong goal of the professionals. To accomplish this, providers must focus on the needs of the individual learners. Instructors should find what are the objectives and goals of the students taking a course or learning new skills. If providers could collect this information and gear courses to meet these knowledge and competency needs of individual learners, the student learner accomplishes much more and learning is reinforced. When the course material is fit to student objectives, learning becomes more personal and the student feels more involved. Providers should consider if the information is timely, applicable, and delivered in a manner that
the students can learn. Learning should be made more accessible on any device anywhere. Time is a scarce resource and everything that can be done to help manage time facilitates learning. Micro learning, just-in-time, and self-paced learning all help with optimizing students’ time (The Future of Learning, 2014).

Professionals should strive to continually develop themselves to do the best job they can (DeLange, 2013). Each professional is vastly different, and personal development strategies must be determined by his/her own goals and drive for success, augmented by the desire for the business to succeed and to provide the best service possible. Each accounting firm should take both the individual needs and the needs of the firm into consideration. Firms should recognize and reward those individuals who develop themselves beyond the minimum requirements and bring new benefits to the business.

Providers of continuing education and organizations that oversee fulfillment of required continuing education need to provide a support system for practicing professionals to help them develop a relevant continuing education program. In conjunction with the support provisions, individuals need to be encouraged to partake of the support to maximize the use of their time and resources. Professionals may need to be continually reminded to get additional help from educational professionals in forming educational plans to maximize the benefit of their life-long learning (DeLange, 2013).

**Chapter Summary**

This research literature falls into two categories of recommendations: working with the current system or making changes to the current system. From the point of view of working within the current system, some literature has expressed ways to maximize the benefits of CPE
within the current constraints. Some others that promote working within the current system express the requirements are minimum standards that motivated professionals will strive to go well beyond the minimum requirements. A third group of research supports that change is required because business and technology are changing the face of accounting and professional education requirements are not keeping up with the rapid changes taking place. Those arguing for change include the very groups that participate in the creation of accounting rules, the AICPA and the NASBA. Professional development of the individual accountant has changed and the way professionals learn is fast paced, on the job, as needed. The old methods of measuring 40 hours of input per year for CPE are not actually accounting for all the learning that is taking place. Changes are due in the way professional development is measured as well as what is measured. Several research articles have suggested measuring increases in competence or abilities, rather than measuring the amount of time input. Such a change would bring us closer to measuring more directly what the CPE is intended to improve.
CHAPTER 3
RESEARCH METHOD

The purpose of this study was to determine the opinions of Certified Public Accountants (CPAs) about the current requirements for Continuing Professional Education (CPE) and their level of satisfaction in accomplishing the purposes intended by these requirements. This chapter also examines if opinions are affected by or show significant differences based on different groups determined by the biographical data. This chapter also describes the research design, defines the population and sample, explains the data collection, and discusses the planned analysis of the data.

A nonexperimental quantitative research design was chosen to examine the relationship among the opinions of accountants concerning the current state of continuing education requirements and various categorical differences based on demographics. The term nonexperimental is used to describe the effects and co-relationships associated with different variables that occur naturally in the environment and are not under the control of the researcher.

Research Questions and Null Hypothesis

The study examined the current state of continuing professional education for professional accountants. The general areas addressed were value, benefit to self, delivery, benefit to others, and barriers to obtaining CPE. The research questions are provided in the following list. Following each question are the corresponding null hypotheses to be tested.
Research Questions:

1. Is there a significant difference in the mean scores for the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) between males and females?

   Ho1\textsubscript{1}: There is no significant difference in the mean scores on Dimension 1 (Value) of the CPE survey between males and females.

   Ho1\textsubscript{2}: There is no significant difference in the mean scores on Dimension 2 (Delivery) of the CPE survey between males and females.

   Ho1\textsubscript{3}: There is no significant difference in the mean scores on Dimension 3 (Benefit to Self) of the CPE survey between males and females.

   Ho1\textsubscript{4}: There is no significant difference in the mean scores on Dimension 4 (Benefit to Others) of the CPE survey between males and females.

   Ho1\textsubscript{5}: There is no significant difference in the mean scores on Dimension 5 (Barriers) of the CPE survey between males and females.

2. Is there a significant difference in the mean scores for the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) among CPAs’ years of experience (1-9, 10-19, 20-29, 30-39, and 40 or more)?

   Ho2\textsubscript{1}: There is no significant difference in the mean scores on Dimension 1 (Value) of the CPE survey among the 5 years of experience groups (1-9, 10-19, 20-29, 30-39, and 40 or more).
Ho2: There is no significant difference in the mean scores on Dimension 2 (Delivery) of the CPE survey among the 5 years of experience groups (1-9, 10-19, 20-29, 30-39, and 40 or more).

Ho3: There is no significant difference in the mean scores on Dimension 3 (Benefit to Self) of the CPE survey among the 5 years of experience groups (1-9, 10-19, 20-29, 30-39, and 40 or more).

Ho4: There is no significant difference in the mean scores on Dimension 4 (Benefit to Others) of the CPE survey among the 5 years of experience groups (1-9, 10-19, 20-29, 30-39, and 40 or more).

Ho5: There is no significant difference in the mean scores on Dimension 5 (Barriers) of the CPE survey among the 5 years of experience groups (1-9, 10-19, 20-29, 30-39, and 40 or more).

3. Is there a significant difference in the mean scores on the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) among CPAs’ types of business (public practice, banking/finance/insurance, industry, government/education, and nonprofit/small business/other)?

   Ho3₁: There is no significant difference in the mean scores on Dimension 1 (Value) of the CPE survey among the 5 types of business (public practice, banking/finance/insurance, industry, government/education, and nonprofit/small business/other).

   Ho3₂: There is no significant difference in the mean scores on Dimension 2 (Delivery) of the CPE survey among the 5 types of business (public practice, banking/finance/insurance, industry, government/education, and nonprofit/small business/other).
Ho3₂: There is no significant difference in the mean scores on Dimension 3 (Benefit to Self) of the CPE survey among the 5 types of business (public practice, banking/finance/insurance, industry, government/education, and nonprofit/small business/other).

Ho3₄: There is no significant difference in the mean scores on Dimension 4 (Benefit to Others) of the CPE survey among the 5 types of business practice (public practice, banking/finance/insurance, industry, government/education, and nonprofit/small business/other).

Ho3₅: There is no significant difference in the mean scores on Dimension 5 (Barriers) of the CPE survey among the 5 types of business (public practice, banking/finance/insurance, industry, government/education, and nonprofit/small business/other).

4. Is there a significant difference in the mean scores on the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) among the firm sizes by the number of employees (1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more)?

Ho4₁: There is no significant difference in the mean scores on Dimension 1 (Value) of the CPE survey among the firms sizes by number of employees (1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more).

Ho4₂: There is no significant difference in the mean scores on Dimension 2 (Delivery) of the CPE survey among the firms sizes by number of employees (1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more).
Ho4$_3$: There is no significant difference in the mean scores on Dimension 3 (Benefit to Self) of the CPE survey among the firms sizes by number of employees (1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more).

Ho4$_4$: There is no significant difference in the mean scores on Dimension 4 (Benefit to Others) of the CPE survey among the firms sizes by number of employees (1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more).

Ho4$_5$: There is no significant difference in the mean scores on Dimension 5 (Barriers) of the CPE survey among the firms sizes by number of employees (1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more).

5. Is there a significant difference in the mean scores on the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) among the positions held by CPAs within the company (self-employed, employee, manager, and partner/other)?

   Ho5$_1$: There is no significant difference in the mean scores on Dimension 1 (Value) of the CPE survey among the 4 positions held by CPAs within the company (self-employed, employee, manager, and partner/other).

   Ho5$_2$: There is no significant difference in the mean scores on Dimension 2 (Delivery) of the CPE survey among the 4 positions held by CPAs within the company (self-employed, employee, manager, and partner/other).

   Ho5$_3$: There is no significant difference in the mean scores on Dimension 3 (Benefit to Self) of the CPE survey among the 4 positions held by CPAs within the company (self-employed, employee, manager, and partner/other).
Ho5_4: There is no significant difference in the mean scores on Dimension 4 (Benefit to Others) of the CPE survey among the 4 positions held by CPAs within the company (self-employed, employee, manager, and partner/other).

Ho5_5: There is no significant difference in the mean scores on Dimension 5 (Barriers) of the CPE survey among the 4 positions held by CPAs within the company (self-employed, employee, manager, and partner/other).

**Instrumentation**

This nonexperimental research design used a Likert-type survey administered to CPAs at their monthly local chapter meetings. The survey is based upon a survey developed by Wessels (2007).

This survey contained ratings on a six point forced choice scale of strongly agree to strongly disagree, to avoid neutral answers. This allowed the researcher to analyze the strength of agreement or disagreement and measure to what extent they differ from the average based on the demographics mentioned in the Research Questions section. The demographic section allowed classification of five independent variables which are gender, years of experience, type of business, size of company, and current position.

The dependent variables in the research are a sum of the opinions measuring agreement with the questions presented. Each question is categorized into a Dimension and the sum of the opinions for each Dimension is the calculated dependent variable. The five Dimensions are presented below:

The Five Dimensions

1. Value (or cost/benefit)
2. Delivery (methods and quality)
3. Benefit to Self
4. Benefit to Others

5. Barriers (to obtaining CPE)

Population and Sample

Approximately 205 members of Tennessee Society of Certified Public Accountants (TSCPA) served as participants and completed the survey at the various chapters located in Northeast Tennessee. The format for the data collection allowed this researcher to explain the educational purpose of the study to the subjects, which further facilitated participation.

The population represented by the sample were all the CPAs practicing in Eastern Tennessee. Extrapolation of these results to all CPAs in Tennessee or possibly the United States would be desirable but not appropriate due to the limited localization of these participants. The TSCPA members of the local chapters who participated in the survey comprise the sample.

Data Collection

The survey was distributed at the monthly meetings of local TSCPA chapters which were Tri-Cities, Knoxville, and Chattanooga. At the beginning of this research project, permission was obtained from the Tennessee Society of CPAs (TSCPAs) to distribute the survey at monthly meetings. Permission to perform the study was obtained from the Institutional Review Board (IRB) of East Tennessee State University (ETSU). Permission was also granted by Wessels (2007) to use the survey developed for her research.

A Likert-type survey was distributed on the tables prior to the meeting. The chapter president introduced the researcher and the survey was briefly explained, and an explanation was also provided on the first page of the survey itself. All participants were 18 years of age or older, a requirement that was specified on the survey. No names or personal identifiable information were requested, so participants remained anonymous. Each meeting included social time, lunch or dinner, and an hour long presentation. After the meeting, forms were left on the table and were
picked up or collected at the door. This allowed respondents time to review the information and decide whether to participate, as it was made clear that participation was voluntary.

**Data Analysis**

The responses to the survey were initially input into an Excel spreadsheet, and then uploaded into IBM-SPSS Version 23. The first five hypotheses were tested using a series of independent sample *t*-test. The remaining 20 hypotheses were tested using a series of one-way ANOVAs (Analysis of Variance). An alpha level of .05 was chosen for the level of significance to use in testing for significance throughout all tests. Post hoc tests were used as appropriate, and we will discuss these tests in Chapter 4.

**Chapter Summary**

Chapter 3 presented the research methodology used in this study. Following the introduction of what is covered in Chapter 3, the research design section provided an overview of the type of research that was conducted as well as the benefits of such research indicating the existence of a relationship, with no causal explanation, while minimizing objectivity. Next the population and selection of the sample were explained followed by an explanation of how the data would be collected. The data analysis section explained what procedures would be followed in the analysis. Chapter 4 presents the results of the analyses.
CHAPTER 4

RESULTS

The purpose of this study was to determine the opinions of Certified Public Accountants (CPAs) about the current requirements for Continuing Professional Education (CPE) and their level of satisfaction in accomplishing the purposes intended by these requirements. The survey was composed of five demographic questions and 23 opinion questions about CPE to acquire the data used in this study. The dimensions of Value, Delivery, Benefit to Self, Benefit to Others, and Barriers were categories of questions presented in a Likert-type survey.

This chapter presents the survey results by addressing participants’ level of agreement with the five dimensions of Value, Delivery, Benefit to Self, Benefit to Others, and Barriers. The statistical package IBM-SPSS computer software was used to analyze the data, providing statistical significance test results in support of the study findings.

The survey was presented to 310 CPAs attending three local chapter meetings of the Tennessee Society of CPAs in Kingsport, Knoxville, and Chattanooga; from which 203 CPAs participated in the survey for a response rate of 65%. The demographics of participants in this study are presented in Table 1.
Table 1

Demographic Characteristics of the Participants (N=203)

<table>
<thead>
<tr>
<th>Demographics</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>84</td>
<td>41.6</td>
</tr>
<tr>
<td>Female</td>
<td>118</td>
<td>58.4</td>
</tr>
<tr>
<td><strong>Years of Experience</strong></td>
<td></td>
<td></td>
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<tr>
<td>1 – 9</td>
<td>46</td>
<td>22.9</td>
</tr>
<tr>
<td>10 – 19</td>
<td>37</td>
<td>18.4</td>
</tr>
<tr>
<td>20 – 29</td>
<td>36</td>
<td>17.9</td>
</tr>
<tr>
<td>30 – 39</td>
<td>47</td>
<td>23.4</td>
</tr>
<tr>
<td>40 or more</td>
<td>35</td>
<td>17.4</td>
</tr>
<tr>
<td><strong>Type of Business</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Practice</td>
<td>96</td>
<td>47.5</td>
</tr>
<tr>
<td>Banking/Finance/Insurance</td>
<td>20</td>
<td>9.9</td>
</tr>
<tr>
<td>Education/Government</td>
<td>23</td>
<td>11.4</td>
</tr>
<tr>
<td>Industry</td>
<td>47</td>
<td>23.3</td>
</tr>
<tr>
<td>NonProfit/Small Business/</td>
<td>16</td>
<td>7.9</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of Employees</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5</td>
<td>34</td>
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<td>6-25</td>
<td>38</td>
<td>19.0</td>
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<td>26-50</td>
<td>19</td>
<td>9.5</td>
</tr>
<tr>
<td>51-100</td>
<td>17</td>
<td>8.5</td>
</tr>
<tr>
<td>101-500</td>
<td>49</td>
<td>24.5</td>
</tr>
<tr>
<td>501 or more</td>
<td>43</td>
<td>21.5</td>
</tr>
<tr>
<td><strong>Position</strong></td>
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<td></td>
</tr>
<tr>
<td>Self Employed</td>
<td>22</td>
<td>10.8</td>
</tr>
<tr>
<td>Employee</td>
<td>92</td>
<td>45.3</td>
</tr>
<tr>
<td>Manager</td>
<td>75</td>
<td>37.0</td>
</tr>
<tr>
<td>Partner/Other</td>
<td>14</td>
<td>6.9</td>
</tr>
</tbody>
</table>
**Research Question 1**

Is there a significant difference in the mean scores for the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) between males and females?

Ho1: There is no significant difference in the mean scores on Dimension 1 (Value) of the CPE survey between males and females.

An independent-samples t test was conducted to evaluate whether the mean scores for Value differed based on the gender of the participant. The scores for Dimension 1 (Value) on the CPE survey was the test variable and the grouping variable was gender. The test was not significant, \( t(196) = -.67, p = .503 \). Therefore, Ho1 was retained. The \( \eta^2 \) index was <.01, which indicated a small effect size. Male respondents (\( M = 21.58, SD = 3.53 \)) tended to report similar opinions as the female respondents (\( M = 21.88, SD = 2.75 \)). The 95% confidence interval for the difference in means was -1.18 to .58. Figure 1 shows the distribution for the two groups.
Figure 1. Gender to Dimension 1 (Value)

Note: ○ = values that are 1.5 to 3 times the interquartile range.

Ho1₂: There is no significant difference in the mean scores on Dimension 2 (Delivery) of the CPE survey between males and females.

An independent-samples $t$ test was conducted to evaluate whether the mean scores for Delivery differed based on the gender of the participant. The scores for Dimension 2 (Delivery) on the CPE survey was the test variable and the grouping variable was gender. The test was not significant, $t(198) = -.81, p = .422$. Therefore, Ho1₂ was retained. The $\eta^2$ index was <.01, which
indicated a small effect size. Male respondents \((M = 19.21, SD = 2.17)\) tended to report similar opinions as the female respondents \((M = 21.48, SD = 2.52)\). The 95\% confidence interval for the difference in means was \(-.95\) to \(.40\). Figure 2 shows the distribution for the two groups.

\[ \text{Figure 2. Gender to Dimension 2 (Delivery)} \]

\[ \text{Note: } \bigcirc = \text{values that are 1.5 to 3 times the interquartile range.} \]

\[ \text{Ho13: There is no significant difference in the mean scores on Dimension 3 (Benefit to Self) of the CPE survey between males and females.} \]
An independent-samples $t$ test was conducted to evaluate whether the mean scores for Benefit to Self differed based on the gender of the participant. The scores for Dimension 3 (Benefit to Self) on the CPE survey was the test variable and the grouping variable was gender. The test was not significant, $t(196) = 1.06, p = .289$. Therefore, $H_{013}$ was retained. The $\eta^2$ index was .01, which indicated a small effect size. Male respondents ($M = 20.57, SD = 3.18$) tended to report similar opinions as the female respondents ($M = 20.06, SD = 3.38$). The 95% confidence interval for the difference in means was -.43 to 1.44. Figure 3 shows the distribution for the two groups.
Figure 3. Gender to Dimension 3 (Benefit to Self)

Note: ○ = values that are 1.5 to 3 times the interquartile range.

Ho1₄: There is no significant difference in the mean scores on Dimension 4 (Benefit to Others) of the CPE survey between males and females.

An independent-samples t test was conducted to evaluate whether the mean scores for Benefit to Others differed based on the gender of the participant. The scores for Dimension 4 (Benefit to Others) on the CPE survey was the test variable and the grouping variable was gender. The test was not significant, $t(197) = -0.94$, $p = .351$. Therefore, Ho1₄ was retained. The
η² index was <.01, which indicated a small effect size. Male respondents ($M = 18.46$, $SD = 3.11$) tended to report similar opinions as the female respondents ($M = 18.85$, $SD = 2.76$). The 95% confidence interval for the difference in means was -1.22 to .43. Figure 4 shows the distribution for the two groups.

![Box plot showing gender differences in Dimension 4 (Benefit to Others)](image)

**Figure 4. Gender to Dimension 4 (Benefit to Others)**

$H_{015}$: There is no significant difference in the mean scores on Dimension 5 (Barriers) of the CPE survey between males and females.
An independent-samples $t$ test was conducted to evaluate whether the mean scores for Barriers differed based on the gender of the participant. The scores for Dimension 5 (Barriers) on the CPE survey was the test variable and the grouping variable was gender. The test was not significant, $t(196) = .57, p = .568$. Therefore, $H_{015}$ was retained. The $\eta^2$ index was .01, which indicated a small effect size. Male respondents ($M = 17.47, SD = 3.79$) tended to report similar opinions as the female respondents ($M = 17.16, SD = 3.81$). The 95% confidence interval for the difference in means was -.77 to 1.40. Figure 5 shows the distribution for the two groups.
Research Question 2

Is there a significant difference in the mean scores for the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) among CPAs’ years of experience (1-9, 10-19, 20-29, 30-39, and 40 or more)?
Ho2₁: There is no significant difference in the mean scores on Dimension 1 (Value) of the CPE survey among the 5 years of experience groups (1-9, 10-19, 20-29, 30-39, and 40 or more).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 1 (Value) and years of experience. The factor variable years of experience included five categories: 1-9, 10-19, 20-29, 30-39, and 40 or more. The dependent variable was a total of the Dimension 1 Value scores. The ANOVA was significant, $F(4, 194) = 3.36$, $p = .011$. Therefore, the null hypothesis Ho2₁ was rejected. The strength of the relationship among the demographic years of experience and survey Value opinions as assessed by $\eta^2$ was .07 indicating a medium effect size. The results indicated survey Value opinions were significantly different when compared to the years of experience.

Because the overall F test was significant, follow-up tests were conducted to evaluate pairwise differences among the means. Also because of the assumption of equal variances, the appropriate post hoc test was a Tukey procedure. There was a significant difference in the means between the group of 1-9 years of experience and the group with 40 or more years of experience ($p < .01$). The group of 40 or more years of experience reported significantly higher scores in the Value category compared to 1–9 years of experience. However, none of other comparisons showed any significant difference. The 95% confidence intervals for the pairwise differences as well as the means and standard deviations for the five groups are in Table 2.
Table 2

95% Confidence Intervals of Pairwise Differences of 5 Groups, Years of Experience (Dimension 1)

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>M</th>
<th>SD</th>
<th>1-9</th>
<th>10-19</th>
<th>20-29</th>
<th>30-39</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-9</td>
<td>20.69</td>
<td>3.43</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-19</td>
<td>21.81</td>
<td>2.00</td>
<td>-0.72 to 2.96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>21.63</td>
<td>2.45</td>
<td>-0.93 to 2.81</td>
<td>-2.13 to 1.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-39</td>
<td>21.78</td>
<td>3.10</td>
<td>-0.63 to 2.80</td>
<td>-1.84 to 1.77</td>
<td>-1.69 to 1.98</td>
<td></td>
</tr>
<tr>
<td>40 or More</td>
<td>23.21</td>
<td>3.67</td>
<td>-0.62 to 4.42*</td>
<td>-0.58 to 3.39</td>
<td>-0.43 to 3.60</td>
<td>-0.43 to 3.30</td>
</tr>
</tbody>
</table>

* Indicates a significant difference at the .05-level.

Ho$_{22}$: There is no significant difference in the mean scores on Dimension 2 (Delivery) of the CPE survey among the 5 years of experience groups (1-9, 10-19, 20-29, 30-39, and 40 or more).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 2 (Delivery) and years of experience. The factor variable years of experience included five categories: 1-9, 10-19, 20-29, 30-39, and 40 or more. The dependent variable was a total of the Dimension 2 Delivery scores. The ANOVA was not significant, $F(4, 196) = 2.07, p = .086$. Therefore, Ho$_{22}$ was retained. The strength of the relationship among the demographic years of experience and survey Delivery opinions as assessed by $\eta^2$ was small (.04). The results indicated no significant difference among survey Delivery opinions compared to years of experience. The means and standard deviations for the five experience groups are reported in Table 3.
Table 3

Means and Standard Deviations of 5 Years of Experience Groups (Dimension 2)

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-9</td>
<td>46</td>
<td>19.37</td>
<td>2.30</td>
</tr>
<tr>
<td>10-19</td>
<td>37</td>
<td>19.03</td>
<td>1.86</td>
</tr>
<tr>
<td>20-29</td>
<td>36</td>
<td>19.83</td>
<td>2.48</td>
</tr>
<tr>
<td>30-39</td>
<td>48</td>
<td>18.79</td>
<td>2.42</td>
</tr>
<tr>
<td>40 or more</td>
<td>34</td>
<td>20.09</td>
<td>2.62</td>
</tr>
</tbody>
</table>

Ho2₃: There is no significant difference in the mean scores on Dimension 3 (Benefit to Self) of the CPE survey among the 5 years of experience groups (1-9, 10-19, 20-29, 30-39, and 40 or more).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 3 (Benefit to Self) and years of experience. The factor variable years of experience included five categories: 1-9, 10-19, 20-29, 30-39, and 40 or more. The dependent variable was a total of the Dimension 3 Benefit to Self scores. The ANOVA was not significant, $F(4, 194) = 2.21, p = .070$. Therefore, Ho2₃ was retained. The strength of the relationship among the demographic years of experience and survey Benefit to Self opinions as assessed by $\eta^2$ was small (.04). The results indicated no significant difference among survey Benefit to Self opinions compared to years of experience. The means and standard deviations for the five experience groups are reported in Table 4.
Table 4

*Means and Standard Deviations of 5 Years of Experience Groups (Dimension 3)*

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-9</td>
<td>46</td>
<td>19.89</td>
<td>3.80</td>
</tr>
<tr>
<td>10-19</td>
<td>37</td>
<td>20.00</td>
<td>2.61</td>
</tr>
<tr>
<td>20-29</td>
<td>35</td>
<td>20.74</td>
<td>2.79</td>
</tr>
<tr>
<td>30-39</td>
<td>48</td>
<td>19.63</td>
<td>3.27</td>
</tr>
<tr>
<td>40 or more</td>
<td>33</td>
<td>21.58</td>
<td>3.48</td>
</tr>
</tbody>
</table>

Ho$_{24}$: There is no significant difference in the mean scores on Dimension 4 (Benefit to Others) of the CPE survey among the 5 years of experience groups (1-9, 10-19, 20-29, 30-39, and 40 or more).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 4 (Benefit to Others) and years of experience. The factor variable years of experience included five categories: 1-9, 10-19, 20-29, 30-39, and 40 or more. The dependent variable was a total of the Dimension 4 Benefit to Others scores. The ANOVA was not significant, $F(4, 195) = 1.74$, $p = .143$. Therefore, Ho$_{24}$ was retained. The strength of the relationship among the demographic years of experience and survey Benefit to Others opinions as assessed by $\eta^2$ was small (.03). The results indicated no significant difference among survey Benefit to Self opinions compared to years of experience. The means and standard deviations for the five experience groups are reported in Table 5.
Table 5

Means and Standard Deviations of 5 Years of Experience Groups (Dimension 4)

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-9</td>
<td>45</td>
<td>18.11</td>
<td>2.58</td>
</tr>
<tr>
<td>10-19</td>
<td>37</td>
<td>19.05</td>
<td>2.68</td>
</tr>
<tr>
<td>20-29</td>
<td>35</td>
<td>19.14</td>
<td>3.05</td>
</tr>
<tr>
<td>30-39</td>
<td>49</td>
<td>18.12</td>
<td>3.30</td>
</tr>
<tr>
<td>40 or more</td>
<td>34</td>
<td>19.35</td>
<td>2.66</td>
</tr>
</tbody>
</table>

$H_{05}$: There is no significant difference in the mean scores on Dimension 5 (Barriers) of the CPE survey among the 5 years of experience groups (1-9, 10-19, 20-29, 30-39, and 40 or more).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 5 (Barriers) and years of experience. The factor variable years of experience included five categories: 1-9, 10-19, 20-29, 30-39, and 40 or more. The dependent variable was a total of the Dimension 5 Barriers scores. The ANOVA was not significant, $F(4, 194) = 1.18$, $p = .323$. Therefore, $H_{05}$ was retained. The strength of the relationship among the demographic years of experience and survey Barriers opinions as assessed by $\eta^2$ was small (.02). The results indicated no significant difference among survey Barriers opinions compared to years of experience. The means and standard deviations for the five experience groups are reported in Table 6.
Table 6

Means and Standard Deviations of 5 Years of Experience Groups (Dimension 5)

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-9</td>
<td>46</td>
<td>17.10</td>
<td>3.24</td>
</tr>
<tr>
<td>10-19</td>
<td>36</td>
<td>17.78</td>
<td>3.51</td>
</tr>
<tr>
<td>20-29</td>
<td>35</td>
<td>17.86</td>
<td>3.44</td>
</tr>
<tr>
<td>30-39</td>
<td>48</td>
<td>17.46</td>
<td>4.21</td>
</tr>
<tr>
<td>40 or more</td>
<td>34</td>
<td>16.15</td>
<td>4.41</td>
</tr>
</tbody>
</table>

Research Question 3

Is there a significant difference in the mean scores on the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) among CPAs’ types of business (public practice, banking/finance/insurance, industry, government/education, and nonprofit/small business/other)?

$H_{03_1}$: There is no significant difference in the mean scores on Dimension 1 (Value) of the CPE survey among the 5 types of business (public practice, banking/finance/insurance, industry, government/education, and nonprofit/small business/other).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 1 (Value) and type of business. The factor variable type of business included five categories: public practice, banking/finance/insurance, industry, government/education, or nonprofit/small business/other. The dependent variable was a total of the Dimension 1 Value scores. The ANOVA was significant, $F(4, 193) = 2.97, p = .021$. Therefore, the null hypothesis
Ho3 was rejected. The strength of the relationship among the demographic type of business and survey Value opinions as assessed by $\eta^2$ was .06 indicating a medium effect size. The results indicated survey Value opinions were significantly different when compared to the type of business.

Because the overall F test was significant, follow-up tests were conducted to evaluate pairwise differences among the means. Because of the assumption of equal variances, the appropriate post hoc test was a Tukey procedure. There was a significant difference in the means between the public practice business and the banking/finance/insurance ($p = .020$). The banking/finance/insurance reported significantly higher scores in the Value category compared to public practice. However, none of other comparisons showed a significant difference. The 95% confidence intervals for the pairwise differences as well as the means and standard deviations for the five groups appear in Table 7.
Table 7

95% Confidence Intervals of Pairwise Differences of 5 Groups, Types of Business (Dimension 1)

<table>
<thead>
<tr>
<th>Type of Business</th>
<th>M</th>
<th>SD</th>
<th>Public Practice</th>
<th>Banking/Finance/Insurance</th>
<th>Industry</th>
<th>Government/Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Practice</td>
<td>21.08</td>
<td>2.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banking/Finance/Insurance</td>
<td>23.42</td>
<td>2.95</td>
<td>.25 to 4.44*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>22.28</td>
<td>3.01</td>
<td>-2.9 to 2.69</td>
<td>-3.41 to 1.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government/Education</td>
<td>21.87</td>
<td>3.49</td>
<td>-1.15 to 2.73</td>
<td>-4.14 to 1.03</td>
<td>-2.53 to 1.71</td>
<td></td>
</tr>
<tr>
<td>Nonprofit/Small Business/Other</td>
<td>21.81</td>
<td>3.17</td>
<td>-1.52 to 2.99</td>
<td>-4.44 to 1.22</td>
<td>-2.77 to 2.66</td>
<td>-2.88 to 1.95</td>
</tr>
</tbody>
</table>

* Indicates a significant difference at the .05-level.

Ho3: There is no significant difference in the mean scores on Dimension 2 (Delivery) of the CPE survey among the 5 types of business (public practice, banking/finance/insurance, industry, government/education, and nonprofit/small business/other).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 2 (Delivery) and type of business practice. The factor variable type of business included five categories: public practice, banking/finance/insurance, industry, government/education, and nonprofit/small business/other. The dependent variable was a total of the Dimension 2 Delivery scores. The ANOVA was not significant, $F(4, 195) = .85, p = .498$. Therefore, Ho3 was retained. The strength of the relationship among the demographic type of
business and survey Barriers opinions as assessed by $\eta^2$ was small (.02). The results indicated no significant difference among survey Delivery opinions compared to years of experience. The means and standard deviations for the five experience groups are reported in Table 8.

**Table 8**

*Means and Standard Deviations of 5 Types of Business (Dimension 2)*

<table>
<thead>
<tr>
<th>Type of Business</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Practice</td>
<td>95</td>
<td>19.46</td>
<td>2.41</td>
</tr>
<tr>
<td>Banking/Finance/Insurance</td>
<td>20</td>
<td>19.55</td>
<td>2.50</td>
</tr>
<tr>
<td>Industry</td>
<td>46</td>
<td>18.91</td>
<td>2.32</td>
</tr>
<tr>
<td>Government/Education</td>
<td>23</td>
<td>19.96</td>
<td>1.89</td>
</tr>
<tr>
<td>Nonprofit/Small Business/Other</td>
<td>16</td>
<td>19.38</td>
<td>2.60</td>
</tr>
</tbody>
</table>

$H_03$: There is no significant difference in the mean scores on Dimension 3 (Benefit to Self) of the CPE survey among the 5 types of business (public practice, banking/finance/insurance, industry, government/education, and nonprofit/small business/other).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 3 (Benefit to Self) and type of business. The factor variable type of business included five categories: public practice, banking/finance/insurance, industry, government/education, or nonprofit/small business/other. The dependent variable was a total of the Dimension 3 Benefit to Self scores. The ANOVA was not significant, $F(4, 193) = .82, p = .514$. Therefore, $H_03$ was retained. The strength of the relationship among the demographic type of
business and survey Benefit to Self opinions as assessed by $\eta^2$ was small (.02). The results indicated no significant difference among survey Benefit to Self opinions compared to type of business. The means and standard deviations for the five business groups are reported in Table 9.

Table 9

*Means and Standard Deviations of 5 Types of Business (Dimension 3)*

<table>
<thead>
<tr>
<th>Type of Business</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Practice</td>
<td>94</td>
<td>20.45</td>
<td>3.02</td>
</tr>
<tr>
<td>Banking/Finance/Insurance</td>
<td>19</td>
<td>19.11</td>
<td>3.81</td>
</tr>
<tr>
<td>Industry</td>
<td>47</td>
<td>20.51</td>
<td>3.51</td>
</tr>
<tr>
<td>Government/Education</td>
<td>22</td>
<td>20.64</td>
<td>3.09</td>
</tr>
<tr>
<td>Nonprofit/Small Business/Other</td>
<td>16</td>
<td>20.19</td>
<td>2.66</td>
</tr>
</tbody>
</table>

$\text{Ho3}_d$: There is no significant difference in the mean scores on Dimension 4 (Benefit to Others) of the CPE survey among the 5 types of business practice (public practice, banking/finance/insurance, industry, government/education, and nonprofit/small business/other).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 4 (Benefit to Others) and number of employees. The factor variable number of employees included five categories: public practice, banking/finance/insurance, industry, government/education, or nonprofit/small business/other. The dependent variable was a total of the Dimension 4 Benefit to Others scores. The ANOVA was significant, $F(4, 194) = 2.48$, $p = .045$. Therefore, the null hypothesis $\text{Ho3}_d$ was rejected. The strength of the relationship among
the demographic type of business and survey Benefit to Others opinions as assessed by $\eta^2$ was .05 indicating a medium effect size. The results indicated survey Benefit to Others opinions were significantly different when compared to the type of business.

Because the overall F test was significant, follow-up tests were conducted to evaluate pairwise differences among the means. Because of the assumption of equal variances, the appropriate post hoc test was a Tukey procedure. There was a significant difference in the means between public practice and industry ($p = .023$). The industry business reported significantly higher scores in the Benefit to Self category compared to public practice. However, none of other comparisons showed a significant difference. The 95% confidence intervals for the pairwise differences as well as the means and standard deviations for the five groups are in Table 10.
Table 10

95% Confidence Intervals of Pairwise Differences of 5 Groups, Types of Business (Dimension 4)

<table>
<thead>
<tr>
<th>Type of Business</th>
<th>M</th>
<th>SD</th>
<th>Public Practice</th>
<th>Banking/Finance/Insurance</th>
<th>Industry</th>
<th>Government/Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Practice</td>
<td>18.21</td>
<td>2.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banking/Finance/Insurance</td>
<td>18.74</td>
<td>2.45</td>
<td>-1.46 to 2.51</td>
<td>-1.11 to 3.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>19.77</td>
<td>2.56</td>
<td>.14 to 2.96*</td>
<td>-1.11 to 2.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government/Education</td>
<td>18.83</td>
<td>3.51</td>
<td>-1.22 to 2.45</td>
<td>-2.36 to 2.53</td>
<td>-2.95 to 1.07</td>
<td></td>
</tr>
<tr>
<td>Nonprofit/Small Business/Other</td>
<td>18.13</td>
<td>2.66</td>
<td>-2.22 to 2.04</td>
<td>-3.29 to 2.06</td>
<td>-3.92 to 1.87</td>
<td></td>
</tr>
</tbody>
</table>

* Indicates a significant difference at the .05-level.

Ho3s: There is no significant difference in the mean scores on Dimension 5 (Barriers) of the CPE survey among the 5 types of business (public practice, banking/finance/insurance, industry, government/education, and nonprofit/small business/other).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 5 (Barriers) and type of business. The factor variable type of business included five categories: public practice, banking/finance/insurance, industry, government/education, or nonprofit/small business/other. The dependent variable was a total of the Dimension 5 Barriers scores. The ANOVA was not significant, $F(4, 193) = .90, p = .464$. Therefore, Ho3s was retained. The strength of the relationship among the demographic type of
business and survey Barriers opinions as assessed by $\eta^2$ was small (.02). The results indicated no significant difference among survey Barriers opinions compared to type of business. The means and standard deviations for the five business groups are reported in Table 11.

Table 11

*Means and Standard Deviations of 5 Types of Business (Dimension 5)*

<table>
<thead>
<tr>
<th>Type of Business</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Practice</td>
<td>95</td>
<td>17.19</td>
<td>3.86</td>
</tr>
<tr>
<td>Banking/Finance/Insurance</td>
<td>19</td>
<td>18.68</td>
<td>3.15</td>
</tr>
<tr>
<td>Industry</td>
<td>47</td>
<td>16.98</td>
<td>3.80</td>
</tr>
<tr>
<td>Government/Education</td>
<td>21</td>
<td>16.74</td>
<td>3.69</td>
</tr>
<tr>
<td>Nonprofit/Small Business/Other</td>
<td>16</td>
<td>17.75</td>
<td>4.28</td>
</tr>
</tbody>
</table>

**Research Question 4**

Is there a significant difference in the mean scores on the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) among the firm sizes by the number of employees (1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more)?

$\text{Ho}_{41}$: There is no significant difference in the mean scores on Dimension 1 (Value) of the CPE survey among the firms sizes by number of employees (1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 1 (Value) and number of employees. The factor variable number of employees included six categories: 1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more. The
dependent variable was a total of the Dimension 1 Value scores. The ANOVA was significant, 
\[ F(5, 190) = 5.60, \ p = .001 \]. Therefore, the null hypothesis \( H_{04} \) was rejected. The strength of 
the relationship among the demographic type of business and survey Value opinions as assessed 
by \( \eta^2 \) was .13 indicating a large effect size. The results indicated survey Value opinions were 
significantly different when the number of employees was involved.

Because the overall F test was significant, follow-up tests were conducted to evaluate 
pairwise differences among the means. Because of the assumption of equal variances, the 
appropriate post hoc test was a Tukey procedure. There was a significant difference in the means 
between 1-5 and 101-500 employees (\( p = .001 \)), as well as between 501 or more and 101-500 
employees (\( p = .001 \)). The two groups of 1-5 employees and 501 or more employees reported 
significantly higher scores in the Value category than the 101-500 employee group. However, 
none of other comparisons were significantly different. The 95% confidence intervals for the 
pairwise differences as well as the means and standard deviations for the five groups are in Table 
12.
Table 12

95% Confidence Intervals of Pairwise Differences of 6 Groups, Number of Employees (Dimension 1)

<table>
<thead>
<tr>
<th>Number of Employees</th>
<th>M</th>
<th>SD</th>
<th>1-5</th>
<th>6-25</th>
<th>26-50</th>
<th>51-100</th>
<th>100-500</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>22.75</td>
<td>2.38</td>
<td>-3.29 to</td>
<td>-2.21</td>
<td>-3.56</td>
<td>-1.79</td>
<td></td>
</tr>
<tr>
<td>6-25</td>
<td>21.47</td>
<td>3.29</td>
<td>-3.09 to</td>
<td>-2.14</td>
<td>-2.37</td>
<td>-1.79</td>
<td></td>
</tr>
<tr>
<td>26-50</td>
<td>21.67</td>
<td>2.79</td>
<td>-3.56 to</td>
<td>-2.21</td>
<td>-2.14</td>
<td>-1.79</td>
<td></td>
</tr>
<tr>
<td>51-100</td>
<td>22.19</td>
<td>2.59</td>
<td>-3.14 to</td>
<td>-2.21</td>
<td>-2.14</td>
<td>-1.79</td>
<td></td>
</tr>
<tr>
<td>101-500</td>
<td>20.04</td>
<td>3.16</td>
<td>-4.62 to</td>
<td>-3.25</td>
<td>-3.94</td>
<td>-4.57</td>
<td></td>
</tr>
<tr>
<td>501 or more</td>
<td>22.91</td>
<td>2.81</td>
<td>-1.81 to</td>
<td>-1.74</td>
<td>-1.74</td>
<td>-1.74</td>
<td></td>
</tr>
</tbody>
</table>

* Indicates a significant difference at the .05-level.

Ho4\textsubscript{2}: There is no significant difference in the mean scores on Dimension 2 (Delivery) of the CPE survey among the firms sizes by number of employees (1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 2 (Delivery) and number of employees. The factor variable number of employees included six categories: 1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more. The dependent variable was a total of the Dimension 2 Delivery scores. The ANOVA was not significant, $F(5, 193) = 1.11, p = .357$. Therefore, Ho4\textsubscript{2} was retained. The strength of the
relationship among the demographic number of employees and survey Delivery opinions as assessed by $\eta^2$ was small (.03). The results indicated no significant difference among survey Delivery opinions when number of employees was involved. The means and standard deviations for the six business groups are reported in Table 13.

Table 13

<table>
<thead>
<tr>
<th>Number of Employees</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>33</td>
<td>19.45</td>
<td>2.94</td>
</tr>
<tr>
<td>6-25</td>
<td>38</td>
<td>20.05</td>
<td>2.51</td>
</tr>
<tr>
<td>26-50</td>
<td>19</td>
<td>19.42</td>
<td>2.39</td>
</tr>
<tr>
<td>51-100</td>
<td>17</td>
<td>18.76</td>
<td>1.95</td>
</tr>
<tr>
<td>101-500</td>
<td>49</td>
<td>19.00</td>
<td>2.07</td>
</tr>
<tr>
<td>501 or more</td>
<td>43</td>
<td>19.47</td>
<td>2.21</td>
</tr>
</tbody>
</table>

$H_{043}$: There is no significant difference in the mean scores on Dimension 3 (Benefit to Self) of the CPE survey among the firms sizes by number of employees (1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 3 (Benefit to Self) and number of employees. The factor variable number of employees included six categories: 1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more. The dependent variable was a total of the Dimension 3 Benefit to Self scores. The ANOVA was significant, $F(5, 190) = 2.49$, $p = .033$. Therefore, the null hypothesis $H_{043}$ was rejected. The
strength of the relationship among the demographic type of business and survey Benefit to Self opinions as assessed by $\eta^2$ was .06 indicating a medium effect size. The results indicated survey Benefit to Self opinions were significantly different when the number of employees was involved.

Because the overall F test was significant, follow-up tests were conducted to evaluate pairwise differences among the means. Because of the assumption of equal variances, the appropriate post hoc test was a Tukey procedure. There was a significant difference in the means between 6-25 employees and 501 or more employees ($p = .011$). The group of 6-25 employees reported significantly higher scores in the Benefit to Self category than the 501 or more employees group. However, none of other comparisons were significantly different. The 95% confidence intervals for the pairwise differences as well as the means and standard deviations for the six groups are in Table 14.
Table 14
95% Confidence Intervals of Pairwise Differences of 6 Groups, Number of Employees (Dimension 3)

<table>
<thead>
<tr>
<th>Number of Employees</th>
<th>M</th>
<th>SD</th>
<th>1-5</th>
<th>6-25</th>
<th>26-50</th>
<th>51-100</th>
<th>100-500</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>20.47</td>
<td>4.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-25</td>
<td>21.47</td>
<td>2.84</td>
<td>-1.22</td>
<td>-3.43 to 3.23</td>
<td>-4.35 to 2.04</td>
<td>.96</td>
<td></td>
</tr>
<tr>
<td>26-50</td>
<td>19.78</td>
<td>1.87</td>
<td>-2.55 to 3.02</td>
<td>-3.48 to 1.94</td>
<td>-2.21 to 4.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51-100</td>
<td>20.71</td>
<td>2.89</td>
<td>-2.29 to 1.93</td>
<td>-3.19 to .82</td>
<td>-2.05 to 3.07</td>
<td>-3.03 to 2.19</td>
<td></td>
</tr>
<tr>
<td>101-500</td>
<td>20.29</td>
<td>3.42</td>
<td>-3.62 to .73</td>
<td>-4.53 to -.37*</td>
<td>-3.37 to 1.86</td>
<td>-4.35 to .99</td>
<td>-3.21 to .69</td>
</tr>
<tr>
<td>501 or more</td>
<td>19.02</td>
<td>3.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Indicates a significant difference at the .05-level.

Ho4d: There is no significant difference in the mean scores on Dimension 4 (Benefit to Others) of the CPE survey among the firms sizes by number of employees (1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 4 (Benefit to Others) and number of employees. The factor variable number of employees included six categories: 1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more. The dependent variable was a total of the Dimension 4 Benefit to Others scores. The ANOVA was
not significant, $F(5, 191) = .71, p = .619$. Therefore, Ho4 was retained. The strength of the relationship among the demographic number of employees and survey Benefit to Others opinions as assessed by $\eta^2$ was small (.02). The results indicated no significant difference among survey Benefit to Others opinions when compared to the number of employees. The means and standard deviations for the six number of employees groups are reported in Table 15.

Table 15

<table>
<thead>
<tr>
<th>Number of Employees</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>33</td>
<td>18.21</td>
<td>3.15</td>
</tr>
<tr>
<td>6-25</td>
<td>38</td>
<td>18.34</td>
<td>3.17</td>
</tr>
<tr>
<td>26-50</td>
<td>18</td>
<td>19.06</td>
<td>2.41</td>
</tr>
<tr>
<td>51-100</td>
<td>16</td>
<td>18.50</td>
<td>2.20</td>
</tr>
<tr>
<td>101-500</td>
<td>49</td>
<td>18.63</td>
<td>2.70</td>
</tr>
<tr>
<td>501 or more</td>
<td>43</td>
<td>19.28</td>
<td>2.84</td>
</tr>
</tbody>
</table>

Ho45: There is no significant difference in the mean scores on Dimension 5 (Barriers) of the CPE survey among the firms sizes by number of employees (1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 5 (Barriers) and number of employees. The factor variable number of employees included six categories: 1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more. The dependent variable was a total of the Dimension 5 Barriers scores. The ANOVA was not
significant, \( F(5, 190) = .37, p = .869 \). Therefore, Ho4 was retained. The strength of the relationship among the demographic number of employees and survey Delivery opinions as assessed by \( \eta^2 \) was small (.01). The results indicated no significant difference among survey Barriers opinions when compared to the number of employees. The means and standard deviations for the six number of employees groups are reported in Table 16.

Table 16

*Means and Standard Deviations of 6 Number of Employees Groups (Dimension 5)*

<table>
<thead>
<tr>
<th>Number of Employees</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>33</td>
<td>17.58</td>
<td>3.39</td>
</tr>
<tr>
<td>6-25</td>
<td>38</td>
<td>17.64</td>
<td>4.46</td>
</tr>
<tr>
<td>26-50</td>
<td>18</td>
<td>16.94</td>
<td>3.83</td>
</tr>
<tr>
<td>51-100</td>
<td>17</td>
<td>16.29</td>
<td>3.24</td>
</tr>
<tr>
<td>101-500</td>
<td>48</td>
<td>17.23</td>
<td>3.56</td>
</tr>
<tr>
<td>501 or more</td>
<td>42</td>
<td>17.36</td>
<td>3.95</td>
</tr>
</tbody>
</table>

**Research Question 5**

Is there a significant difference in the mean scores on the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) among the positions held by CPAs within the company (self-employed, employee, manager, and partner/other)?

Ho5: There is no significant difference in the mean scores on Dimension 1 (Value) of the CPE survey among the 4 positions held by CPAs within the company (self-employed, employee, manager, and partner/other).
A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 1 (Value) and position within the company. The factor variable position included four categories: self-employed, employee, manager, partner/other. The dependent variable was a total of the Dimension 1 Value scores. The ANOVA was not significant, $F(3, 195) = 2.26, p = .083$. Therefore, $Ho_{51}$ was retained. The strength of the relationship among the demographic position and survey Value opinions as assessed by $\eta^2$ was small (.03). The results indicated no significant difference among survey Value opinions when compared to position. The means and standard deviations for the four position groups are reported in Table 17.

Table 17

Means and Standard Deviations of 4 Position Groups (Dimension 1)

<table>
<thead>
<tr>
<th>Position</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Employed</td>
<td>20</td>
<td>23.35</td>
<td>3.27</td>
</tr>
<tr>
<td>Employee</td>
<td>91</td>
<td>21.40</td>
<td>3.20</td>
</tr>
<tr>
<td>Manager</td>
<td>74</td>
<td>21.72</td>
<td>2.88</td>
</tr>
<tr>
<td>Partner/Other</td>
<td>14</td>
<td>21.93</td>
<td>2.59</td>
</tr>
</tbody>
</table>

$Ho_{52}$: There is no significant difference in the mean scores on Dimension 2 (Delivery) of the CPE survey among the 4 positions held by CPAs within the company (self-employed, employee, manager, and partner/other).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 2 (Delivery) and position within the company. The factor variable position included four categories: self-employed, employee, manager, and partner/other. The dependent
The variable was a total of the Dimension 2 Delivery scores. The ANOVA was not significant, $F(3, 197) = .06, p = .982$. Therefore, $Ho5_2$ was retained. The strength of the relationship among the demographic position and survey Delivery opinions as assessed by $\eta^2$ was small (.01). The results indicated no significant difference among survey Delivery opinions when compared to position. The means and standard deviations for the four position groups are reported in Table 18.

Table 18

Means and Standard Deviations of 4 Position Groups (Dimension 2)

<table>
<thead>
<tr>
<th>Position</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Employed</td>
<td>21</td>
<td>19.52</td>
<td>3.11</td>
</tr>
<tr>
<td>Employee</td>
<td>91</td>
<td>19.32</td>
<td>2.42</td>
</tr>
<tr>
<td>Manager</td>
<td>75</td>
<td>19.41</td>
<td>2.16</td>
</tr>
<tr>
<td>Partner/Other</td>
<td>14</td>
<td>19.29</td>
<td>2.16</td>
</tr>
</tbody>
</table>

$Ho5_3$: There is no significant difference in the mean scores on Dimension 3 (Benefit to Self) of the CPE survey among the 4 positions held by CPAs within the company (self-employed, employee, manager, and partner/other).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 3 (Benefit to Self) and position within the company. The factor variable position included four categories: self-employed, employee, manager, and partner/other. The dependent variable was a total of the Dimension 3 Benefit to Self scores. The ANOVA was not significant, $F(3, 195) = .69, p = .559$. Therefore, $Ho5_3$ was retained. The strength of the
relationship among the demographic position and survey Benefit to Self opinions as assessed by \( \eta^2 \) was small (.03). The results indicated no significant difference among survey Benefit to Self opinions when compared to position. The means and standard deviations for the four position groups are reported in Table 19.

Table 19

*Means and Standard Deviations of 4 Position Groups (Dimension 3)*

<table>
<thead>
<tr>
<th>Position</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Employed</td>
<td>21</td>
<td>20.81</td>
<td>3.56</td>
</tr>
<tr>
<td>Employee</td>
<td>91</td>
<td>19.99</td>
<td>3.73</td>
</tr>
<tr>
<td>Manager</td>
<td>73</td>
<td>20.33</td>
<td>2.76</td>
</tr>
<tr>
<td>Partner/Other</td>
<td>14</td>
<td>21.07</td>
<td>2.27</td>
</tr>
</tbody>
</table>

Ho5.4: There is no significant difference in the mean scores on Dimension 4 (Benefit to Others) of the CPE survey among the 4 positions held by CPAs within the company (self-employed, employee, manager, and partner/other).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 4 (Benefit to Others) and position within the company. The factor variable position included four categories: self-employed, employee, manager, and partner/other. The dependent variable was a total of the Dimension 4 Benefit to Others scores. The ANOVA was not significant, \( F(3, 196) = 1.39, p = .247 \). Therefore, Ho5.4 was retained. The strength of the relationship among the demographic position and survey Benefit to Others opinions as assessed by \( \eta^2 \) was small (.02). The results indicated no significant difference among survey Benefit to Others.
Others opinions when compared to position. The means and standard deviations for the four position groups are reported in Table 20.

Table 20

Means and Standard Deviations of 4 Position Groups (Dimension 4)

<table>
<thead>
<tr>
<th>Position</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Employed</td>
<td>21</td>
<td>18.67</td>
<td>2.97</td>
</tr>
<tr>
<td>Employee</td>
<td>91</td>
<td>18.26</td>
<td>2.82</td>
</tr>
<tr>
<td>Manager</td>
<td>74</td>
<td>19.19</td>
<td>2.93</td>
</tr>
<tr>
<td>Partner/Other</td>
<td>14</td>
<td>18.71</td>
<td>3.07</td>
</tr>
</tbody>
</table>

Ho5\(_5\): There is no significant difference in the mean scores on Dimension 5 (Barriers) of the CPE survey among the 4 positions held by CPAs within the company (self-employed, employee, manager, and partner/other).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship among Dimension 5 (Barriers) and position within the company. The factor variable position included four categories: self-employed, employee, manager, and partner/other. The dependent variable was a total of the Dimension 5 Barriers scores. The ANOVA was not significant, \(F(3, 195) = 1.36, p = .256\). Therefore, Ho5\(_5\) was retained. The strength of the relationship among the demographic position and survey Barriers opinions as assessed by \(\eta^2\) was small (.02). The results indicated no significant difference among survey Barriers opinions when compared to position. The means and standard deviations for the four position groups are reported in Table 21.
Table 21

*Means and Standard Deviations of 4 Position Groups (Dimension 5)*

<table>
<thead>
<tr>
<th>Position</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Employed</td>
<td>21</td>
<td>18.43</td>
<td>3.28</td>
</tr>
<tr>
<td>Employee</td>
<td>91</td>
<td>17.36</td>
<td>3.34</td>
</tr>
<tr>
<td>Manager</td>
<td>73</td>
<td>17.12</td>
<td>4.19</td>
</tr>
<tr>
<td>Partner/Other</td>
<td>14</td>
<td>15.86</td>
<td>4.85</td>
</tr>
</tbody>
</table>
CHAPTER 5
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to determine the opinions of Certified Public Accountants (CPAs) about the current continuing professional education requirements for licensure and if the current requirements are accomplishing the purposes for which they are intended. CPE is intended to assist in maintaining the CPAs’ professional competence to provide information that is accurate and consistent because the information provided is used in making important financial decisions that affect peoples’ lives. CPE also provides assurance to the public that the CPA is qualified. Accountants must participate in lifelong learning due to the constantly changing complexity, technology, knowledge, skills, and regulations required to perform their duties properly (Hunt, 1992).

Accountants were asked for their opinions about CPE value, delivery methods, benefits to themselves, benefits to others, and barriers to obtaining CPE. Data were collected from CPAs of various demographics including gender, years of experience, type of company, number of employees, and position in the company, and determine if significant differences in opinions exist among the various demographics. This information will assist those providing CPE to address those differences, make the CPE more valuable and beneficial, while making barriers known and possibly minimized.

Summary of Findings

Data were collected from 203 participants of the 310 Tennessee Society of CPAs members attending local chapter meetings in Tri-cities, Knoxville, and Chattanooga providing a
65% response rate. CPAs were presented with a survey of five demographic questions about gender, years of experience, type of business, number of employees, and position at company. Following those were 23 Likert-type questions grouped into five categories or Dimensions as follows: Value, Delivery, Benefit to Self, Benefit to Others, and Barriers. These dependent variables, Dimensions, were tested for significant differences among the independent variables, the demographics. In this section the findings are discussed by results of the analysis.

Research Question 1: Is there a significant difference in the mean scores for the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) between males and females?

No significant differences were found between males and females when tested for each of the five dimensions of Value, Delivery, Benefit to Self, Benefit to Others, and Barriers. Males and females tended to have similar scores for all dimensions.

Research Question 2: Is there a significant difference in the mean scores for the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) among CPAs’ years of experience (1-9, 10-19, 20-29, 30-39, and 40 or more)?

Significant differences were found in Dimension 1 (Value) with respondents with 40 or more years of experience (Mean = 23.21, SD = 3.67) reporting significantly higher Value scores than respondents with 1-9 years of experience (Mean = 20.69, SD = 3.43). No other significant differences were found in Dimension 1 (Value), and no significant differences among years of experience and any of the other Dimensions of Delivery, Benefit to Self, Benefit to Others, and Barriers.

Research Question 3: Is there a significant difference in the mean scores on the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers)
among CPAs’ types of business (public practice, banking/finance/insurance, industry, government/education, and nonprofit/small business/other)?

Significant differences were found among the Dimension 1 (Value) opinions when compared to type of business. Additional significant differences were found among Dimension 4 (Benefit to Others) opinions and type of business. The other Dimensions of Delivery, Benefit to Self, and Barriers did not show significant differences compared to type of business. Post hoc tests revealed the specific groups with significantly different means. The banking/finance/insurance (Mean = 23.42, SD = 2.95) type of business reported significantly higher scores in the Dimension 1 (Value) compared to public practice (Mean = 21.08, SD = 2.91). Differences also occurred with the industry business (Mean = 19.77, SD = 2.56) reported significantly higher scores in the Dimension 4 (Benefit to Others) compared to public practice (Mean = 18.21, SD = 2.94). No other business types were significantly different on the five dimensions.

Research Question 4: Is there a significant difference in the mean scores on the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) among the firm sizes by the number of employees (1-5, 6-25, 26-50, 51-100, 101-500, and 501 or more)?

Significant differences did occur among the Dimension 1 (Value) and the demographic, number of employees, as well as among Dimension 3 (Benefit to Self) and number of employees. The other Dimensions of Delivery, Benefit to Others, and Barriers did not show significant differences compared to number of employees. Post hoc tests revealed the specific groups with significantly different means. The two groups of 1-5 employees (Mean = 22.75, SD = 2.38) and 501 or more employees (Mean = 22.91, SD = 2.81) both reported significantly higher scores on the Dimension 1 (Value) than the 101-500 employees (Mean = 20.04, SD =
None of other Value comparisons showed significant difference. The other specific comparison showing a significant difference occurred between 6-25 employees (Mean = 21.47, SD = 2.84) group reporting significantly higher scores in the Dimension 3 (Benefit to Self) than the 501 or more employees (Mean = 19.02, SD = 3.17) group. None of other comparisons of number of employees showed significant differences.

Research Question 5: Is there a significant difference in the mean scores on the five dimensions of the CPE survey (Value, Delivery, Benefit to Self, Benefit to Others, and Barriers) among the positions held by CPAs within the company (self-employed, employee, manager, and partner/other)?

No significant differences were found among the four positions in the company demographics when tested for each of the five Dimensions of Value, Delivery, Benefit to Self, Benefit to Others, and Barriers.

Discussion

The finding of no significant differences by gender is no surprise, as the literature revealed no disparity or gap between males and females in obtaining or providing CPE. In fact, the accounting profession has moved from a predominantly male occupation, to predominantly female. In 1950 there were only 500 women professionals in the accounting profession, however a study in 2012 revealed 60% of professionals in the accounting profession are women, both certified and not certified (DuBios, 2013). Differences may exist in the workforce but differences with regard to obtaining CPE were not found in the literature review and not found in the present study. This may mean that women are provided the same opportunities and benefits with regard to obtaining CPE.
The next question tested for differences based upon the years of experience and did find significant differences in Dimension 1 (Value) between those with 40 or more years reporting higher value than the 1-9 years of experience. This difference could indicate that the group with less experience simply did not have enough personal experience to form as favorable opinion of the value received from the continuing professional education. Recent college graduates going into an accounting career may not have as much need or may not perceive as much benefit from the additional education as the more experienced professional, especially those who have had the most years of experience (40 years or more). This finding is in agreement with Wessel’s (2007) comments that earlier studies of CPE effectiveness were conducted by Phillips (1983), Fletcher and French (1987), and Young (1998); but Wessels considered these surveys to be deficient because mandatory CPE was new and participants had insufficient experience to base their responses. Those early in their careers may have viewed additional education as “hours to keep their license”, as described by Clyde (1998) and not seen the value experienced by the seasoned professionals. Some of the more experienced accountants had practiced prior to 1994 when CPE was not yet required in all states (Chatfield & Vangermeersch, 1996) and could appreciate differences before and after this requirement. The more experienced may value pursuing education well beyond the minimum requirements as reported by Knese (2013) and DeLange et al. (2013). Another recommendation came from Korney (2006) simply to provide a wider variety of CPE courses for participants to meet specific needs of niche groups.

Value differences occurred again in the type of business demographic with banking/finance/insurance reporting higher Dimension 1 (Value) opinions than public practice, and the industry business reported higher Dimension 3 (Benefit to Others) opinions than the public practice. In this instance there were differences in value and benefit to self in different business
types that may be due to the failure of providers to perform an adequate needs assessment for the individual niches of the profession they are providing training for. Different types of businesses will experience many differences in training needs, especially that of the public accounting provider who would experience the largest variety of required skills of all the business types. This variety of needs is not being satisfied by the profit incentive of most providers who often focus on mainstream needs (Stern and Queeney, 1992). The CPE providers need to focus more attention to a needs assessment of the individual learners. The variety of individual needs and individual needs assessment is addressed in numerous research articles including Future of Learning (2014), DeLange, Jackling, and Basioudis (2013), Vela (2002), Thomas and Harper (2001); Clyde (1998), and Queeney (1991). This focus on fulfilling individual needs will help to eliminate gaps in educational value and benefits to others perceived professionals.

Differences in Demographic Value opinions occurred a third time when testing against the number of employees as well as differences in the Demographic Benefit to Self. The group from 1-5 employees and 501 employees or more both reported higher scores in the Demographic Value than the 101 to 500 employees group. A difference between a high employee number and a low number is anticipated, but in this case high employee numbers and low employee numbers both reported higher opinions than a group in the mid-range of employee numbers. Initial reaction would be to attribute this finding to lack of CPE access for certain groups, but that would fall under the Dimension 5 Barriers which found no significant differences. Additional differences were found with the Dimension 4 (Benefit to Self), with the 6-25 employees group reporting significantly higher scores in the Benefit to Self opinions than the 501 or more employees. These differences are likely due to differences in the various corporate climates or cultures. There are wide differences in the culture of employers across different types of
businesses. The major objective of The Future of Learning is to get businesses and CPE providers to create a culture that will increase the professional’s desire to learn. This idea of encouraging the professional’s desire to learn is also supported by DeLange et al. (2013) and Knese (2013). A culture that encourages a lifetime of learning and sharpening skills would help to close these gaps in perceived Value and Benefit to Self.

The final category of position held within the company found no significant differences among the Demographics of Value, Delivery, Benefit to Self, Benefit to Others, or Barriers. This would indicate that the position within the company, whether self-employed, employee, manager, or partner, has little effect on the professional’s perception of CPE.

**Conclusion**

This study examined the opinions of Certified Public Accountants (CPAs) about the current requirements for Continuing Professional Education (CPE) and their level of satisfaction in accomplishing the purposes intended by these requirements. Significant differences were found in CPA’s opinions in relation to years of experience, with 40 or more years perceiving more Value in CPE than those with 1-9 years of experience. This finding was attributed to the more experienced had more time to see the benefits of continuing education. In addition, some with more experience had seen the profession prior to CPE being a requirement and could make a better comparison.

The types of business reported significant differences in opinions in relation to value and benefit to self. Different types of businesses will experience a variety in training needs, sometimes creating niches in training needs because the small amount of demand is not met by the profit motives of providers seeking the more profitable learner groups. This situation leaves
some training needs unfulfilled and could create these differences in opinions about Value and Benefits to Self.

Significant differences were also found among CPA opinions based upon the number of employees where they work. These differences occurred in opinions of Value and Benefit to Others and were attributed to differences in business climate. Some businesses and CPE providers encourage lifelong learning more than others, and the accounting teams with The Future of Learning (2014) are trying to increase the desire to learn across all businesses and CPE providers.

Recommendations for Practice

The following are recommendations in practice to facilitate the perceived Value of CPE received by CPAs.

1. CPE providers and employers of CPAs should focus more attention on educating new CPAs about the ongoing and long-term value of receiving continuing professional education courses.

2. CPE providers need to perform needs assessment of the learners to determine more individualistic needs and provide more training in subject areas that have demands that are not fulfilled.

3. CPE providers and CPA employers alike need to provide more encouragement to CPAs to continue their lifelong learning requirements with a passion, stressing the benefits and value they receive by pursuing continuing professional education well beyond the minimum requirements.
Recommendations for Further Research

Based on this study, the following recommendations are made about possible further research.

1. A qualitative study should be done for researchers to understand the areas of CPE delivery that are most problematic.
2. A qualitative study with in-depth interviews would build on the survey results and researchers would gain understanding of the needs of CPAs.
3. A larger sample size in another quantitative study may have the benefit of producing a more diverse group of participants.
4. A study that included other geographical regions of the U.S. beyond the Southeast may yield other results and provide researchers with a better understanding of differences by location.
5. A study that focused on women and millennials would provide researchers more information about the specific CPE needs of these groups.
REFERENCES


APPENDICES

APPENDIX A

CPE REQUIREMENTS OF THE STATE OF TENNESSEE

State of Tennessee
Board of Accountancy
Continuing Education Requirements

State Requirements | AICPA | NASBA QAS Sponsors | TN Society of CPA's

Continuing Education & State Requirements
Categories: Before explaining the State requirements, you must first understand the categories under which CPE credits fall. They are summarized as follows:
A - Accounting and Auditing
T - Tax
M - Management advisory services (includes financial advising)
E - Ethics
S - State Specific Ethics
O - Other (Non-Technical)

When submitting CPE documentation to the State, each course must be classified in one of the above categories. All CPE must be taken from NASBA approved CPE sponsors or State Board exempted sponsors. If you are taking a course through a NASBA-approved sponsor, the subject code should appear on the certificate of completion. A misclassification in the subject code could result in non-compliance with CPE reporting requirements. Contact the State Board at (615) 741-2550 or toll free at 1-888-453-61501-888-453-6150 with any questions you have regarding subject codes.

IMPORTANT: ALL SELF-STUDY COURSE PROVIDERS MUST HAVE EACH COURSE QUALITY-ASSURED BY NASBA. The Board has implemented the quality assurance rule for self-study in order to insure that all correspondence courses are of high quality and enhance the professional competency of all licensees. The Quality Assurance Service (QAS) Program of NASBA has been designated by the Board to establish the registration process and enforcement of QAS. Licensees may contact NASBA at www.nasba.org to download a list of QAS providers and courses.

Courses taken through state CPA societies such as the Tennessee Society of CPA's (TSCPA) and/or the AICPA are accepted by the Board and do not require QAS approval.

Filing Requirements

All Active CPA certificate holders are required to obtain CPE. The Accountancy Act of 1998 exempts inactive certificate holders from CPE.

Active CPA certificate holders must obtain:
- 80 approved hours every two (2) years with a minimum of 20 hours in each year.
- Of those 80 hours, at least 40 hours must be in technical subjects (category A, T M or E).
- If performing attest services (including compilations), at least 20 of the 40 technical hours must be in the "A" category.
- If providing expert witness testimony, at least 20 hours must be in the general area in which the court deems you an expert, such as tax, auditing, etc.
- A maximum of 16 hours of your 80-hour requirement may be obtained through the magazine reading program such as reading TSCPA journals and returning those questions for a score.
- The Ethics requirement for license renewal is two hours of state specific ethics taken every two year licensing period.

Carry Over CPE: Excess CPE hours physically earned in one full two year reporting period (i.e. any over the 80 hour requirement) can be carried forward into the next reporting period but not beyond. Carry over is limited to 24 hours of carry over CPE per reporting period. In addition, carry over hours do not contribute to the minimum 20 hour requirement nor the 40 technical hour requirement. No carryover education may be used by a new licensee whose initial licensing period is less than two full years.

(State of Tennessee, Board of Accountancy, 2014)
Hello Everyone,

My name is Brian Lucas. Like many of you, I am a practicing accountant and licensed CPA. I am also a doctoral student in the Ed.D. (Doctorate of Education) program at East Tennessee State University in the process of conducting research. I am surveying professionals in accounting to determine your perceptions and opinions about continuing professional education. This short survey will take less than 5 minutes to complete and will help me gather data for my dissertation. I appreciate your willingness to help me with my research.

By completing the survey you are agreeing to participate in this research project. Participation is voluntary. You may choose not to participate or discontinue at any time without penalty. All surveys will be anonymous and the data will be kept confidential. No individuals or organizations will be identified in the reporting of the data.

Please be sure to omit your name from the survey to assist with the anonymity.

My contact information is at the end of the survey if you have questions for me at a later date.

Thank you for your participation.
CONTINUING PROFESSIONAL EDUCATION FOR CPAs SURVEY

This first section is to gather information about demographics:

1. What is the gender that you most identify with?
   a. male      b. female

2. How many years of experience do you have in Accounting?
   _______ Years of Experience

3. In what type of business do you primarily practice in accounting?
   a. Public Practice
      a1. Tax
      a2. Auditing
      a3. Consulting
   b. Banking and Finance
   c. Computer and Information Services
   d. Education
   e. Government
   f. Industry (manufacturing, construction, real estate, energy, etc.)
   g. Non-profits
   h. Small Business
   i. Other (please specify) _____________________________

4. How many employees work in your place (location) of employment?
   a. 1 - 5 employees
   b. 6 – 25
   c. 26 – 50
   d. 51 - 100
   e. 101 – 500
   f. 501 or more

5. What term best describes your current position?
   a. Self employed
   b. Employee
   c. Manager
   d. Partner
   e. Educator
   f. Other ______________________________
For the following questions, please respond by circling the number that best represents your level of agreement from 1 to 6 with 1 representing Strongly Disagree, and 6 representing Strongly Agree as follows:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

The following statements relate to courses you have taken the past 2 year cycle of CPE:

6. Were a good value for the cost.
1 2 3 4 5 6

7. Offered at times that fit my schedule well.
1 2 3 4 5 6

8. Were taught at the right level of difficulty for me.
1 2 3 4 5 6

9. Were relevant to the job responsibilities of someone in my position.
1 2 3 4 5 6

10. Increased my knowledge base.
1 2 3 4 5 6

11. Enhanced my employability.
1 2 3 4 5 6

12. Increased my income / wealth.
1 2 3 4 5 6

13. Enhanced my networking with peers.
1 2 3 4 5 6

14. Provided by qualified presenters.
1 2 3 4 5 6
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15. Required CPE improves the image of the profession.
1 2 3 4 5 6

16. Required CPE can help protect the public from incompetent work.
1 2 3 4 5 6

17. Required CPE improves the competence of CPAs.
1 2 3 4 5 6

18. The indirect costs (travel, food, time, etc.) of CPE tends to be expensive.
1 2 3 4 5 6

19. The requirements of my job do not leave much time for CPE courses.
1 2 3 4 5 6

20. Long-distance travel for CPE is a significant financial burden.
1 2 3 4 5 6

21. If CPE were not required, I would take fewer courses.
1 2 3 4 5 6

22. I can learn what I need on-the-job or through in-house instruction.
1 2 3 4 5 6

23. I can learn what I need through reading and research on my own.
1 2 3 4 5 6

24. I do not like lectures and formal schooling.
1 2 3 4 5 6

25. I prefer online courses rather than traditional classroom courses.
1 2 3 4 5 6
26. It is difficult to know in advance if a course will benefit me professionally.

1 2 3 4 5 6

27. Overall, I am very satisfied with the current CPE requirements.

1 2 3 4 5 6

28. Hours of CPE is an appropriate measure to fulfill requirements.

1 2 3 4 5 6
If you have any questions, problems, or research-related problems at any time, you may contact Brian Lucas (423-276-3991; lucasbj@etsu.edu), or Dr. Jim Lampley (423.439.7619; lampley@etsu.edu). You may also call the Chairperson of the ETSU Institutional Review Board at 423-439-6054 for any questions you may have about your rights as a research participant. If you have any questions or concerns about the research and want to talk to someone independent of the research team or you cannot reach the study staff, you may call an IRB Coordinator at 423-439-6055 or 423-439-6002.

This survey is from Wessels, 2007 with permission obtained May 15 of 2016.
APPENDIX C

SURVEY QUESTION NUMBERS BY DIMENSION

Value:
6. Were a good value for the cost.
18. The indirect costs (travel, food, time, etc.) of CPE tends to be expensive.
20. Long-distance travel for CPE is a significant financial burden.
27. Overall, I am very satisfied with the current CPE requirements.
28. Hours of CPE is an appropriate measure to fulfill requirements.

Delivery:
7. Offered at times that fit my schedule well.
8. Were taught at the right level of difficulty for me.
9. Were relevant to the job responsibilities of someone in my position.
14. Provided by qualified presenters.

Benefit to self:
10. Increased my knowledge base.
11. Enhanced my employability.
12. Increased my income / wealth.
13. Enhanced my networking with peers.
26. It is difficult to know in advance if a course will benefit me professionally.

Benefit to Others:
15. Required CPE improves the image of the profession.
16. Required CPE can help protect the public from incompetent work.
17. Required CPE improves the competence of CPAs.
21. If CPE were not required, I would take fewer courses.
Barriers:
19. The requirements of my job do not leave much time for CPE courses.
22. I can learn what I need on-the-job or through in-house instruction.
23. I can learn what I need through reading and research on my own.
24. I do not like lectures and formal schooling.
25. I prefer online courses rather than traditional classroom courses.
VITA

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MACct, Virginia Tech, Blacksburg, Virginia, 1985

MBA, James Madison University, Harrisonburg, Virginia, 1981

BS, Psychology, Virginia Tech, Blacksburg, Virginia, 1980

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Accountant, At Work Personnel, Johnson City, Tennessee, 2014-2016

Adjunct Faculty, Walters State Community College, Greeneville, Tennessee, 2006-2013

Fixed Asset Accountant, Asahi Glass Company, Kingsport, Tennessee, 2010-2011

Account Analyst, Mahle Incorporated, Morristown, Tennessee, 2004-2009


Financial Analyst, Glaxo Smithkline Pharmaceuticals, Bristol, Tennessee, 1986-2004

Business Manager, Appalachian Repertory Theatre, Kingsport, Tennessee, 2000-2004

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Performance Award, Mahle Incorporated, 2007