THE ACCEPTABILITY OF ONLINE DEGREES IN ACCOUNTING: A LITERATURE REVIEW

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ABSTRACT

Increasing demand for college-educated employees in the private sector has supported the increase in for-profit educational institutions and enrollments in online degree programs. Online learning continues to provide unprecedented, flexible opportunities for individuals to pursue their higher education. As institutions of higher learning enroll an increasing number of students in online degree programs, a key question is whether recruiters will view degrees earned online as comparable to those earned in traditional face-to-face programs. The face-to-face classroom interaction of student and professor has been the traditional method for developing the knowledge and skills students need for success in business. However, the increasing cost of traditional means for delivering education has forced educators to search for new ways to achieve the same results. The growth of distance education demonstrates that online learning is here to stay. Professors, students, and professionals must embrace this change to meet the workforce needs of the near future. Although some will always prefer traditional brick-and-mortar programs, it is only a matter of time before online degree programs in accounting are widespread throughout the United States.

INTRODUCTION

The increased demand for and access to online learning is evident when examining the escalating number of online courses now offered at institutions of higher learning across the United States (Allen & Seaman, 2015). Traditional classrooms are declining, and online learning is experiencing strong growth (Tabatabaei & Gardiner, 2012). Institutions offering online degrees claim their programs are viable routes to employment, career advancement, pay increases, and other job-related rewards. Accordingly, an increasing number of job applicants now earn their degrees online and compete against other applicants with traditional degrees (Tabatabaei & Gardiner, 2012). Accounting is a degree program area for which online offerings are increasing, and students are now preparing themselves for entry into the accounting profession through online degree programs (Kohlmeyer et al., 2011). The question now surfacing is if and how the accounting profession will accept individuals who graduate from these programs (Kohlmeyer et al., 2011; Metrejean & Noland, 2011; Tabatabaei et al., 2014).

THE DEMAND FOR AND SUPPLY OF ONLINE EDUCATION

Studying for a degree in business administration has conventionally been a means of attaining an initial professional position in the workplace, improving employment opportunities, or furthering an existing career (Beqiri, Chase, & Bishka, 2010). One of the basic functions of education is to prepare individuals to meet the needs of the labor market. Consequently, universities and students have become more responsive to the needs of the labor market in their learning activities (Cai, 2013). Employers are starting to focus hiring based on levels of core

skills (e.g., applied math, critical listening, close observation, information compilation, and written expression) matched to job requirements (Bonvillian & Singer, 2013). Education provides marketable skills and abilities relevant to job performance. Therefore, the more educated people are, the more successful they will be in the labor market in terms of both job opportunities and increased salaries (Cai, 2013). This section discusses the demand for and supply of online education, with a focus on the educational needs of the labor market, particularly in the accounting profession.

Increasing demand for college-educated employees in the private sector has supported the increase in for-profit educational institutions and enrollments in online degree programs. Online learning continues to provide unprecedented, flexible opportunities for individuals to pursue their higher education. The need for increased access to post-secondary education and flexible course and degree options for adult and other non-traditional students has greatly contributed to the growth in online learning (Allen & Seaman, 2015). Enrollment in private-sector institutions has increased significantly in recent years primarily due to an unmet need brought about by the student profile that most for-profits serve (Gutierrez, 2012). It is likely this trend will continue because the demand for employees holding a college degree is projected to rise significantly for the near future (Adams & DeFleur, 2006). This is particularly true in professional occupations such as accounting, management, and information systems.

Inconclusive research has not deterred public and private institutions of higher education from expanding their online programs to serve professions where the demand is greatest (Adams et al., 2012). The demand is so intense that even traditional face-to-face institutions have started to establish some form of online learning into their curricula (Adams & DeFleur, 2006). The National Center for Education Statistics Integrated Postsecondary Education Data System (IPEDS) reported that 70.7% of all currently active, degree-granting institutions that are open to the public had some distance offerings in 2014. It is important to note that these results represent all higher education institutions and are not based on a survey sample (Allen & Seaman, 2015).

Every year since 2003 when the Babson Survey Research Group first began tracking online education in the United States, the number of students taking at least one online course has grown at a rate higher than that of the overall higher education student body. The proportion of academic leaders who report that online learning is critical to their institution's long-term strategy has grown from 48.8% in 2002 to 70.8% in 2014, an all-time high. When asked about what will drive the future of higher education, academic leaders selected workforce development and gainful employment second most often, with 20.4% picking it as the most important factor and 64.4% as one of their top three factors (Allen & Seaman, 2015). In the context of high-demand fields with a chronic shortage of qualified applicants, online programs have the potential to play a variety of important roles (Adams et al., 2012).

Accounting not only exists as an academic discipline, but also as a field of professional practice in which education and training is of utmost importance to the public interest (Wilson et al., 2008). Accounting is a service profession devoted to helping people by creating and reporting the financial information they need to make good business decisions. In a survey of small business owners, respondents viewed accountants as among the most trusted business advisors. Additionally, many corporate executives are placing increasing importance on accounting skills in their training programs and are emphasizing these skills in their employee searches. Accounting is commonly ranked among the top five careers for individuals who want higher pay, additional career growth potential, and increased control over where they are going (AICPA, 2013).

The demand for accounting graduates has rebounded significantly from the economic downturn in recent years (AICPA, 2011). With the turn of the new millennium, the economic boom of the 1990s ended and the accounting profession experienced drastic changes. Several significant financial failures and the subsequent introduction of the Sarbanes-Oxley Act of 2002 suddenly created more talent demands than firms could fill with available staff (Elam & Mendez, 2010). The AICPA revealed that the hiring of accounting graduates increased by over 40,000 in 2012. Additionally, 89% of the firms surveyed expect to hire at least the same number or more accounting graduates in future years (AICPA, 2013).

The United States Department of Labor Bureau of Labor Statistics (BLS) expects employment of accountants and auditors to grow 13% by 2022, faster than the average for all occupations. The accounting profession will see an increase of about 166,700 new jobs over the next decade and over 500,000 job openings (BLS, 2012). This growth is mostly due to increasing demand for thorough financial documentation in response to recent financial crises and subsequent financial regulations. Stricter laws and regulations, particularly in the financial sector, will likely increase the demand for accounting services as organizations seek to comply with new standards (BLS, 2012). Additionally, the accounting profession, like many other professions, will experience a significant decline in staff over the next decade as the Baby Boomers retire (Deines, Bittner, & Eichman, 2012).

Because of fast-paced lifestyles, geographic dispersion, and the need for accounting professionals to possess new skill sets and credentialing, as well as increased technological competence, the demand for online degree programs in accounting has grown over the past ten years (Columbaro & Monaghan, 2009). Many educators support online courses and see them as critical to the future of post-secondary learning (McAllister, 2009). However, in order to promote the field of accounting, it is necessary to ensure that education approaches are effective. Inadequately trained practitioners can cause a great deal of harm (Wilson et al., 2008). Hence, it is of great importance for professional programs at institutions of higher learning to prepare graduates for successful careers in their respective professions, and this includes employability (Adams & DeFleur, 2006). As institutions of higher learning enroll an increasing number of students in online degree programs, a key question is whether recruiters will view degrees earned online as comparable to those earned in traditional face-to-face programs (Adams et al., 2012; Cai, 2013; Linardopoulos, 2012). Therefore, given the increased demand for accounting professionals, further investigation identifying the attitudes and hiring practices of accounting firms in the context of online degrees is useful in assisting institutions of higher education with targeting offerings for the greatest benefit to the accounting profession and their graduates (Kohlmeyer et al., 2011; Metrejean & Noland, 2011).

CURRENT TRENDS IN ONLINE DEGREE PROGRAMS

The increased demand for and access to online learning is evident when examining the escalating number of online courses now offered at institutions of higher learning across the United States (Allen & Seaman, 2015). Traditional classrooms are declining, and online learning is experiencing strong growth (Tabatabaei & Gardiner, 2012). As colleges and universities continue to seek ways of increasing revenues in the current economic climate, researchers expect that the number of online programs will continue to increase (Toppin & Pullens, 2010; Watters & Robertson, 2009). This section discusses the current trends in online degree programs in the United States.

Researchers reported a growth rate of 10% in online education enrollments in the United States from 2009 to 2010 at institutions of higher learning (Allen & Seaman, 2011). Moreover, an estimated number of students taking at least one online course increased from 5.6 to 6.1 million across 2,500 institutions. In the Fall of 2010, online education reached 31% of total higher learning enrollments (Allen & Seaman, 2011). The 2014 Survey of Online Learning conducted by the Babson Survey Research Group revealed that as many as 7.1 million students across 2,800 institutions are taking at least one online course (Allen & Seaman, 2015).

In the early development of online learning, the majority of students enrolling in online courses were nontraditional adult learners (Allen & Seaman, 2011). Convenience and access to advanced education for nontraditional students are frequently mentioned as advantages of online learning (Fogle & Elliott, 2013). However, online learning is becoming more common with younger traditional learners as well, and researchers expect this trend to continue (Allen & Seaman, 2011). Online courses are a significant, rapidly growing, and increasingly popular option in the pursuit of higher education. Today's students are aware of these offerings and it is plausible that future students will hold even greater awareness. This increased awareness is likely to result in more students choosing online offerings for their college education (Bristow et al., 2011).

Accounting program enrollments at colleges and universities is currently lower than in the early 1990s. However, there is more demand for accounting personnel and their services (Elam & Mendez, 2010) and accounting enrollments are starting to rebound (Watters & Robertson, 2009). Professional education at institutions of higher learning currently faces two major challenges. First, they must meet the increasing demand for education with declining resources. Second, they must ensure that graduates attain the technical knowledge and skills required for a successful career (Zabriskie & McNabb, 2007).

In a study by Almer and Christensen (2008), public accounting assurance recruiters evaluated hypothetical job candidates with varying educational path, age, and gender. Participants in this study were from 16 different public accounting firms located across several western states (Alaska, California, Montana, Oregon, and Washington) and Florida. researchers distributed surveys to 115 individuals who were actively involved with campus recruiting at their firms. Participants returned 52 useable surveys. The authors investigated whether accounting courses taken in a non-degree or post-baccalaureate program are valued differently than the same courses taken through a degree program. They also studied the effect of age and gender on recruiter decision-making. While this study aims to understand the student profile most attractive to CPA firm recruiters, it does not address online degree programs. However, the research questions used in this study are adaptable to a study addressing the acceptability of online degrees for obtaining entry-level employment in the accounting profession. The authors suggested that as firms continue to recruit, they should not ignore the considerable number of accounting majors who are not traditional aged students, as these students may be an answer to current firm staffing shortages (Almer & Christensen, 2008). Given the majority of students enrolling in online courses are nontraditional adult learners (Allen & Seaman, 2011), the findings of this study are helpful to students pursuing online degrees for obtaining entry-level employment at public accounting firms.

The face-to-face classroom interaction of student and professor has been the traditional method for developing the knowledge and skills students need for success in business. However, the rapidly increasing cost of traditional means for delivering education has forced educators to search for new ways to achieve the same results. Constructing new physical facilities to meet the

growing demand for professional education is expensive. Additionally, the declining number of terminally qualified faculty in accounting increases the cost of hiring new professors (Zabriskie & McNabb, 2007). When asked about what will drive the future of higher education, academic leaders selected cost and student indebtedness the most often, with 38.8% picking it as the most important factor and 76.8% as one of their top three factors (Allen & Seaman, 2015).

The declining share of public funds earmarked for education places additional stress on the ability to deliver professional education using traditional means. The pressure to increase online offerings is growing as state governments cut funding for higher education to pay for the growth of Medicaid expenditures and prisons. Because state-assisted institutions provide an estimated 72% of higher education in the United States, this pressure is quite powerful (Bonvillian & Singer, 2013). With increasing demands on state budgets, online education has prompted some institutions of higher education to establish their own educational venues (Kohlmeyer et al., 2011; McAllister, 2009). Because tuition increases are quickly reaching the point where they cannot keep up with declining public support, educators must search for ways to replace traditional classroom instruction with online learning that takes place outside of the classroom (Zabriskie & McNabb, 2007).

In some cases, the decision by institutions of higher learning to increase online degree program offerings in place of traditional face-to-face degrees has generated more problems than solutions. Some describe online programs as sterile, lonely, and unfulfilling (Zabriskie & McNabb, 2007). Others describe online programs as lacking rigor and accountability in the curriculum (Kohlmeyer et al., 2011). Academic dishonesty and the perception of an overall lower quality of education are also frequently mentioned in the literature as less favorable traits (Fogle & Elliott, 2013). Nevertheless, university administrators have acknowledged that online course delivery is part of the future in higher education. Therefore, educators must work to improve online delivery in order to keep the solemn promise they make to students, employers, and society upon the conferral of a degree. With the awarding of a degree, educators assure that the recipient has a foundation of knowledge and skills relative to their field of study. Potential employers assume that a foundation is in place to which the organization can apply its purpose, industry, or business context (Bristow et al., 2011). Chronic problems in the online education industry may affect the willingness of employers to hire graduates with online degrees (Kohlmeyer et al., 2011).

The accounting profession creates relevant and reliable financial information that individuals use to make informed decisions about companies. This is one of the most valuable and essential resources in the world economy because it cannot function effectively or efficiently without useful and credible financial information. Every day, around the world, investors, bankers, financial analysts, corporate managers, and many others pore through financial accounting information to analyze the profitability, risk, and growth of companies and make informed investing, financing, and other important decisions (AICPA, 2013). Accounting is known as a reputable profession with well-established regulatory bodies that sanction entry criteria. These criteria include passage of the 14-hour standardized national uniform CPA examination, preceded by completion of a prescribed set of accounting coursework as well as other post-secondary coursework totaling 150 credit hours in most jurisdictions. The state boards of accountancy, charged with protecting the public interest in licensing CPA candidates, are responsible for deciding if students' education, experience, and examination success are sufficient for licensure (Mastracchio, 2008).

The members of the AICPA have invested a great deal of time and energy to establish a core competency framework for CPAs, with a focus on the required technical competencies required of practicing CPAs (Zabriskie & McNabb, 2007). As previously defined, a CPA is an individual who has demonstrated proficiency by passing a uniform national examination and meeting other requirements of the applicable state board of accountancy. The Uniform CPA Examination protects the public interest by helping to ensure that only qualified individuals become licensed as U.S. CPAs. Individuals seeking to qualify as CPAs, the only licensed qualification in accounting, are required to pass the CPA examination (AICPA, 2012).

Many business schools consider success on the CPA exam to be a good indicator of program quality because the exam is designed to assess technical knowledge of accounting, auditing, taxation, business law, and general business concepts, as well as communication, problem solving, and application skills (Lindquist, 2012; Morgan & Ihrke, 2013). In a 2013 study, Morgan and Ihrke compared average CPA exam scores of first-time candidates with accounting degrees from online institutions to those with accounting degrees from traditional institutions. Their sample included all four-year U.S. colleges and universities listed in the National Center for Education Statistics (NCES) database having graduates with 20 or more first-time testing events during the calendar year 2010. The final sample consisted of 668 traditional institutions and 37 online institutions, totaling 705 schools. Morgan and Ihrke found that graduates of online universities, on average, score considerably lower on the CPA exam than do the graduates of traditional, classroom-based universities. They reported an average difference in exam scores of 7%. Their results demonstrated a significant and negative association between online accounting degrees and average first-time CPA exam scores of graduates. The result was not only statistically significant, but also of a magnitude suggesting considerable practical importance. However, the authors cautioned against over-generalizing about the quality of online education from their results alone. In un-aggregated data, some online schools have higher than average CPA exam scores, and some traditional schools have lower than average CPA exam scores. Therefore, delivery mode is not the sole factor related to CPA exam success (Morgan & Ihrke, 2013).

Another recent study investigated the quality of selected for-profit and not-for-profit higher education institutions that offer undergraduate and/or graduate degrees online (Lindquist, 2012). At a recruiting fair, Lindquist asked managers and partners from each of the Big Four accounting firms whether they had ever hired graduates with an accounting degree from a forprofit school. Each responded they had not. When asked if they were willing to consider such candidates, all but one indicated they were willing to consider all applicants. Using a sample of five popular for-profit universities (DeVry, Kaplan, Keller, Strayer, and Phoenix), Lindquist found that although for-profit institutions often promote their accounting programs as paths to careers in public accounting, these programs lack accreditation and show recent student performance on the CPA exam consistently well below national averages. Using a sample of five popular not-for-profit universities (Florence Atlantic, Morehead State, Stetson, Connecticut, and Washington State), Lindquist found that traditional not-for-profit schools with online programs do have accreditation and show recent student performance on the CPA exam often well above national averages. Although two studies are not enough to draw a definitive conclusion, these findings suggest that individuals seeking an online accounting education leading toward a career in public accounting should consider not-for-profit schools before forprofit schools (Lindquist, 2012; Morgan & Ihrke, 2013).

The quality of online accounting education relative to traditional face-to-face delivery remains a contentious and unsettled topic (Morgan & Ihrke, 2013). Despite some concerns, existing research shows that students believe the quality of online courses to be the same or even better than traditional courses (Ward, Peters, & Shelley, 2010). However, researchers know that self-assessment survey studies tend to be unreliable. It is likely that the student participants have not experienced traditional education and therefore do not actually know what they would have learned had they completed their education using traditional delivery methods (Morgan & Ihrke, 2013). Morgan and Ihrke (2013) believe these results are biased because students completing online courses would naturally want to trust that they had learned as much as students who completed the same course in the traditional format. No recent empirical studies were found that directly observed the comparative outcomes of online accounting course sections with traditional accounting course sections in a single multi-sectioned course by comparing scores earned on a common final examination.

Although a literature search did not reveal any recent studies that observed comparative outcomes in a single multi-sectioned accounting course, researchers did examine whether the perceived effectiveness and knowledge development in online course delivery relative to traditional course delivery differs between introductory and advanced accounting courses (Chen, Jones, & Moreland, 2013). Over a three-year period, the researchers surveyed 463 students enrolled in one of 14 sections of four different accounting courses at one institution of higher education. The results suggested that course level is in fact important when assessing whether it is advisable to offer online accounting courses. The researchers found an interaction between delivery method and course level, indicating that course level matters. They concluded that the delivery method remains an important factor in course outcomes at the advanced undergraduate course level, but not at the principles level. Students at the more advanced levels expressed a need for somewhat more face-to-face time than did students at the principles level. Therefore, some evidence exists that online learning is gaining ground on traditional delivery in terms of overall effectiveness, at least at the principles level (Chen et al., 2013).

Online learning is fast becoming the most popular alternative to traditional face-to-face learning (McAllister, 2009). However, critics argue that degrees earned online are not as marketable as traditional degrees. Recruiters often question online degree programs during the candidate selection process, which is likely attributable to increased popular press reporting of diploma mills (Bejerano, 2008). The accounting discipline was initially organized to train competent accountants who produce financial statements and auditors who attest to the conformity of those statements with generally accepted accounting principles (Lee, Quddus, & Bell, 2010). A solid background in professional knowledge and technical skills is important in the accounting profession, and some question whether online degree programs can provide those skills (Metrejean & Noland, 2011). This causes students to place a high premium on whether online degree programs translate into jobs, or better yet careers, in the accounting profession. Ultimately, the public will not consider online education a success unless it delivers the knowledge and skills needed by society (Zabriskie & McNabb, 2007).

CURRENT RESEARCH REGARDING EMPLOYER PERCEPTIONS OF ONLINE DEGREES

An extensive discussion exists in the literature regarding online degree programs; however, much of the existing literature about online learning focuses on student and faculty

perceptions and satisfaction with online education delivery (Bristow et al., 2011; Columbaro & Monaghan, 2009; Jeancola, 2011). Higher education serves as a gatekeeper to managerial and professional positions in society (Rood, 2011). Consequently, when it comes to the transition from higher education to the workplace, employer perceptions are critical (Cai, 2013). The online delivery of higher education has generated questions regarding the acceptance, employability, and credibility from the perspective of external stakeholders of online education (Fogle & Elliott, 2013). This section discusses the current research regarding employer perceptions of online degrees.

The employability and promotion of individuals who graduate from online degree programs are major employer concerns (Kaupins, Wanek, & Coco, 2014). Employers have historically treated online education with suspicion (Tabatabaei et al., 2014). The expected rise of job candidates with online degrees has two major implications for employers. First, the potential applicant pool will include a larger number of applicants with online degrees. Second, employers are more likely to exploit the accessibility of online programs for employee training and development. Therefore, employers are considered key stakeholders in online education and institutions of higher learning should carefully consider their viewpoints during the development of new online programs (Linardopoulos, 2012).

Students are another key stakeholder in online education. Students earning online degrees are interested in knowing if the same employment opportunities are available to them that are available to students earning traditional face-to-face degrees (Bristow et al., 2011; Columbaro & Monaghan, 2009; Tabatabaei & Gardiner, 2012). Additionally, educators are interested in knowing more about the attractiveness of online degrees to employers because the success of their students in terms of job placement is very important to the reputation of their programs. Educators are also interested in evaluating, improving, and redesigning curriculum to prepare graduates for career success (Tabatabaei & Gardiner, 2012). What remains unknown for job candidates is whether online degrees are becoming more accepted in the job market (Fogle & Elliott, 2013; Kohlmeyer et al., 2011; Metrejean & Noland, 2011).

The divide between the growing popularity of online degree programs and less than favorable employer perceptions of online degree recipients, is currently a developing topic in the literature. Toppin and Pullens (2010) contributed to this discussion in a comprehensive review of related literature by examining the factors that influenced the perceptions of academicians and employers regarding online coursework and degree programs. They found that although employers preferred to hire employees who earned a degree from a traditional university, the education delivery modality in which the person responsible for hiring received his or her own training significantly influenced his or her hiring decision. This finding suggests that as online education increases in popularity, it is plausible that acceptability among employers will also increase. As colleges and universities continue to expand online degree programs, researchers call for additional examination of the administration, development, and outcomes of these programs (Toppin & Pullens, 2010). If positive outcomes are measurable and convincing, prospective employers will feel more comfortable hiring job candidates with online degrees (Morgan & Ihrke, 2013).

A recently published exploratory research study employed a random sample of 71 employers across multiple industries with the purpose of describing and understanding hiring manager's perceptions of degrees earned from online universities (Fogle & Elliott, 2013). The results revealed that employers perceived a traditional or hybrid delivery mode more credible than an online delivery mode. However, respondents' attitudes towards online education were

significantly more positive if the respondent personally experienced online education. If the respondent either received an online degree or has a hybrid background as a student, then they are more likely to favor online students and less likely to discriminate against them. This finding is consistent with the finding published by Toppin and Pullens in 2010. Additionally, the study revealed that hiring practices were less biased against graduates of online universities if the rigor of the online university was known to be comparable to the rigor of traditional universities. The researchers suggested that external certification by a professional association (e.g., becoming a Certified Public Accountant) may be a satisfactory substitute as a signal of competency for an online degree of unknown and suspicious quality, especially from the employer's perspective (Fogle & Elliott, 2013).

Based on a survey of 264 human resource professionals in Texas, researchers investigated the acceptability of online degrees compared to traditional degrees for hiring and promotion purposes (Kaupins et al., 2014). The researchers found that overall, online education is not perceived as equivalent to traditional education. Only about half of the respondents believed that their organizations treated online degrees as equivalent to traditional degrees for hiring and promotion purposes. However, results indicated that if respondents were satisfied with their own online course experiences, they were most likely to view their organization as treating online degrees as equivalent to traditional degrees. Consistent with Toppin and Pullens (2010) and Fogle and Elliott (2013), a person's satisfaction with online courses was associated with perceiving his or her organization to treat an online degree as acceptable (Kaupins et al., 2014). The researchers cited familiarity bias as a possible explanation. The literature concerning familiarity bias theory suggests that familiarity with an experience, especially if the experience was positive, would lead to higher future opinions of that same experience. In other words, alternatives that are more familiar to an individual are perceived to be better than those that are not (Kaupins et al., 2014).

Using a national survey of hiring executives, Adams and DeFleur (2006) sought to assess the acceptability of a job applicant's qualifications for professional employment that included a degree earned solely online or one that included a significant amount of online coursework. The researchers sent a survey in response to job advertisements posted in newspapers in eight major metropolitan areas throughout the United States. The eight cities were Atlanta, Boston, Chicago, Houston, Miami, Los Angeles, San Francisco, and Washington, DC. The survey described three hypothetical applicants (traditional, online, and blended degrees) and asked potential employers in accounting, business, engineering, and information technology to indicate who should or should not be hired and why. Out of 673 surveys sent, participants returned 269 completed surveys to the researchers. When asked to choose between an applicant with a traditional degree and one with an online degree, 96% of respondents chose the candidate with the traditional degree (Adams & DeFleur, 2006).

Adams and DeFleur (2006) also used a content analysis of the written comments to examine responses for evidence of overriding concerns. Accreditation was the most frequently used keyword, followed by interaction, quality, reputation, skills, and experience. Both quantitative and qualitative results indicated that degrees earned online are not as acceptable as traditional degrees, and that they are regarded as suspect when used as credentials in a hiring situation. Adams and DeFleur (2006) argued there is a need for further research to expand the literature regarding the comparative standing and acceptability of online degrees. This is

because most of the discussion in the current literature concerns the merits of online education rather than acceptability of online degrees by employers (Adams & DeFleur, 2006).

To continue addressing the acceptability issue, Columbaro and Monaghan (2009) conducted a literature review exploring research regarding the perceptions of potential employers about online degrees in comparison with those earned in a traditional environment. Their findings indicated that when companies attempted to fill management or entry-level positions in accounting, business, engineering, and information technology, 96% indicated they would choose the candidate with a traditional degree. Their findings further indicated that concerns such as accreditation, perceived interaction among peers and professors, quality, skills, and work experience were the most predominant reasons not to hire an online degree candidate. These concerns provide a strong basis for continuing to address the apprehensions of professional employment recruiters and provide a foundation for future research ideas, including a possible differentiation within the accounting profession where possible career opportunities exist for those with online degrees (Columbaro & Monaghan, 2009).

In an exploratory study by Kohlmeyer et al. (2011), researchers investigated how professionals in public accounting firms perceived online accounting degrees as compared to accounting degrees earned in the traditional face-to-face environment relative to a hiring decision. The investigators administered a survey to employees at public accounting firms of different sizes located in the southeast United States. Participants returned 129 completed surveys, representing 10 different public accounting firms. Through an analysis of both quantitative and qualitative findings, the researchers revealed that public accounting professionals indicate a strong preference to hire students with traditional face-to-face accounting degrees. The researchers also revealed that partialities for traditional accounting degrees occurred across different job titles and different sized firms. Despite reservations, study participants understood that accepting job candidates with online accounting degrees might be necessary to meet the demand to fill accounting positions (Kohlmeyer et al., 2011).

Kohlmeyer et al. (2011) reported the top five reasons (in order of frequency) for hiring a candidate with an online accounting degree as follows: (1) need to hire persons, (2) reputation of online program, (3) maturity of the candidate, (4) technical knowledge, and (5) technology-based skills (p. 155). The top five reasons (in order of frequency) for not hiring a candidate with an online accounting degree were as follows: (1) lacking interpersonal experiences, (2) inferior reputation and quality of online instruction, (3) professors really did not know their online students, (4) lack of rigor in online classes, and (5) lack of familiarity with online instruction (p. 156). The top reason of concern was the quality of online classes. Principally noted was the lack of interpersonal experiences and the skills gained from group discussions and direct interaction with a professor. These skills are important because the ability to respectfully and tactfully work with others (e.g., colleagues and clients) can be the difference between an entry-level employee rising to partner and washing out after the first year on the job (Kohlmeyer et al., 2011). One advantage that online graduates may possess is an enhanced ability to use modern technology to work collaboratively to meet project goals in an effective and timely manner (Fogle & Elliott, 2013). Virtual learning environments, advanced web technologies, and the increasing use of social media have changed the way people do business in the modern workplace (Nelis, 2014).

As online education gains wider acceptance among employers, Kohlmeyer et al. (2011) believe some of these concerns of CPA firms may dissipate and make online accounting degrees equally desirable with traditional accounting degrees for hiring purposes. Yet, at this time, working professionals appear to view online accounting degrees with skepticism. However, in

explaining their findings, the researchers raised the possibility that participants may have been reacting to popular press reports regarding the reputation of online degree programs rather than the delivery mode of education (Kohlmeyer et al., 2011). Many of the problems associated with online degree programs have made national news, resulting in a loss of credibility even for properly accredited online institutions and traditional institutions that offer online degrees (Adams & DeFleur, 2006). As previously discussed, some studies (Fogle & Elliott, 2013; Kaupins et al., 2014; Toppin & Pullens, 2010) note that perceptions of online schools are more favorable if the respondent attended an online school. As more people attend online schools and the number of graduates from online schools increases over time, researchers anticipate better treatment of graduates from online programs (Fogle & Elliott, 2013). Additionally, advancements in technology could improve the quality and image of online education. Therefore, the credibility of online education is like to increase as reputable institutions adopt technological improvements and continue to launch additional online programs (Tabatabaei et al., 2014).

In a study by Tabatabaei et al. (2014), researchers investigated employers' perceptions of online accounting education by administering a research instrument via e-mail and the Internet to accounting professionals who were members of a Society of CPAs in a southeastern state. Completed surveys were returned by 101 accounting professionals. The respondents perceived, albeit only slightly, that a traditional education is preferred to an online education. Therefore, recruiters of accounting students have a slight preference for traditional education over online education. This finding is consistent with the finding of Kohlmeyer et al. (2011); however, the bias for traditional education was not nearly as strong. The overall perception of the respondents was that online education is becoming more acceptable (Tabatabaei et al., 2014). Of the four factors examined (i.e., reputation of degree granting institution, work experience, grade point average, and education mode), education mode was rated as the least important. In contrast to previous studies (Fogle & Elliott, 2013; Kaupins et al., 2014; Toppin & Pullens, 2010), this study suggested that the online education experience of recruiters does not affect their hiring decisions (Tabatabaei et al., 2014).

To investigate employability of online degree graduates in a related profession, Tabatabaei and Gardiner (2012) presented a set of vignettes describing hypothetical information systems graduates to information systems recruiters to determine if a job candidate's education mode (i.e., online or traditional) influences the attractiveness of an applicant for employment. This study adopted a vignette experiment methodology to present short descriptions of each candidate to recruiters who were registered alumni of the college department in which the researchers were on the faculty. There were 82 participants in the final recruiter pool. Research findings did not support the notion that education mode was important to recruiters. Factors such as work experience and academic performance were much more important to recruiters. Tabatabaei and Gardiner (2012) believe online education is evolving into a viable alternative to traditional modes of education. They argue that the acceptance gap between online and traditional modes of education is narrowing, and the positive perception of online education will continue to evolve over time as additional members of society start to embrace online learning. However, because the participants in this study were information systems recruiters, the findings are not generalizable to other professions. The authors suggested extending their study to investigate attitudes towards online education held by recruiters in other professions because attitudes towards online education may differ (Tabatabaei & Gardiner, 2012).

Also in 2012, Adams et al. studied the acceptability of online degrees earned as credentials for obtaining employment as a secondary school teacher. The purpose of this study was to understand the perceived marketplace value of online degrees and the factors influencing the acceptance of online degrees in hiring situations specific to the teaching profession. The researchers used a national survey of high school principals to assess the acceptability of job applicants who obtained their educational credentials either online, partly online, or in a traditional face-to-face program. The researchers collected the names of high school principals from each state department of education website. Participants completed and returned 713 surveys. High school principals were asked to evaluate the acceptability of online courses as part of a job candidate's professional credentials in a hiring situation. The applicants who completed their coursework in the traditional format were overwhelmingly preferred over applicants holding an online or hybrid degree. Qualitative comments revealed that high school principals did not perceive online courses as presenting sufficient opportunity for students to develop important social skills through interaction with other students and professors. The overall tone of responses expressed doubt as to whether courses that do not include face-to-face contact with professors, fellow students, and mentors are appropriate for a profession that relies so heavily on social skills (Adams et al., 2012). These qualitative findings are consistent with the qualitative findings of the Kohlmeyer et al. (2011) study conducted in the public accounting profession.

A different study examined the acceptability of online degrees in higher education faculty hiring situations (Adams, 2008). The researcher developed a questionnaire using qualitative statements for assessing the importance of objections to accepting higher education faculty candidates with online degrees. The questionnaire was sent to 300 randomly selected contacts gathered from open faculty position advertisements on the Chronicle of Higher Education website. The findings from 123 useable responses revealed three major objections: (a) face-to-face classroom experience, (b) reputation of institution for rigor, (c) and mentored learning experiences. The goal of this study was to learn more about the perceived acceptability of online degrees for faculty positions and to offer suggestions for future research in distance education doctoral programs (Adams, 2008). These qualitative findings are also consistent with the qualitative findings of the Kohlmeyer et al. (2011) study conducted in the public accounting profession.

A more recent study surveyed 208 academic administrators across the southeastern United States regarding their perception of faculty who had earned their doctoral degrees online (DePriest & Absher, 2013). Data revealed that academic administrators would choose a candidate with a traditional doctorate over a candidate with an online doctorate a majority of the time. Additionally, data revealed that academic administrators would choose an online doctorate from a traditional school at a much higher rate than a candidate from an online-only school. Therefore, the disgrace associated with online degrees was relative depending on the situation. A traditional degree was perceived to be better than an online degree, but an online degree from a traditional school was perceived to be better than an online degree from an online-only school. Although the results of this study suggested an overall negative outlook of online degrees, it was only slightly negative. This suggests that acceptance may be improving as time passes, which is consistent with the findings of Tabatabaei et al. (2014). The researchers speculated that administrators who have spent their careers using computers in the classroom and teaching online courses might be more accepting of online degrees (DePriest & Absher, 2013).

Given several consistent studies in recent years, it is conceivable that the bias for traditional education delivery modes may result from cultural preferences that are specific to

particular fields, general resistance to change, or that online education is not yet recognized as a viable alternative for traditional practices (Adams et al., 2012). The literature still demonstrates a distinct limit to how much employers and other stakeholders in higher education are willing to accept online learning (DePriest & Absher, 2013). Individuals with online degrees are still facing a perceptual uphill battle regarding hiring and promotion decisions (Kaupins et al., 2014).

As previously noted, accounting is a degree program area for which online offerings are increasing, and students are now preparing themselves for entry into the accounting profession through online degree programs (Kohlmeyer et al., 2011). However, current research shows that employers at the pinnacle of the accounting profession, certified public firms, show a disinclination to hire graduates of online programs, even when they possess the CPA credential (Kohlmeyer et al., 2011; Tabatabaei et al., 2014). Nevertheless, employment at certified public firms is but one option for accounting graduates. Employers other than certified public firms in the accounting profession may be more accepting of online program graduates (Metrejean et al., 2008). Many individuals are engaged in the practice of accounting, filling a wide range of positions in the public, private, government, education, and not-for-profit sectors of the economy. The mix of formal education, job training, experience, and certification needed differs across these roles (AAA, 2012). There are even professional accounting certifications specific to these alternative employment settings. The Certified Management Accountant (CMA) and Certified in Financial Management (CFM) designations by the Institute of Management Accountants are examples of such certifications. Despite these popular alternative employment settings for accountants, there is a paucity of research regarding the acceptability of online degrees earned as credentials for obtaining employment in these alternative settings (Adams, 2008; Columbaro & Monaghan, 2009; Metrejean et al., 2008).

According to Adams and DeFleur (2006), online degrees are more acceptable in corporate settings. Some corporate employers now accept online degrees from institutions with an established history of providing quality education. This is because the reputation of the institution granting the degree makes a significant difference in whether employers perceive the degree as acceptable. The level of regard an institution has earned is directly proportional to the perception the employer has to how well the institution has kept the promise represented by the degree (Bristow et al., 2011). Furthermore, a number of corporations now promote online learning for training and continuing education as part of their human resource practices. Studies have shown that firms are supportive of online continuing professional education training (Tabatabaei et al., 2014). Online learning appears to be ideal for professional development activities because of the well-known convenience factors (Adams et al., 2012). Classroom training may no longer be the most efficient training method. Offering training through a virtual means could result in cost savings for the organization and time savings for the employee by eliminating the need for travel. There is a large cost associated with bringing employees from their place of work to a central base for training purposes (Nelis, 2014). Therefore, online learning is a cost and time efficient method of providing continuing education for employees. Employers often utilize online learning to refresh or update an employee's foundation of knowledge and skills or to provide new knowledge and skills to perform a different task (Adams & DeFleur, 2006; Bristow et al., 2011).

In an exploratory study using a random sample of 240 employers from the North Central region of the United States, Astani and Ready (2010) found that employers from several industries would recommend online courses to their employees for the further development of skills, but they were uncertain about whether an online degree was comparable to a traditional

face-to-face degree. Furthermore, these employers were uncertain as to whether they would hire someone with an online degree if the position required a college degree. Employers in this study represented service, retail, financial, government, and manufacturing industries. Nance (2007) noted that a survey from Eduventures' Continuing and Professional Education 2005 report revealed that, of the 505 employers surveyed, more than 62% had a favorable attitude toward online instruction and perceived the quality of online learning to have the same if not greater merit than classroom instruction. According to this study, online degrees are gaining acceptance among employers. Based on the results, Nance suggested that, when considering employability, skills, experience, and reputation of school are more important factors than the education delivery modality utilized. This study was consistent with studies by Adams and DeFleur (2006) and Bristow et al. (2011) in which researchers discovered that online learning is more successful in corporate settings.

More recently, researchers employed a qualitative study design using grounded theory methodology to conduct semi-structured personal interviews of 20 hiring managers in a crosssectional sample of business sectors in the state of Wisconsin (Bailey & Flegle, 2012). The purpose of this study was to identify the factors that influenced hiring managers' perceptions of job candidates and if obtaining an online MBA from a for-profit institution influenced those perceptions. This research identified accreditation, school recognition, group interaction, real life scenarios, and group projects as factors that influenced a hiring manager's perception of value for an online MBA. Additionally, this research indicated an improvement in the acceptance of online degrees (Bailey & Flegle, 2012). Another study concerned with graduate level education examined the perceptions of CPA firm recruiters on whether an online Master of Accountancy matters in the hiring decision (Metrejean & Noland, 2011). Results from a survey instrument returned by 28 CPA firms in the state of Georgia revealed that recruiters do not perceive a difference in a candidate who receives an online Master of Accountancy versus one who receives the degree from a traditional brick-and-mortar program. Results also revealed that having passed all or part of the CPA exam is one of the most highly rated attributes of a new accounting graduate. While these studies concentrated on graduate rather than undergraduate programs, the research instruments still focused on recruiters' perceptions of the type of degree that a student received (Bailey & Flegle, 2012; Metrejean & Noland, 2011). These studies provide important conflicting results that add to the ongoing debate regarding online education in the United States. These conflicting results may help identify which employment settings are most favorable for those job seekers with online degrees. Because of these conflicting findings, additional research is necessary to extend the literature in this area of study.

CONCLUSION

While debate continues regarding the comparative quality of online learning and traditional face-to-face learning, little is known about the perceptions of practicing CPAs regarding the acceptability of online degrees for obtaining entry-level employment across various positions in the accounting profession (Metrejean & Noland, 2011). As institutions of higher learning enroll an increasing number of students in online degree programs, a key question is whether recruiters will view degrees earned online as comparable to those earned in traditional face-to-face programs (Adams et al., 2012; Cai, 2013; Linardopoulos, 2012). Despite considerable literature on the topic, much of the research about online education is in liberal arts, with relatively fewer studies having been performed with respect to technical topics such as

accounting or to assess whether findings related to other disciplines apply to accounting (Chen et al., 2013).

Although the number of students taking online courses has grown by the millions over the past decade, faculty acceptance has lagged, student retention concerns linger, and academic leaders continue to worry that online courses require more faculty effort and institutional resources than traditional face-to-face instruction (Allen & Seaman, 2015). Despite the fact that concerns still exist in the educational community, online learning has enhanced its position over the last five to ten years. The Internet has provided a platform for the standardized delivery of online courses, which has allowed strategic importance, popularity, and perceived quality of online learning to improve (Thomas, 2011).

The rapid growth of distance education demonstrates that online learning is here to stay. Professors, students, and professionals must embrace this change to meet the workforce needs of the near future. Although some will always prefer traditional brick-and-mortar programs, it is only a matter of time before online degree programs in accounting are widespread throughout the United States. Universities must design and deliver challenging online coursework to keep the accounting profession strong given the increasing need for skilled accountants across different professional settings.

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