Perceptions of employers toward hiring graduates with online degrees

Leisa Dione Thompson
University of Nevada, Las Vegas

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PERCEPTIONS OF EMPLOYERS TOWARD HIRING GRADUATES WITH ONLINE DEGREES

by

Leisa Dione Thompson

Bachelor of Science
California State University, Northridge
1986

Masters of Education
University of Nevada, Las Vegas
2004

A dissertation submitted in partial fulfillment of the requirements for the

Doctor of Philosophy Degree in Educational Leadership
Department of Educational Leadership
College of Education

Graduate College
University of Nevada, Las Vegas
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Leisa Thompson

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is approved in partial fulfillment of the requirements for the degree of

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Examination Committee Chair

Dean of the Graduate College

Examination Committee Member

Graduate College Faculty Representative
ABSTRACT

Perceptions of Employers Toward Hiring Graduates With Online Degrees

by

Leisa Dione Thompson

Dr. Cecilia Maldonado-Daniels, Examination Committee Co-Chair
Associate Professor of Educational Leadership
University of Nevada, Las Vegas

Dr. Sterling Saddler, Examination Committee Co-Chair
Associate Professor of Educational Leadership
University of Nevada, Las Vegas

Since the late 1990s, online education programs for academic credit have emerged in colleges and universities across the country at an astonishing rate. Enrollment in online courses and online degree programs has grown dramatically. Online education is in high demand because it allows individuals to pursue an education while maintaining their full-time jobs and commitments to their families. However, the employability of a graduate with an online degree has not kept pace with the growth of this delivery method. This study was an attempt to explore the workforce sentiments concerning employment of college graduates obtaining a degree completed through online education.

Using a conceptual framework of human capital theory and the theory of credentialism, a Web-based self-administered questionnaire was implemented. A national survey was conducted to investigate the perceptions of human resource (HR) professionals and employer policies and practices toward hiring college
graduates who have earned traditional degrees compared to those who have earned online degrees. In this study, HR professionals are defined as executives, directors, or managers who develop and manage human resources policies and practices, as well as those who specialize in employment, recruitment, and placement of job applicants. Participants were instructed to rate policy-oriented statements as to how well each statement reflected their organization's current hiring practices on a 6 point Likert-type scale ranging from 1 to 6 (1 = strongly disagree to 6 = strongly agree).

Findings indicate that respondents have a strong preference for graduates with traditional degrees compared to graduates with online degrees. While online degrees from accredited institutions are accepted for employment, some employers may only consider job candidates with traditional degrees and prefer not to have applicants from online degree programs. Additionally, the findings indicate that employers have different policies and practices toward hiring college graduates who have earned their degree traditionally or online. Differences exist in industries where a college degree is often required for employment and work activities require a high degree of expertise and training. Moreover, differences exist in organizations that have a large percentage of employees with a bachelor or graduate degree.
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CHAPTER 1

INTRODUCTION

Online education has become prevalent in higher education in the United States. "Technological innovations and societal changes have dramatically changed the lives of college students over the last 25 years" (Morrell, 2001, p. 39). Given that more than 73%—147 million Americans are connected to the Internet (Pew Internet & American Life Project, 2006), institutions of higher learning are working vigorously to offer online courses and entire online degree programs.

Technologies such as the Internet and the World Wide Web have allowed institutions to offer online courses, programs, and degrees to learners anywhere and everywhere. According to Johnson (2003), the Internet and the Web are the most significant phenomenon in distance education and has forever changed the way higher education institutions do business. Additionally, the Internet and the Web have also provided colleges and universities new means of reaching out beyond their traditional service areas for students and has become the predominant mode of distance education delivery (Johnson, 2003).
Background of the Study

Online education programs are in high demand because they provide working individuals the opportunity to improve and update their professional skills and the opportunity to obtain both undergraduate and graduate degrees while maintaining their jobs, families, and community responsibilities. According to Johnson (2003), "distance education serves the needs of not only the traditional age college student, but also the most rapidly growing segment of the population, adult learners over the age of 35 years who have full-time jobs, families, and limited discretionary time" (p. 9). The National Center for Education Statistics (1999) suggests that:

While taking individual courses through distance education has the potential to increase access to postsecondary education among those who traditionally have not had access, it is the possibility of completing degree and certificate programs solely through distance education that offers the potential for the most dramatic changes in access and opportunity. (p. iv)

Enrollment in online education is consistently growing to meet students' demands. In the 1997-98 academic year, postsecondary institutions enrolled over 1.6 million students in all distance education courses, and over 1.3 million enrollments in college-level credit-granting distance education courses (NCES, 1999). By the fall term of 2005, enrollment had risen to nearly 3.2 million students who had taken at least one online course (Allen & Seaman, 2006).
In addition to the increase in course offerings, completing a degree program totally through distance education had also increased. In 1997-98, 2-year and 4-year postsecondary institutions offered an estimated 1,230 degree programs that were designed to be completed totally through distance education (NCES, 1999). Seven-hundred-twenty of these programs were offered at the graduate/first-professional level as compared with 500 programs offered at the undergraduate level (NCES, 1999). Public 4-year institutions offered twice as many degree programs as private 4-year institutions, which in turn offered more degree programs than public 2-year institutions (NCES, 1999). Noteworthy is that approximately 42% of the 1,230 distance education degree programs offered in 1997-98 were graduate/first-professional degree programs offered by public 4-year institutions. Finally, the fields of study for these degrees included business and management, health professions, education, engineering, and liberal/general studies (NCES, 1999).

In the fall term of 2005, Allen and Seaman (2006) surveyed 2,251 colleges and universities and found that 46% of public institutions offered fully online degree programs compared with 20.8% of private, nonprofit institutions and 23.0% of private, for-profit institutions. They also found that public institutions as well as the largest institutions of all types are at the forefront of online offerings; the larger the institution, the more likely it is that they will have a fully online degree program (Allen & Seaman, 2006). Of these programs, disciplines being offered included business; computer and information sciences; education; health
professions and related sciences; liberal arts and sciences; general studies; humanities; psychology; and social sciences and history (Allen & Seaman, 2005).

Statement of the Problem

Although online education appears to be advantageous to students, employers are not always willing to hire applicants with online degrees (Vault Inc., 2006; Adams & DeFleur, 2006). Still, more than 96% of the very largest institutions have some online offerings; 31.6% are online courses and 64.6% are online degree programs (Allen & Seaman, 2006).

With such proliferation of online education, a large amount of research has focused on student and faculty perceptions of distance learning (Askov & Simpson, 2002; Davis, Sollecito, Shay, & Williamson, 2004; Folkers, 2005; Frey, Alman, Barron, & Steffens, 2004; Hass & Senjo, 2004; Kambutu, 2002; Maushak & Ellis, 2003; Ryan, Carlton, & Ali, 2004). However, little research has been done to investigate employers’ perceptions of online education, particularly around organizational policies and practices towards hiring online graduates.

Since one can complete an online program for a degree without ever stepping into a classroom, a benefit to students taking online learning programs is relief from the constraints imposed by having to attend a class on campus at a specified time (Zirkle, 2003). Nevertheless, it would be advantageous for students to inquire into employers’ acceptance of online degrees for employment before investing time and effort in these programs.
In 2006, Vault Inc., a career-information company, surveyed 101 employers representing a variety of organizations across the U.S. and found that 55% of these employers preferred job applicants with traditional degrees over those with online degrees, although 41% said they would give job candidates with both types of degrees equal consideration (Vault, 2006; Carnevale, 2007).

Even though the Vault survey suggests a certain amount of acceptance of online degrees in business and industry, this is clearly not the case in the academy. In a study entitled, *The Acceptability of a Doctoral Degree Earned Online as a Credential for Obtaining a Faculty Position*, participants were asked to choose between recommending an applicant with a traditional degree and one with an online degree. Ninety-eight percent of the respondents in the study chose the candidate with a traditional degree (Adams & DeFleur, 2005).

Other aspects applicants should consider regarding employment are employer decisions pertaining to recruitment techniques and personnel selection practices implemented during the hiring process. Wilk and Cappelli (2003) postulate that “organizations make decisions about the methods that will provide the most useful information” (p. 104) about prospective employees. While most companies use traditional recruitment and selection processes like résumés, reference checks, and background checks, with the prominence of the Internet, companies are also using online recruiting technologies and public domain channels akin to MySpace and Google to review information posted online about a job candidate (Fegley, 2007).
While these two previous surveys reported employers' acceptance of an online degree for consideration of employment, a part of this study addressed the gap in the literature by examining policies and practices that employers may have used as screening mechanisms in the hiring process of college graduates. Additionally, the study looked at educational qualifications that employer's value and their selection methods used when considering hiring a job candidate with either an online or traditional degree for a professional position.

Purpose of the Study

The purpose of this exploratory study was to investigate the perceptions of human resource (HR) professionals and employer policies and practices toward hiring college graduates who have earned traditional degrees compared to those who have earned online degrees. For the purpose of this study, HR professionals are defined as executives, directors, or managers who develop and manage human resources policies and practices, as well as those who specialize in employment, recruitment, and placement of job applicants, and establish job descriptions. A college graduate who has earned a traditional degree is one who has taken less than 30% of the course content online while a graduate who has earned an online degree has completed 80% or more of the coursework in a degree program via the Internet/Web.
Research Questions

As more and more colleges and universities offer online degree programs, questions continue to emerge concerning the acceptance and credibility of online degrees in the workforce. According to Carnevale (2007), there is still skepticism among employers regarding degrees obtained through online academic programs. Therefore, this study was guided by the following research questions:

1. What are the differences in the perceptions of employers with regard to employer characteristics toward hiring college graduates who earn their degrees traditionally or online?
2. What are the differences in policies and practices of employers toward hiring college graduates who earn their degrees traditionally or online?
3. What relationships exist between selected independent variables and the dependent variable, which examines the perception of hiring candidates who have earned an online degree?

Significance of the Study

It is important to examine the workforce sentiments about receiving a degree completed online. It only makes sense for prospective students to be aware of the perception toward online degrees before he or she completes an online program. It would be heartbreaking for a student to spend time and money working toward an online degree, only to discover that such a degree merits or is afforded less acceptability.
This research can add to the limited body of literature on employability for graduates who receive a degree through online education, particularly, employer policies and practices for the recruitment and selection of job applicants. Additionally, this research may assist personnel in higher education institutions in planning degree programs that give students reassurance of successful job placement upon degree completion by addressing employers' expectations of the workforce.

Limitations

This study is limited to data collected by business organizations that are members of the National Association of Colleges and Employers (NACE). Human resource professionals (the respondent) who are responsible for employment, recruitment, and placement of job applicants represent the business organizations.

Delimitations

This study has several delimitations. First, the researcher's decision to use the NACE employer database will limit the ability to generalize the findings outside this population. Secondly, this population was selected from a private professional organization and the HR professionals who are not associated with NACE may have different viewpoints and therefore, will not be represented. Lastly, The HR professionals are instructed to only consider prospective
employees who have obtained a bachelor or graduate degree when answering the questionnaire.

Assumptions

The HR professionals are asked to respond according to their organizational culture, not their personal feelings. The researcher assumes all responses will be answered under these conditions.

Definitions of Terms

For the purpose of this study, the following terms are defined:

**Distance education** is an “institution-based, formal education where the learning group is separated, and where interactive telecommunications systems are used to connect learners, resources, and instructors” (Simonson, Smaldino, Albright, and Zvacek, 2003, p. 7). In distance education, students may use some type of technology in the learning process and in many cases are not face-to-face with their instructors; the students may be geographically remote.

**Online education** is a form of distance education where credit-granting courses or education is delivered primarily via the Internet/Web to students at remote locations, including their homes. Online courses may be delivered synchronously or asynchronously. An online course may include a requirement that students and teachers meet once or periodically in a physical setting for lectures, labs, or exams, so long as the time spent in the physical setting does not exceed 20 percent of the total course time (E-Learning, 2007).
Human resource (HR) professionals are executives, directors, or managers who develop and manage human resources policies and practices as well as those who specialize in employment, recruitment, and placement of job applicants and establish job descriptions.

Traditional graduate is one who has earned a college degree by taking less than 30% of the course content online (Allen & Seaman, 2003).

Online graduate is one who has completed 80% or more of the coursework in a degree program via the Internet/Web (Allen & Seaman, 2003).

Credential is a bachelor degree or graduate degree

Professional employees are executive, administrative, professional, outside sales, and computer employees often referred to as “white collar” workers or exempt employees (U.S. Department of Labor, 2004).

Online degree is a degree which results from a nontraditional program in which very little classroom attendance is required. The programs tend to be available to students at remote locations, including their homes, primarily via the Internet/Web. Some of the programs are offered by colleges and universities, which also have regular classroom-based programs for full-time students; others are offered by colleges which grant only online degrees.

For the purpose of this study, distance education and online education will be used interchangeably.
Organization of the Dissertation

Chapter 1 introduced the background of the study, the statement of the problem, and the purpose of the study. Additionally, the research questions were established, the significance of the study was discussed along with the limitations, delimitations, assumptions, and definitions of terms. Chapter 2 provides a detailed literature review that contains the conceptual basis of the study, related research about the topics of distance and online education, accreditation in higher education, and human resources recruitment and selection practices of college graduates. The methodology for this study is presented in Chapter 3 and includes the operational framework, research questions, selection of the population and sample, research instrument, data collection tasks, and data analysis procedures. Chapter 4 presents the results of the study and Chapter 5 provides a summary of the results, discussion, recommendations for further research, and additional limitations of the study.
CHAPTER 2

LITERATURE REVIEW

This literature review will introduce the conceptual framework adopted for this study, which includes the concepts of human capital theory and credentialism. Additionally, the literature review will examine the demand for American higher education and educational credentials. The literature on distance and online education, including the demand for distance education; history of distance education and the evolution of online education; growth in online education; and the credibility and acceptance of online degrees as a credential for employment will be presented. Finally, the review of literature covers the accreditation of higher education institutions in the United States and employer policies and practices toward recruitment and selection of prospective employees.

Purpose of the Study

The purpose of this exploratory study was to investigate the perceptions of human resource (HR) professionals and employer policies and practices toward hiring college graduates who have earned traditional degrees compared to those who have earned online degrees. For the purpose of this study, HR professionals are defined as executives, directors, or managers who develop and manage human resources policies and practices, as well as those who specialize in
employment, recruitment, and placement of job applicants, and establish job
descriptions. A college graduate who has earned a traditional degree is one who
has taken less than 30% of the course content online while a graduate who has
earned an online degree has completed 80% or more of the coursework in a
degree program via the Internet/Web (Allen & Seaman, 2003).

Conceptual Framework

Guided by the concepts of human capital theory (Shultz, 1971; Blaug, 1992;
Sweetland, 1996), specific to an individual’s investment in higher education and
the theory of credentialism (Brown, 1995; Bowen, 1996; Bills, 2003) as it relates
to employment, the conceptual framework adopted for this study implies that
individuals invest in themselves by voluntarily attending postsecondary
institutions to acquire marketable skills and knowledge to obtain a college degree
and increase lifetime earnings. The attainment of a college degree then makes
the individual highly attractive to potential employers who use educational
credentials as a screening mechanism for external hiring positions.

Human Capital Investment

An individual acting in his or her own best interest by investing in education is
a major source of human capital in the United States (Sweetland, 1996; Blaug,
1992). The concept of human capital is the idea that people will deliberately
invest in themselves to acquire useful skills and knowledge to enlarge the range
of choices available to them (Schultz, 1971), whether they be for the sake of
future pecuniary and nonpecuniary returns or for the sake of present or future personal satisfactions (Blaug, 1992). Douglass (1996) writes that:

- Human capital, as most economist define it, consists of acquired energy, motivations, skills, and knowledge possessed by human beings, which can be harnessed over a period of time to the tasks of producing goods and services. It may include abilities acquired through some more or less formal system of instruction, such as colleges and graduate professional schools. But, just as likely, it includes competencies learned less formally in the home, on the job, and around the community. (pp. 362-363)

Examples of investments in human capital may include earnings foregone by mature students attending school and by workers acquiring on the job training (Schultz, 1971).

Human capital theory distinguishes among several types and means of education. There is formalized education at primary, secondary, and postsecondary levels; informal education at home and at work; on the job training and apprenticeships; and specialized vocational education at secondary and postsecondary levels (Sweetland, 1996). However, when people voluntarily acquire additional education beyond the secondary level, education may be viewed as investment (Blaug, 1992).

The pursuit of education, particularly postsecondary education, leads to individual growth. Education helps develop marketable work skills, thus improving worker productivity (Bills, 2003; Sweetland, 1996). Furthermore, it makes the more highly schooled individual more attractive to employers,
consequently enhancing their incomes and their opportunities for securing gainful employment (Bills, 2003). Knox, Lindsay, and Kolb (1993) suggests that “investment in schooling may increase worker productivity and, hence, lifetime earnings” (p. 26).

Credentialism

In the United States, credentialism most commonly applies to higher education and individuals who hold college degrees (Brown, 1995; Bills, 2004). These degrees granted by postsecondary institutions form a hierarchy ranging from associate, bachelors, masters, through doctoral and professional. According to Bills (2003), the educational credentialist thesis holds that a college education leads to socioeconomic success (i.e., the acquisition of a job by means of an external hiring decision) because of the ability of the highly educated to control access to elite positions, not because of the skills and knowledge of the more highly educated. “In the credentialist view, employers do not examine their own propensity to hire more highly educated workers, but, instead, operate on widely shared societal assumptions about the appropriate relationship between schooling and job assignment” (Bills, 2003, p. 452).

Historically, the practice of credentialing originated as part of the academic incentive system designed to motivate students to get good grades and encourage them to complete coherent courses of study and obtain degrees and certificates (Bowen, 1996). “While continuing to serve as motivators, they evolved into effective sorting devices for placement in the labor market” (Bowen, 1996, p. 43).
The credential serves an important role in the labor market by reducing the uncertainty that plagues the process of external hiring. Credentials are valued in the marketplace because they act as a “signal” that an individual has completed a program of study, and as such, the individual has acquired a certain level of skills, knowledge, experience, and the ability to learn (Bechky, 1999). Additionally, credentials provide employers a starting point at which they can have confidence in the ability and reliability of potential employees. Employers turn to these credentials given that “they lack direct information about job candidates and credentials provide a reasonable shorthand way to acquire information (Bills, 2004, p.78). Bowen (1996) reiterates that:

A degree and other credentials indicate with clearly, some reliability that the individual can speak and write clearly, understand what he reads, reason about matters of some complexity, recognize historical and cultural reference points, feel somewhat at home amidst philosophical and general abstract ideas. (p. 44)

Even if colleges do not teach skills relevant to specific jobs, they do enhance trainability, thus making the highly educated more valuable to employers and making educational credentials a rational screening mechanism (Bills, 2003).

Furthermore, employers might rely heavily on educational credentials in initial employment decisions, especially of inexperienced workers because they want new employees who possess scarce cognitive skills and have desirable personality traits such as self-reliance and achievement drive (Douglass, 1996). Employers also rely on credentials as a screening device because they want
trainable people who will learn quickly, grow in their jobs, and have a willingness to comply with organizational rules (Douglass, 1996; Blaug, 1992). "As educational credentials have proliferated, they have come to be acquired at different points in people's lives. Adults are returning to school in ever greater numbers, and job assignment often precedes the attainment of educational credentials" (Bills, 2003, p. 457).

**Demand for Higher Education and Educational Credentials**

Participation in American higher education has continued to grow as individuals invest in their own human capital. The notion that students forgo earnings while studying to better their chances in the labor market attributes to the demand for more education at the higher levels. With rising demands for skilled labor in workplaces, individuals are enrolling in colleges and universities in order to increase their human capital and their attractiveness to prospective employers who seek skilled labor (Brown, 1995).

Over the past 40 years, the demand for higher education has changed significantly. The number of students enrolled at degree-granting postsecondary institutions has risen substantially, resulting in dramatic changes in the composition of the student population and the delivery mode for instruction (Cohen, 1998). In 1975, over 11.1 million students had attended college (Cohen, 1998). By 2004, the enrollment figure had grown to 17.3 million students (NCES, 2006). Of these 17.3 million students, 53% were traditional students, age 18-to-24-year-old, while 47% were adult students, 25 and older (Martinez, 2004).
increased opportunities for part-time study and flexible vehicles for learning offered by most colleges and universities (e.g., distance and online learning) have also facilitated the participation in higher education.

Institutions of higher education play a vital role in expanding the human capital of individuals (Toutkoushian, 2005). This role is growing in importance as the demand for a college-educated workforce increases. The Bureau of Labor Statistics (2005), for example, predicts that 63% of the new job growth between the years 2004 and 2014 will require some form of postsecondary education, and that the growth in job openings for workers with college training will be considerably higher than for workers with a high school education or less (Toutkoushian, 2005).

For several decades now, a college education has become the ticket to well-paid employment and financial security in the United States. To be competitive in the workforce, a high school education or less is no longer sufficient for most high earning jobs and has not been so for many decades. For instance, “adults with a bachelor’s degree earned an average of $54,689 in 2005, while those with a high school diploma earned $29,448” (U.S. Census Bureau, 2007, ¶13).

Similarly, the demand for educational credentials has increased in part because of the value of a postsecondary education in the labor market. The role of college and professional degrees in the improvement of an individual’s employment prospects may explain why many high schools in the U.S. have quietly adopted a college-for-all approach, moving from past efforts designed to
prepare students for work (Rosenbaum, 2004). The college-for-all philosophy is based on the premise that today's labor market requires a college education.

Aggressive efforts to prepare students for higher education may be one factor that has prompted the steep rise in student enrollment and the number of degrees conferred by postsecondary institutions. Between 1994 and 2004, the total number of degrees awarded has increased at all levels. Degrees conferred at the associate's level rose by 23%; bachelor's, increased by 20%, master's, experienced a 44% climb, doctoral degrees increased by 11%; and first-professional degrees experienced a 10% increase (Cohen, 1998; NCES, 2006).

Significant economic and employment changes brought about by globalization and rapid advances in technology have amplified the adult demand for formal higher education and educational credentials. Since 1970, adults over the age of 25 in unprecedented numbers have sought to upgrade their skills, pursue career changes, and increase their earnings through a college education (TERI & IHEP, 1996). According to the 1996 study by The Education Resources Institute (TERI) and the Institute for Higher Education Policy (IHEP), the percentage of students ages 40 and older who enrolled in higher education grew by 235% between 1970 and 1993.

Likewise, an institutional survey created by the American College Testing organization asked students over age 40 why they elected to return to school. The results indicated that 49% wanted to become better educated, 47% said personal happiness was their primary motivation, and 33% wanted to improve
their incomes, to meet job requirements, or improve their job skills (TERI & IHEP, 1996).

Finally, another indicator for increased college attendance and didactic credentials has been societal changes. Between the mid-1970s and the mid-1990s, our society progressed into the technology era. During this time, undergraduate enrollment rose by 26% and graduate enrollment experienced a 36% rise (Cohen, 1998). This 30-year trend led to a shift of conferred degrees in several disciplines. Computer science and engineering programs saw the highest enrollment in colleges across the country (Cohen, 1998). Two- and four-year degrees conferred in computer science increased by 385% over this time period. Other programs that experienced significant growth included communications, which saw an increase of 154%; business, which experienced a 77% rise; engineering with an increase of 67%; and health fields, which experienced a 63% increase (Cohen, 1998).

Over the past 10 years, as the nation has moved toward a service economy, the educational demands of students have shifted as well. The academic areas awarding the most degrees include business management and administrative services, education, health fields, biological services, social sciences, engineering, and psychology (NCES, 2003b).

Demand for Distance Education

Students are increasingly demanding distance education in higher education. Distance education is an "institution-based, formal education where the learning
group is separated, and where interactive telecommunications systems are used to connect learners, resources, and instructors” (Simonson, Smaldino, Albright, & Zvacek, 2003, p. 7). In distance education, students may use some type of technology in the learning process and in many cases are not face-to-face with their instructors; the students may be geographically remote.

Distance education can occur in two modes: synchronous learning and asynchronous learning. In synchronous distance learning, instruction can take place in different places at the same time. This mode of learning often uses television to connect to a local classroom with the instructor and students at a distance (Simonson et al., 2003). Examples of synchronous instruction are satellite, broadcast television, audio, videoconferencing, and two-way live broadcasts. In asynchronous distance learning, instruction can take place in different places and different times. Asynchronous learning allows the student to access instructional material whenever and wherever they choose (Simonson et al., 2003).

Technologies, including the Internet and the Web, have increased this mode of instruction by offering online courses and online degrees to learners all over the world. Thus, thousands of U.S. colleges and universities offer online education programs for academic credit. As long as the entrance requirements are met and the tuition is paid, the majority of these programs are open to any student anywhere (Simonson et al., 2003).

The emergence of technology-based distance education has afforded students, particularly working adults, the opportunity to pursue higher education
while maintaining their full-time jobs and commitments to their family. As these students participate in online education, many are seeking credentials that will make them marketable to potential employers.

History of Distance Education – Evolution of Online Education

_Late 1800s to Late 1940s: Correspondence Study_

Distance education has existed for at least 160 years (Simonson et al., 2003) to provide educational opportunities to people who were unable to attend conventional schools. People who most benefited from distance education were those with physical disabilities, women who were not allowed to attend schools open only to men, people who had jobs during normal school hours, and those who lived in remote regions where schools did not exist (California Distance Learning Project, 2005).

The first distance method of instruction was correspondence study and extension courses which were established initially in Europe, crossing the Atlantic in 1873 (Simonson et al., 2003). With the availability of correspondence study, education became accessible to those who were not among the elite and who could not afford full-time residence at an educational institution (Mclssac & Gunawardena, 1996). During this time, the delivery of correspondence courses were primarily through print media and the postal service, with the course content segmented into manageable units to provide sufficient structure to ensure success.
By the end of the 19th century, there was a growing public thirst for education. "Correspondence study was flourishing with universities and private schools providing instruction to elementary, secondary, higher education, and vocationally-oriented learners" (Sumner, 2000, p. 274). "From 1883 to 1891, academic degrees were authorized by the State of New York through the Chataugua College of Liberal Arts to students who completed the required summer institutes and correspondence courses" (Simonson et al., 2003, p. 32). This movement pioneered correspondence instruction in the United States that influenced the development of distance education.

Among the pioneers in correspondence study for universities were Illinois Wesleyan in 1877 and the University Extension Department of the University of Chicago in 1892 (Simonson et al., 2003). Illinois Wesleyan offered bachelors, masters, and doctoral degrees as part of a program modeled on the Oxford, Cambridge, and London model (Simonson et al., 2003). Correspondence study also had a major impact on religious education. Moody Bible Institute, founded in 1886 formed a correspondence department in 1901 that continues today with a record of over 1 million enrollments from all over the world (Simonson et al., 2003).

With advances in electronic communications, instructional radio became a new method of instruction by in the 1920s (Simonson et al., 2003). With respect to higher education, university extension programs were among the first to have radio stations. Between 1918 and 1946, the federal government granted radio broadcasting licenses to 202 colleges, universities, and school boards (Nasseh,
1997) though by the end of the 1940s, most of the radio stations did not exist (Simonson et al., 2003). By the early 1930s, the University of Iowa, Purdue University, and Kansas State College began producing experimental television curricula. However, not until the 1950s, did colleges offer courses for credit via broadcast television (Simonson et al., 2003).

1950s to Early 1990s: Multimedia Distance Education

After the end of World War II, television became another delivery method for distance education. In the 1950s, states faced with shortages of school facilities and teachers saw instructional television as a way to ease their problems. As a result, television became the medium of choice for broadcast programs. Many colleges and university systems developed televised curricula to reduce pressure on school facilities and provide access to more individuals. According to Johnson (2003), 25% of the nation’s colleges and universities in 1979, offered courses for credit over television and 36% of them used broadcast television to supplement instruction.

By the late 1980s and early 1990s, fiber-optic communication systems provided live, two-way, high-quality audio and video systems in distance education. With the development of synchronous two-way, real-time interactive technologies such as audio teleconferencing, audiographics, and video teleconferencing, it was now possible to allow geographically separated learners and instructors to interact with each other (McIsaac & Gunawardena, 1996). Audio teleconferencing technology is a voice-only communication that utilizes the regular telephone system to connect various locations simultaneously for a
conference (Mclissac & Gunawardena, 1996). Audiographics adds a visual element to audio teleconferencing with graphics through electronic blackboards or document cameras that transmit images or drawings via the audio connection (Mclissac & Gunawardena, 1996). Finally, video teleconferencing transmits voice, graphics, and images of people. Video teleconferencing is a real-time interactive system that either allows two-way video and audio, where the instructors and students can see and hear one another, or one-way video and two-way audio where the students see and hear the instructor and the instructor only hears the students (Mclissac & Gunawardena, 1996).

Mid 1990s to Present:

Today, computer-mediated technologies such as email, computer conferencing, the Internet, and the Web have enormously influenced the delivery of distance education. Computer conferencing systems provide a conferencing feature in addition to email that supports group and many-to-many interactive communication and asynchronous distance learning. In these systems, linked messages form chains of communication that are stored to the hard drive on a microcomputer until an individual logs onto the computer to read and reply to the messages (Mclissac & Gunawardena, 1996).

The Internet and Web-based technologies has had a major impact on distance education. One of the most dramatic features of the Web is hypertext, the ability to link words, phrases, or graphics with other files located on a local server or on a server located on the other side of the world (Simonson et al., 2003).
In 2001, there were over 377 million online users worldwide (Swail & Kampits, 2001). "Colleges and universities, as well as corporations and proprietary postsecondary institutions began to see how the Web would promote distance education and distributed-learning opportunities" (Swail & Kampits, p. 36). The Internet and the Web extended the text-only characteristics of computer conferencing and made way for the Web-based courses in distance education. The Web-based courses may include colorful graphics, audio and video segments, and hypertext links. Web-based courses may also include off-line activities such as reading a textbook or participating in a group project, but most aspects of the course are online. All course material is online, electronic discussions with the instructor and other students, links to Web resources that support the course content, and the submission and return of assignments (Eastmond, 1998).

Growth of Online Education

Online education has entered the mainstream of higher education and has become a visible component of the postsecondary landscape. Online programs for academic credit are emerging in colleges and universities across the country at an astonishing rate. In 1999, the National Center for Education Statistics (NCES) reported that during the 1997-98 academic year only 8% of all postsecondary institutions offered distance education programs but by the 2000-2001 academic year, NCES (2003a) reported that 56% of all postsecondary institutions offered distance learning. During this same period, the International
Data Corporation (IDC) released a report in January 1999 entitled *Online Distance Learning in Higher Education, 1998-2002* that:

An estimated 2.2 million college students would be enrolled in distance education by 2002, up from approximately 710,000 in 1998. IDC's research also estimated that 85% of 2-year colleges would offer distance learning courses by 2002, compared to 58% in 1998. In addition, 4-year colleges and universities that already offered distance education courses would jump to 84% in 2002, an increase from 62% in 1998. (as cited in Council for Higher Education Accreditation [CHEA], n.d., ¶ 1)

In 2001, NCES surveyed degree-granting postsecondary institutions and found 2,320 colleges and universities offered distance education courses and programs (NCES, 2003a). Of these institutions, 89% of public 4-year institutions and 90% of public 2-year institutions offered online education courses, compared with 40% of private 4-year institutions and 16% of private 2-year institutions (NCES, 2003a). Moreover, 30% of these institutions offered degree programs to be completed totally through online education (NCES, 2003a). Between 2003 and 2006, Allen & Seaman authored several annual surveys that addressed the state of online education in the U.S., specifically its growth, the diversity of institutions that offer online learning, programs offerings, and the discipline areas that are represented in online education.

In the first publication, *Sizing the Opportunity: The Quality and Extent of Online Education in the United States, 2002 and 2003*, Allen & Seaman (2003) found that over 1.6 million students took at least one online course during the fall
2002 and over one-third (578,986) of these students took all of their courses online. This report also showed that 81% of all higher education institutions offered at least one fully online course and 34% of the institutions offered complete online degree programs (Allen & Seaman, 2003).

The growth of online enrollments has continued to increase year after year. The second annual study, Entering the Mainstream: The Quality and Extent of Online Education in the United States, 2003 and 2004, indicated that 1.98 million students had taken one or more online courses in the fall 2003, an increase of 22.9% from 2002 (Allen & Seaman, 2004). The third survey, Growing by Degrees: Online Education in the United States, 2005, resulted in an overall enrollment growth rate of 18.2% with online enrollments reaching 2.35 million in 2004 (Allen & Seaman, 2005).

The fourth publication in the series of reports, Making the Grade: Online Education in the United States, 2006, questioned whether the growth of online enrollments had begun to plateau since the growth rate in 2004 was lower than the growth rate in 2003. The results clearly showed there had been no leveling in the growth rate and that “higher education institutions taught nearly 3.2 million online students during the fall term of 2005, an increase of about 850,000 students and a growth rate of 35%” (Allen & Seaman, 2006, p.5). This report also signified that close to 17% of the 17 million students enrolled at degree-granting institutions are online students (Allen & Seaman, 2006).
Institutional Characteristics

Given the pervasiveness of technology in student lives and in the workplace, colleges and universities have little choice but to infuse their teaching with it (Zumeta, 2004). Hence there are different types of course delivery methods offered at higher education institutions. They are web-facilitated courses, blended/hybrid courses, and complete online courses. Web-facilitated courses use web-based technology to facilitate what is essentially a face-to-face course (Allen & Seaman, 2003). The technology used for these courses may be Blackboard or WebCT with 1 to 29% of the course content delivered online (Allen & Seaman, 2003). Blended/hybrid courses use web-based technology and has a substantial proportion of their content delivered online; 30 to 79% of the courses is a blend of online discussion and face-to-face class meetings (Allen & Seaman, 2003). A complete online course has most or all of their course content delivered online; 80% or more of the course is online and typically there are no face-to-face meetings (Allen & Seaman, 2003).

Online education has made strong inroads in the availability of core courses offered at most types of institutions. Allen and Seaman (2005) expressed that 63% of the colleges that offered undergraduate face-to-face courses or programs also offered the same courses online. With regards to graduate programs, 65% of those institutions offering graduate face-to-face courses or programs also offered the same courses online (Allen & Seaman, 2005). Among the disciplines offered, 43% of colleges offering face-to-face business programs also offer online business programs. Allen & Seaman (2005) reported, "business programs are
followed closely by liberal arts and sciences, general studies, humanities (40%), computer and information sciences (35%), health professions and related sciences (31%), social sciences and history (28%), education (25%), and psychology (24%)” (p. 8).

Public institutions have a large lead over private institutions in offering both online courses and complete online degree programs. Over 90% of all public institutions offer at least one online course in contrast to 47% of private, nonprofit institutions and 40% of private, for-profit institutions (Allen & Seaman, 2006). The difference between public and private institutions is even more dramatic when comparing the number of online degree programs that are offered at each. Public institutions offer 46% of online degrees, private nonprofit institutions offer 21%, and private for-profit institutions offer 23% of online programs (Allen & Seaman, 2006).

Large institutions that have more than 15,000 enrollments have the greatest number of students taking all their courses online with doctoral/research institutions far more likely to have fully online programs (56%) than masters (44%) and baccalaureate (17%) institutions (Allen & Seaman, 2006).

Credibility and Acceptance of Online Degrees

The literature related to online education suggest that students are satisfied with online learning programs and will continue to have an ongoing relationship with higher education as they seek to invest in their human capital and improve their career opportunities via online learning (Folkers, 2005; Frey et al., 2004;
Davis et al., 2004). Benson (2002) acknowledges that “over the past decade, online learning has evolved into a growing vehicle for providing adults with new skills, updated information, and new knowledge, often through degree programs” (p. 443). However, even as more and more colleges offer programs online, there is still skepticism among employers concerning degrees obtained through online academic programs (Carnevale, 2007).

Several reports published regarding the acceptance of online degrees for employment are largely anecdotal though they share some insights into employers’ perceptions about degrees earned online as a credential for employment. For example, in 2001, Vault Inc. surveyed 239 human resource (HR) professionals on their opinions regarding candidates with online degrees. Their report showed that 77% of the HR professionals or hiring managers believed that an online degree earned at an accredited institution such as Duke and Stanford was more credible than one earned at an accredited Internet only institution such as Jones International (Vault Inc., 2001). Twenty-six percent of those surveyed believed that an online bachelor's degree was as credible as an offline degree, while 61% said the online degree was not as credible, but was acceptable. Likewise, 13% of the HR professionals held that an online bachelor's degree was not credible and unacceptable (Vault Inc., 2001).

Vault repeated this study in 2006 to see if employers’ sentiments regarding the acceptance of online degrees in the workplace had changed over a five-year period. Out of 101 responses, 28% of managers surveyed indicated that an online bachelor's degree was as credible as an offline degree, 58% said an
online degree was not as credible but acceptable, and 14% believed the online bachelor's degree was not credible and unacceptable (Vault Inc., 2006). When comparing the two surveys, the results indicated that little had changed in five years about the credibility and acceptance of online degrees in the workplace.

Similarly, the private career accrediting commission, the Distance Education and Training Council (DETC) conducted a survey in 2001 entitled DETC Degree Programs: Graduates and Employers Evaluate Their Worth to determine the depths and worth of accredited degrees earned via distance education. DETC surveyed 80 employers (33 surveys returned) who were supervisors of graduates who received their degree from a distance-learning program. The supervisors were asked to rate the value of the employee's academic degree compared to resident school degrees in the same field, and responded with 13% saying the degree was more valuable, 56% thought the degree was just as valuable, 13% believed the degree was less valuable, and 18% were not sure (Distance Education and Training Council [DETC], 2001). Additionally, DETC measured how many supervisors knew that their employee had earned their degree by distance education and the results indicated 91% (DETC, 2001).

DETC also repeated this study in 2006 and surveyed 104 employers (46 surveys returned) to see if the value of distance education degrees had changed over time. The results were similar to the previous survey indicating that 93% of employers were aware of the employee's distance education degree. Moreover, when supervisors were asked to rate the value of the employee's academic degree compared to resident school degrees in the same field, 11% responded
saying the degree was more valuable, 85% thought the degree was just as valuable, and 4% were not sure (DETC, 2006).

An empirical study performed by Adams and DeFleur (2006) entitled The Acceptability of Online Degrees Earned as a Credential for Obtaining Employment looked at whether a job applicant who earned a bachelor’s degree entirely or partially online had the same chance of being hired as a person whose degree had been completed through traditional on-campus coursework. The authors reported that, of the 269 hiring managers that responded, “96% indicated they would choose the candidate with the traditional degree for employment in their organization” (p. 38), while “only 4% selected the candidate with the online degree” (p. 38).

After evaluating the preceding studies, little has changed with reference to employer attitudes of the acceptance and credibility of online degrees for employment. The reason for this may be attributed to the fact that “the credibility of traditional education is based on the reputation of the institution itself” (Bechky, 1999, How the Context of Distance Education Differs section, ¶ 1). In contrast, the credibility of online education “relies on the market performance of the students who have finished a degree program and are looking for jobs in which to apply the skills they have learned” (Bechky, 1999, How the Context of Distance Education Differs section, ¶ 1). Consequently, students who pursue a degree online are taking a risk that potential employers will not value the credential they earn.
Accreditation

Accreditation in the United States is a "process of external quality review used by higher education to scrutinize colleges, universities, and educational programs for quality assurance and quality improvement" (Eaton, 2006, p.3). The higher education enterprise is made up of degree-granting and non-degree-granting, public or private, 2- or 4-year, nonprofit or for-profit institutions. These institutions and educational programs seek accredited status as a means of demonstrating their academic quality to students, the public, and to become eligible for federal funds.

Accreditation status of an institution or program is also important to students for a smooth transfer of courses and programs among colleges and universities, and to employers when evaluating credentials of job applicants and providing tuition support to current employees seeking additional education (Eaton, 2006). According to Loane (2001), an accredited institution undergoes periodic self-studies, inspections, and evaluations to certify that it meets the standards of the accrediting body in areas as diverse as governance, curriculum, faculty, finances, and student services.

Furthermore, U.S. accreditation is a voluntary, nongovernmental system of quality assurance. Unlike other countries that have a Ministry of Education or other central authority that exercises control over the quality of postsecondary educational institutions, the United States has no such governmental entity. Instead, the U.S. Department of Education (2007) states:
The Secretary of Education is required by law to publish a list of nationally recognized accrediting agencies that the Secretary determines to be reliable authorities as to the quality of education or training provided by the institutions of higher education and the higher education programs they accredit. (Overview of Accreditation section, ¶ 3)

Organizations recognized either by the U.S. Department of Education (USDE) or by organizations recognized by the Council for Higher Education Accreditation (CHEA), a private nonprofit organization which accredits institutions and programs. Recognition means the accrediting organizations undergo a periodic external review of their qualifications and activities to determine whether they meet the standards of USDE or CHEA. If accreditors meet the standards, they are recognized.

Though accreditation is a voluntary, nongovernmental activity, recognition is not. The USDE and the CHEA each review the quality and effectiveness of accrediting organizations. USDE's primary purpose is to assure that federal student aid funds are purchasing quality courses and programs. To be USDE recognized, accrediting organizations must maintain criteria or standards in specific areas such as student achievement, curricula, faculty, facilities, fiscal and administrative capacity, student support services, and recruiting and admissions. Other standards include measures of the program length and objectives of degrees or credentials offered; record of student complaints; and record of compliance with the institution's program responsibilities for student aid under Title IV of the Higher Education Act (USDE, 2007, Accreditation in the
Similarly, CHEA’s main objective is to assure and strengthen academic quality and ongoing quality improvement in courses, programs, and degrees. CHEA accreditors are required to advance academic quality, demonstrate accountability, encourage self scrutiny for change and needed improvement through ongoing self-examination in institutions and programs, employ appropriate and fair procedures in decision making, continually reassess accreditation practices, and maintain fiscal stability (Eaton, 2006).

**Types of Accreditation**

There are two basic types of accreditation in the U.S., institutional and specialized or programmatic. “Institutional accreditation normally applies to an entire institution, indicating that each of an institution’s parts is contributing to the achievement of the institution’s objectives, although not necessarily all at the same level” (USDE, 2007, Type of Accreditation section, ¶ 2). Lubinescu, Ratcliff, and Gaffney (2001) added “institutional accreditation assists in achieving a balance of human and financial resources among the various programs” of higher education institutions (p. 6).

Institutional accreditation is carried out by regional and national accrediting organizations. Regional associations operate in six geographical regions of the country whose purpose is to evaluate the quality of the institution as a whole, not their individual programs. There are eight regional accrediting organizations: the Middle States Association of Colleges and Schools-Commission on Higher
Education; the New England Association of Schools and Colleges-Commission on Institutions of Higher Education; the New England Association of Schools and Colleges-Commission on Technical and Career Institutions; the North Central Association of Colleges and Schools-The Higher Learning Commission; the Northwest Commission on Colleges and Universities; the Southern Association of Colleges and Schools-Commission on Colleges; the Western Association of Schools and Colleges-Accrediting Commission for Community and Junior Colleges; and the Western Association of Schools and Colleges-Accrediting Commission for Senior Colleges and Universities (USDE, 2007, Regional Institutional Accrediting Agencies section; Lubinescu et al., 2001).

The process of regional accreditation is intended to improve the quality and integrity of institutions based on the voluntary association of schools and colleges by identifying potential problems within an institution and providing a statement of quality to external stakeholders. Lubinescu et al. (2001) points out that:

Regional accreditation provides recognition to institutions that meet a minimum standard of quality. Institutions then must strive to maintain this level of quality while seeking to improve human, physical, and financial resources; programs and services; and impact on students and other constituents. In order to maintain accreditation, an institution must respond to any criticism or suggestions given and work to improve the problems identified. Through this process, regional accreditation provides opportunities for institutional improvement and accountability. (p. 9)
It is important to note that all state universities, most private colleges, and most private research institutions are regionally accredited.

National accrediting organizations include faith-based and private career accreditors. These associations operate nationally and review entire institutions (CHEA, 2008b; Eaton, 2006). Faith-based agencies accredit religiously affiliated and doctrinally-based degree-granting and nonprofit institutions. Private career agencies accredit mainly for-profit, career-based, single-purpose institutions, both degree- and non-degree-granting. Many of these institutions focus on specific subject areas such as education in business and information technology (CHEA, 2008b; Eaton, 2006).

Specialized or programmatic agencies also operate throughout the country and review programs and some single-purpose institutions. Specialized accreditors accredit specific programs, professions, and free-standing schools including business, law, medical, engineering, and health profession programs (CHEA, 2008b; Eaton, 2006).

*Accreditation for Distance Education*

Technology mediated instruction is becoming increasingly commonplace, as is evident in the growing number of colleges and universities offering courses and programs online. With the advent of the World Wide Web and Internet-based distance learning, accreditors have had to revise their quality review practices to meet the needs of electronically delivered courses, programs, and degrees using the same standards they use for evaluating other academic programs. “Once focused on residential campus learning structures with little attention to off-
campus programs, accrediting commissions have begun to address the ramifications of technology-supported learning, whether it occurs on- or off-campus, at both traditional institutions and for-profit educational ventures” (Albrecht, 2002, p. 2). Carnevale (2000) also emphasized that:

Accrediting agencies have found themselves having to review institutions that have no campus but rely on Internet-based education to teach students. And traditional universities have created distance-learning programs that accreditors have to review when the universities’ regular accreditation comes up for renewal. (p. A58)

As a result, in 2000, the Council of Regional Accrediting Commissions (CRAC) made up of the eight regional accrediting agencies worked together to establish standards that would be consistent across regions for granting accreditation to distance education programs and institutions. Incidentally, the new guidelines differ from traditional accrediting standards by focusing on how much students learn, instead of institutional preferences (Carnevale, 2000).

The CRAC developed two documents to address changes to accreditation standards and procedures for distance education. The first document entitled Statement of Commitment by the Regional Accrediting Commissions for the Evaluation of Electronically Offered Degree and Certificate Programs, considers emergent forms of learning and expresses a set of commitments aimed at ensuring high quality in distance education (2001a). This document accentuates that:
The commissions are seeking to assure that technologically mediated instruction offered at a distance by whatever institution in whatever region meets the same high standards for quality through the application of an evaluative framework utilizing peer review common to all regions. (p. iv)

The second document entitled Best Practices for Electronically Offered Degree and Certificate Programs, "provides a comprehensive and demanding expression of what is considered current best practice. It is being utilized by each commission, compatibly with their policies and procedures to promote good practice in distance education among their affiliated colleges and universities" (CRAC, 2001a, p. v).

The Best Practices report promotes guidelines such as evidence that the electronically offered program is consistent with the role and mission of the institution and suggests that faculty members participate fully in decisions concerning program curricula. Other guidelines include that institutions provide technical and program support for both faculty members and students, and the programs have evaluation and assessment methods for measuring student learning (CRAC, 2001b; Carnevale, 2000).

Accreditors are applying best practices identified in the report to higher education institutions to ensure that courses and programs offered through distance education meet minimum standards of quality. According to Albrecht (2002) the regional accrediting commissions "are adapting to changes in higher education including the shift from inputs to learning outcomes, the increase in
distributed learning, and the penetration of technology into the classrooms 'real' or 'virtual'" (p. 5).

Accreditation Mills and Diploma Mills

There are a number of accreditation agencies that are not recognized by the U.S. Department of Education (USDE) or the Council for Higher Education Accreditation (CHEA) which are considered accreditation mills. "Accreditation mills are dubious providers of accreditation and quality assurance or operations that offer a certification of quality of institutions that are considered bogus" (CHEA, 2003, Fact Sheet 6 ¶1) which can mislead students and the public about the quality of an institution. Along with accreditation mills, there are also diploma mills, which are also "dubious providers of educational offerings or operations that offer certificates and degrees that are considered bogus" (CHEA, 2003, Fact Sheet 6 ¶1). Some accreditation agencies not recognized by the USDE or the CHEA are: (a) the American Association of Accredited Colleges and Universities; (b) the Council for National Academic Accreditation; (c) and the Distance Education Council of America (Ezell & Bear, 2005).

Examples of higher education institutions offering degrees by distance education that are not accredited by the USDE or CHEA are Breyer State University and Canyon College. Breyer State University offers more than 50 online degree programs (Breyer State University, 2008) and Canyon College offers over 60 online degree programs and hundreds of online courses (Canyon College, 2008).
Recruitment of college graduates is a major source of hiring for professional, managerial, and technical jobs — jobs that are increasingly important to the economic success of both businesses and nations (Rynes, Orlitzky, & Bertz, Jr., 1997). In many organizations, external hiring is usually limited to entry-level positions filled by new college graduates, while higher-level jobs are reserved for internal candidates through promotion opportunities (Rynes et al., 1997).

Human resource (HR) professionals play a vital role in the recruitment and selection of new employees. Large firms particularly “are more likely to have dedicated HR staffs and therefore they are more likely to involve human resource professionals in the recruitment function while small firms are more likely to have to use upper management in the recruiting process” (Barber, Wesson, Roberson, & Taylor, 1999, p. 844). Similarly, Wilk and Cappelli (2003) suggest, “employer’s decisions about the selection of employees are central to the operation of organizations and to outcomes that matter to individuals, organizations, and society” (p. 103).

When an organization is interested in gathering information about job applicants, it may use numerous selection methods. For example, if an organization is concerned about an applicant’s academic background, transcripts and teacher references can provide this information. Likewise, if an organization intends to review an applicant’s work history, résumés and employer references are methods for collecting such information. Finally, information regarding the
ability and skill level of an applicant can be collected using tests and work samples designed as part of the selection process (Wilk & Cappelli, 2003).

Online Recruiting

Recruitment and selection policies and practices have dramatically changed over the past decade with online recruiting becoming a rapidly growing trend in human resource management (Fegley, 2007). Online recruiting also referred to as e-recruiting utilizes the Internet and a variety of recruiting technologies to fill open positions efficiently and effectively. More specifically, online recruiting “is job-specific and offers computer-assisted screening interviews and statistical prediction to aid in reducing recruiting costs, time-to-hire, and employee turnover” (Smith & Rupp, 2004, p. 67). When recruiting online, companies can post and update openings in real-time, obtain résumés in an electronic format, scan and evaluate résumés using a résumé application system, and warehouse résumés for future openings (Stimpson, 2004).

According to McMurtrie and Adams (2006), “the Internet is an invaluable tool for advertising jobs online” (p. 28). Its use allows a company to consider various methods to recruit and select online candidates. Trends such as employer Web sites, general job boards, niche job boards, organization Web sites, social networking Web sites, as well as other new e-recruitment technologies like video résumés and .jobs domains, are changing the recruitment landscape (Booz Allen Hamilton, 2006; Fegley, 2007).

A major method of online recruiting for businesses is to post job opportunities on their own company’s Web site. The benefit of this method enables companies
to sell themselves to potential employees and allows a candidate to learn more about the company (Smith & Rupp, 2004). Another e-recruiting method includes general job sites similar to Monster.com and CareerBuilder.com that have thousands of listings for job seekers in numerous categories and locations. These sites let job seekers search an unlimited number of openings and post their résumés for employers. Additionally, these sites also permit employers to post job listings and search a résumé database for qualified candidates (Stimpson, 2004; Smith & Rupp, 2004).

Similarly, niche job boards are industry-specific sites that specialize in targeting an intended audience. For instance, Dice.com focuses on technology professionals while JobsintheMoney.com concentrates on professionals in the accounting and financial industry. By posting job opportunities on an industry-specific site, businesses can ensure that their intended audience will see their listings (Stimpson, 2004; Smith & Rupp, 2004). Likewise, organization Web sites like SHRM.org (Society of Human Resource Management) and NALP.org (National Association for Law Placement) represent professional associations and attract qualified job candidates in the business community, many of who are members of the association (Stimpson, 2004; Simth & Rupp, 2004).

Other options for posting job listings are social networking Web sites that focuses on building online communities for people who share interest and activities. For example, LinkedIn.com is a site for business and career-oriented professionals that help job seekers discover inside connections that help them land jobs and close deals. Employers may also use this site to post and distribute
job opportunities. Other general social networking sites like MySpace, Facebook, and Friendster are mediums that allow members to communicate by blogs, instant message, voice chat, and video and videoconferencing (Fegley, 2007).

One of the most recent advancements in the recruitment process is the jobs domain, which offers employers a different conduit to more effectively direct job seekers to their own employment Web site (Fegley, 2007). "This domain's intended use is to provide a simple, fast, and consistent method for the human resource management community to communicate the exact online destination of their organization's job page to job seekers using the Internet" (Fegley, 2007, p. 3). For example, if a job seeker is looking for a job at AT&T, they can navigate directly to www.att.jobs to access AT&T’s jobs page.

Internet job sources attract many online applicants. A study conducted by Booz Allen Hamilton for DirectEmployers Association found that over 50% of all new hires in 2005 were recruited from Internet job postings. An employers organization Web site accounted for 21% of these hires, general job boards were responsible for 15%, and 6% of new hires originated from niche job boards. Other Internet sources included social networking Web sites, 5%, and commercial résumé databases, 4% (Booz Allen Hamilton, 2006).

Although Internet job sources attract many qualified applicants, good recruiting and selection practices combine multiple online and offline strategies such as employee referrals, search firms, and campus recruiting. In 2005, employee referrals generated the highest quality of new hires (88%), while
employer Web sites generated 54%, search firms 51%, and campus recruiting 43% of high quality new hires (Booz Allen Hamilton, 2006).

Reference and Background Checks

According to Burke (2005) “hiring a new employee is a huge undertaking of both time and money, and the responsibility for finding the best person for the job lies, in part, with an organization’s HR professionals” (p. v). Reference, background checking, and verification of job candidates is a crucial element of the hiring process. Therefore, to get a complete picture of a candidate, it is essential to review résumés and interview prospective employees. It is also vital to include processes such as interviewing former employers, verifying a candidate’s education, certifications, and information from criminal and driving records as part of the hiring process (Burke, 2005). The most popular kinds of screenings implemented for new hires or applicants are criminal checks (85.9%), followed by résumé checks for prior employment (85.2%), education checks for degrees awarded (65.9%), and drug screening (60.0%) (Anonymous, 2007).

Even though reference and background checking is an important phase in the hiring process, only 96% of respondents surveyed by the Society of Human Resource Management (SHRM), indicated that they always conduct reference checks, even on candidates for executive and upper management positions (Burke, 2005).

Thus, “in the past few years, a number of organizations have been embarrassed to discover that an individual they hired to a high-profile position had actually misrepresented credentials as basic as a college degree” (Burke,
2005, p. v). In February 2006, for example, RadioShack Corporation’s chief executive officer (CEO), David Edmundson resigned after the discovery of errors on his résumé; Edmundson misrepresented his academic record stating that he had received a Bachelor of Science degree (“RadioShack”, 2006). Even though reference checking is vital to the hiring process, “employers are often reluctant to provide information on current or former employees for fear of legal liability” (Burke, 2005, p. v). According to Burke (2005) 54% of respondents in a SHRM survey said that their organization has a policy not to provide any references or information about current or former employees.

**Online Background Checks**

While the Internet has made it easy for job seekers to find and apply for jobs online, it has also opened the door to a wealth of personal information accessible to organizations posted about a job candidate on other areas of the Web. With the growing popularity of social networking sites like MySpace and Facebook, employers are making online searches part of their background checks and viewing personal information shared on these Web sites by potential employees (Millard, 2007; Fegley, 2007). Furthermore, employers are using search engines similar to Google and Yahoo! to find information posted online about a job candidate, and some organizations have disqualified a candidate based on what they revealed using a search engine (Fegley, 2007).

Despite the advantages of using online technologies to conduct background checks, there are many caveats and potential pitfalls, such as legal and ethical concerns, that staffing professionals need to be cognizant of before adding the
use of these tools to their screening repertoire (Society for Human Resource Management [SHRM], 2008). In looking up information on the Internet, HR professionals should be mindful of possible discrimination lawsuits and concerns about unethically invading the privacy of applicants (SHRM, 2008).

Summary

This chapter began with a review of the literature about the concepts of human capital theory and the theory of credentialism which discusses the idea that individuals will invest in themselves by acquiring education, particularly higher education credentials that employers may use as a screening device to attract potential employees. Also included in this chapter were the general demands for higher education and the diversity of the student population in terms of traditional and nontraditional students (Cohen, 1998; NCES, 2006; Martinez, 2004). The demands for higher education reflects the increases in enrollments over the last 40 years from 11.1 million students in 1975 (Cohen, 1998) to 17.3 million students attending college in 2004 (NCES, 2006).

Furthermore, presented was the demand for distance education, its diverse delivery modes for instruction, the history of distance education from the late 1800s to the present evolution of online education, and the growth of online education from 1997 to 2005. In the 1997-98 academic year, only 8% of all postsecondary institutions offered distance education programs (NCES, 1999) but by the 2000-01 academic year, 56% of all postsecondary institutions offered distance learning programs (NCES, 2003a). Likewise, the growth of online
enrollments had increased from approximately 710,000 million students in 1998 (as cited in Council for Higher Education Accreditation [CHEA], n.d, ¶ 1) to nearly 3.2 million online students during 2005 (Allen & Seaman, 2006).

Finally, this chapter reviewed the credibility and acceptance of online degrees in the workforce, the accreditation process of higher education institutions, and policies and practices that employers use to recruit and select prospective employees. A growing tool that HR utilizes is the Internet for online recruiting and reference and background checking of job applicants.
CHAPTER 3

METHODOLOGY

The purpose of this exploratory study was to investigate the perceptions of human resources (HR) professionals and employer policies and practices toward hiring college graduates who have earned traditional degrees compared to those who have earned online degrees. For the purpose of this study, HR professionals are defined as executives, directors, or managers that develop and manage human resources policies and practices as well as those who specialize in employment, recruitment, and placement of job applicants and establish job descriptions. A college graduate who has earned a traditional degree is one who has taken less than 30% of the course content online while a graduate who has earned an online degree has completed 80% or more of the coursework in a degree program via the Internet/Web (Allen & Seaman, 2003).

This chapter presents the research method and procedures used in the study, which consists of the following sections: operational framework, rationale for survey methodology, rationale for online survey implementation, research questions, population and sample, unit of analysis, research instrument, data collection procedures, and data analysis.
Operational Framework

The operational framework is a graphical representation of the conceptual framework that grew out of the research literature on human capital theory and the theory of credentialism. The model (see Figure 1) for this study shows how individuals develop their own human capital by investing in education and obtaining a college degree while acquiring motivation, marketable skills, and knowledge. Human capital investment makes the more highly schooled individual more attractive to employers, consequently enhancing their opportunities for high level occupations and higher compensation (Bills, 2003). Human capital investment is a component that drives the theory of credentialism and is essential to an employer's decision to hire or not hire a college graduate with an online degree (Bills, 2003).

Additionally, this model entails the theory of credentialism, which generally applies to individuals who hold degrees from higher education institutions that lead to the acquisition of a job by means of an external hiring decision (Bills, 2003). Employers rely on credentials as a screening mechanism because they want trainable people who learn quickly and can grow in their jobs. Employers also value credentials because they are at a starting point for which they can have confidence in the ability and reliability of potential employees. In this model, credentialism is a vital element to an employer's decision to hire or not hire a college graduate with an online degree.
Human Capital Investment


Investment in Education
Type of Institution
Type of Degree

Graduate Characteristics
Motivation
Marketable Skills
Knowledge

Higher Level Occupations

Higher Compensation

INDEPENDENT VARIABLES

Credentialism

Screening Mechanisms
Policies and Practices
External Hiring Decisions
Institution Reputation

Employer's Value
Educational Qualifications

Organization Characteristics
Size
Industry
Sector
Credentialed Employees

Respondent Demographics
Experience
Title
Gender
Age

DEPENDENT VARIABLE

Employer Decision
To hire graduates with online degree

OR
Not hire graduates with online degree

Figure 1. Operational model containing variables influencing an employers decision toward hiring college graduates who earn their degree online.

Rationale for Quantitative Survey Methodology

Survey research is a descriptive approach that is "used to collect information from or about people to describe, compare, or explain their knowledge, feelings, values, and behavior" (Fink, 2006, p.1). In addition, survey research is one of the best methods available to researchers who are "interested in collecting original data for describing a population too large to observe directly" (Babbie, 2004, p.52).
With 182,000 human resources employment, recruitment, and placement specialist (Bureau of Labor Statistics, 2007) in the United States, the population under study is too large to observe directly. This study consisted of a cross-sectional design that collected data from select individuals in a single time period.

The methodology for this study was based on Dillman's (2007) Tailored Design Method (TDM), which describes a set of procedures developed to produce high quality information, high response rates, and reduce error in self-administered surveys. TDM incorporates principles of social exchange theory aimed at designing surveys people will respond to which stresses the importance of establishing trust with the respondents, offering rewards to complete the survey, and reducing social costs for being a respondent (Dillman, 2007). Additional elements include using multiple contacts and respondent-friendly questionnaires; communication that emphasizes the surveys usefulness and the importance of a response from each person in the sample; and personalizing cover letters. Finally, TDM involves tailoring the survey by taking into consideration the survey population and the nature of the survey situation in an effort to maximize quality and increase survey response (Dillman, 2007).

Rationale for Using Online Survey

A significant development in survey methodology is the collection of survey data through self-administered electronic surveys by the World Wide Web (Dillman, 2007). Two types of electronic or online surveys available for data collection are e-mail and Web-based surveys.
Electronic survey methodologies offer the potential for dramatically reducing survey costs and efficiency. Once the online survey has been developed, the cost of surveying each additional person is much less, compared with both telephone interview and conventional paper-and-pencil surveys (Dillman, 2007; Van Selm & Jankowski, 2006; Gunn, 2002). Additionally, data collection via the Internet provides a faster response rate and "ease to process data, since responses could be downloaded to a spreadsheet, data analysis package, or a database" (Gunn, 2002, Advantages of Web-based Surveys section, ¶1).

Online surveys are particularly attractive when the population under study is distributed across a large geographic region or when the population of interest has high rates of computer use and Internet experience (Van Selm & Jankowski, 2006). Examples of these populations include surveys of businesses, universities, large organizations, groups of professionals, and purchases of computer equipment (Dillman, 2007).

Similarly, for an increasing portion of the population, computers and Internet access has become a basic workplace necessity. According to the latest data published by the Bureau of Labor Statistics (2005), 77 million persons used a computer at work in 2003. Of these workers, the most commonly reported task was accessing the Internet or using e-mail. In terms of occupation, managers and professional workers reported relatively high computer-use (79.6%) and Internet access (67.1%) rates.
Review of Research Questions

As more and more colleges and universities offer online degree programs, questions continue to emerge concerning the acceptance and credibility of online degrees in the workforce. According to Carnevale (2007), there is still skepticism among employers regarding degrees obtained through online academic programs. Therefore, this study was guided by the following research questions:

1. What are the differences in the perceptions of employers with regard to employer characteristics toward hiring college graduates who earn their degrees traditionally or online?

2. What are the differences in policies and practices of employers toward hiring college graduates who earn their degrees traditionally or online?

3. What relationships exist between selected independent variables and the dependent variable, which examines the perception of hiring candidates who have earned an online degree?

Population and Sample

The survey population for this study consisted of human resource professionals whose job titles indicate being responsible for employment, recruitment, and placement of job applicants in the United States. The population represented organizations who were members of the National Association of Colleges and Employers (NACE) organization. This professional association represents organizations in business and government engaged in human resources (HR), professional staffing, college relations, and recruiting and hiring
of college graduates. The researcher received an electronic file from NACE that included 1,046 members, however, several names were removed from the list by the researcher because the contact person was not located in the United States or their title was not related to HR employment, recruitment, or placement of employees. For example, several members had titles, such as logistics analyst, economist, shareholder, and procurement analyst. Therefore, only 832 members were eligible to participate in the study. This sample is represented by the participants who responded to the study.

Unit of Analysis

According to Calabrese (2006), "an important step in research design is to determine the unit of analysis—or the unit about which statements are being made" (p. 46). In this study, data collection and statistical analyses were conducted at the organizational level. Thus, the unit of analysis for this study was employing organizations.

Research Instrument

The survey instrument (see Appendix I) is a Web-based self-administered questionnaire that consisted of three sections. The first section included five items for organizational characteristics. These questions were derived from a study by Burke (2005) entitled 2004 Reference and Background Checking Survey Report.
The second section of the survey comprised of 27 items and instructed respondents to rate policy-oriented statements as to how well each statement reflected their organizations current hiring practices on a 6 point Likert-type scale ranging from 1 to 6, where 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, and 6 = strongly agree. Respondents were further instructed to consider their organization's policies and practices, not their personal preference in their rating. These scale items originated from a study conducted by Sosdian and Sharp (1978a) entitled The External Degree as a Credential: Graduate's Experiences in Employment and Further Study. A component of the Sosdian and Sharp (1978a) study included an opinion survey of employers that focused on general employer hiring and promotion policies and practices, and investigated whether and how these policies and practices related to external degree graduates as compared with traditional graduates (Sosdian & Sharp, 1978a).

The development of the original instrument involved several unstructured in-depth interviews with employers. The interviewees were personnel officers responsible for recruitment and hiring. Each interviewee was asked several open-ended questions designed to probe for as many hiring or promotion criteria used by their organization as possible. Responses were analyzed for content and the results constituted the basis for writing the questions for the instrument (Sosdian & Sharp, 1978b).

For this study, the researcher did not use all of the questions from the original survey created by Sosdian and Sharp (1978b) additionally, the term external
degree was changed to reflect the modern era with the term online degree (Sosdian & Sharp, 1978b; Moore & Kearsley, 2005).

The third section of the survey included four items that focused on respondent demographic information. These questions were obtained from a report written by Cober, Brown, Levy, and Shalhoop (2003) entitled HR Professionals’ Attitudes Toward and Use of the Internet for Employee Recruitment.

Reliability

The researcher assessed the internal consistency to determine how well the items that made up the scale were measuring the same underlying construct of screening mechanisms and employer’s value. To test for internal consistency, Cronbach’s coefficient alpha was computed, which can take on values from 0.0 to 1.0, with higher values indicating greater reliability (DeVellis, 1991; Pallant, 2005). Alpha values of .70 or higher are considered acceptable (Pallant, 2005; Nunnally, 1978), however, “it is not unusual to see published scales with lower alphas” (DeVellis, 1991, p. 85). Pedhazur (1997) suggest that in non-experimental research, the reliability of the measure tends to be low to moderate, ranging from about .50 to about .80. Table 1 shows the Cronbach’s alpha values for the screening mechanisms and employer’s value measures for this study.
Table 1

*Reliability Values*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening Mechanisms</td>
<td>.692</td>
</tr>
<tr>
<td>Employer's Value</td>
<td>.635</td>
</tr>
</tbody>
</table>

Data Collection Procedures

Before administration of the survey, the researcher followed all appropriate procedures required by the Office for the Protection of Research Subjects at the University of Nevada, Las Vegas and its Institutional Review Board (IRB) approved the project.

Survey method via the Internet, specifically *SurveyMonkey* was used to administer the Web-based self-administered questionnaire. The researcher purchased a professional subscription from *SurveyMonkey* to create and host the survey. The researcher also created a Web site hosted at the University of Nevada, Las Vegas (UNLV), which included a welcome screen that explained the purpose of the study and instructions to complete the survey. The UNLV Web site provided a link that launched the survey hosted at *SurveyMonkey* and it was designed to allow participants to skip questions or quit the survey at anytime. Given that participants were asked to access the survey by typing the Web address into their browser, this assured respondent anonymity since
SurveyMonkey only tracks survey responses if their e-mail component deployed the survey.

In order to increase the response rate, the researcher used procedures outlined in Dillman (2007), which included a cover letter, follow-up letter, official university envelopes, and offered an incentive to participants for completing the survey. The first contact with potential participants comprised of sending a personalized cover letter (see Appendix II) in an official university envelope that included the Department of Educational Leadership as the return address.

These letters were sent by first-class mail on April 20, 2008 to each eligible participant listed in the database. Each letter explained the goals of the study, how to access the survey, estimated time to complete the survey, and ensured confidentiality. As an incentive, participants were offered a copy of the results at the conclusion of the study by replying with their e-mail address to the researcher.

On May 15, 2008, three weeks after the initial contact, everyone on the survey list was sent a first-class mail follow-up letter (see Appendix II) in an official university envelope, thanking those who had already completed the survey and encouraging those who had not, to do so as soon as possible.

The first question in the survey consisted of an informed consent statement (see Appendix I). In order to participate in the survey, participants were required to select the “I consent” option located at the bottom of the Web page. If a participant did not agree with the informed consent, they had the option to select “I disagree and would like to exit the survey” where they were redirected to an
exit Web page. Each participant had the option of printing the informed consent through either the Web page within the survey or the link on the Web homepage. Once the respondents consented, they were asked to complete the survey using the instructions provided at the beginning of each section (Section I, II, and III). Upon selecting the "DONE" button at the conclusion of the survey, respondents were thanked for their participation by being redirected to a "Thank You" Web page.

The survey was administered over a period of approximately 10 weeks. Using SurveyMonkey's "One Response Per Computer" collection option, allowed only one response per computer to ensure respondents were not able to complete the survey multiple times. Additionally, as part of the subscription, SurveyMonkey compiled results as they were received and provided a quick and easy way to download results into a spreadsheet that was imported into a data analysis software package. SurveyMonkey also securely stored the survey and its results.

By June 30, 2008, the post office had returned eight contact letters, leaving 824 eligible participants. A total of 93 participants responded to the survey for an overall response rate of 11.3%. However, two participants declined consent and four surveys were discarded as unusable because respondents skipped a large portion of the policy statements section (Section II). Consequently, leaving 87 completed questionnaires to be used for analysis. Although the response rate was low, the responses yielded useful information for learning which organizational policies and practices were important in hiring college graduates who earned either online or traditional degrees.
Data Analysis

The data analysis for this study involved descriptive and inferential statistics using SPSS 14.0. Frequencies and percentages were generated to describe the sample. In addition, means, standard deviations, one-way between-groups analysis of variance (ANOVA), effect sizes, and content analysis were performed to explore differences in employer policies and practices.

One-way analysis of variance involves the analysis of one independent variable with two or more levels that correspond to different groups or conditions and one dependent continuous variable (Hinkle, Wiersma, Jurs, 2003; Pallant, 2005). According to Pallant (2005), analysis of variance "compares the variance (variability in scores) between the different groups (believed to be due to the independent variable) with the variability within each of the groups (believed to be due to chance)" (p. 214). The effect size (also known as strength of association) indicates the relative magnitude of the differences between the groups, not just whether the difference could have occurred by chance (Pallant, 2005). The effect size statistic is calculated as eta squared. This represents the proportion of variance of the dependent variable that is explained by the independent variable. Content analysis was used to examine the open-ended questionnaire items to portray the values and beliefs of the participants in the study. Marshall and Rossman (1999) suggest content analysis is a "method for describing and interpreting the artifacts of a society or social group" (p. 117).

Finally, correlation was used to look for relationships between employer characteristics, employer screening mechanisms, employer’s value, and
respondent demographics to examine the perception of hiring candidates who have earned an online degree. Table 2 identifies the variables used in the study and summarizes data analysis techniques used to answer each research question.

The dependent variable for this study is the employers’ decision to hire or not hire a college graduate with an online degree. The independent variables for this study were categorized into employer characteristics, screening mechanisms, employer’s value, and respondent demographics.

- **Employer characteristics** – represents organizational demographics such as the size of a company, the type of industry the company represents, the sector of the company (government, college, public, private), the geographic region, and the number of employees in the organization that holds a bachelor’s or graduate degree.

- **Screening mechanisms** – represents employer policies and practices for the recruitment and selection of job applicants, along with external hiring decisions of employers, and the reputation of an institution that may have an effect on the recruitment and selection of a job candidate.

- **Employer’s value** – represents educational qualifications for employment and credentials that signal an individual has completed a program of study.

- **Respondent demographics** – represents personal information collected from each respondent.
Table 2

Summary of Variables and Data Analysis Procedures

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Variables</th>
<th>Type of Data</th>
<th>Analysis Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What are the differences in the perceptions of employers' with regard to employer characteristics toward hiring college graduates who earn their degrees traditionally or online?</td>
<td>Employer Characteristics</td>
<td>Nominal</td>
<td>Percentages</td>
</tr>
<tr>
<td></td>
<td>Size</td>
<td></td>
<td>Frequencies</td>
</tr>
<tr>
<td></td>
<td>Industry</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Region</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Credentialed Employees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. What are the differences in policies and practices of employers' toward hiring college graduates who earn their degrees traditionally or online?</td>
<td>Screening Mechanisms</td>
<td>Continuous</td>
<td>Means</td>
</tr>
<tr>
<td></td>
<td>Policies and Practices</td>
<td></td>
<td>Standard Deviation</td>
</tr>
<tr>
<td></td>
<td>External Hiring Decisions</td>
<td></td>
<td>ANOVA</td>
</tr>
<tr>
<td></td>
<td>Institution Reputation</td>
<td></td>
<td>Content</td>
</tr>
<tr>
<td></td>
<td>Employer's Value</td>
<td></td>
<td>Analysis</td>
</tr>
<tr>
<td></td>
<td>Educational Qualifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. What relationships exist between selected independent variables and the dependent variable which, examines the perception of hiring candidates who have earned an online degree?</td>
<td>Respondent Demographics</td>
<td>Continuous</td>
<td>Correlation</td>
</tr>
<tr>
<td></td>
<td>Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Title</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Variables listed in question 1 and 2 will also be used for this analysis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Summary

A quantitative survey design that implements various techniques in Dillman's (2007) Tailored Design Method (TDM) was used to investigate the perceptions of employers towards hiring college graduates with online degrees. This chapter outlined the methodology of the research, including the operational framework, the rationale for survey design, the rationale for implementing an online survey, a review of the research questions, population and sample selection, the research instrument, data collection procedures, and a summary of analyses conducted. The following chapter will present the results of the data collection.
CHAPTER 4

RESULTS

The purpose of this research was to investigate the perceptions of human resources (HR) professionals and employer policies and practices toward hiring college graduates who have earned traditional degrees compared to those who have earned online degrees. Chapter 1 outlined the background of the problem and identified three specific research questions. This chapter presents the results of this research organized in five sections. The first section provides a profile of the respondents; section two reports the findings from research question one; section three provides analyses of responses to policies and practices; section four presents results of research question three; and section five presents interesting findings related to the recruitment and selection process of prospective employees.

Profile of Respondents

Table 3 represents a summary of personal information of the respondents, which includes their gender, age, years of human resources experience, and their level of management. Participants were allowed to skip questions in the survey, therefore demographic responses vary.
Table 3

Summary Profile of Respondents

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>$N = 87$</td>
<td>100%</td>
</tr>
<tr>
<td>Gender</td>
<td>$n = 82$</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>27</td>
<td>32.9%</td>
</tr>
<tr>
<td>Female</td>
<td>55</td>
<td>67.1%</td>
</tr>
<tr>
<td>Age (years)</td>
<td>$n = 82$</td>
<td></td>
</tr>
<tr>
<td>Under 25</td>
<td>2</td>
<td>2.4%</td>
</tr>
<tr>
<td>25 - 34</td>
<td>32</td>
<td>39.0%</td>
</tr>
<tr>
<td>35 - 44</td>
<td>25</td>
<td>30.5%</td>
</tr>
<tr>
<td>45 - 54</td>
<td>12</td>
<td>14.6%</td>
</tr>
<tr>
<td>55 - 64</td>
<td>11</td>
<td>13.4%</td>
</tr>
<tr>
<td>HR Experience</td>
<td>$n = 81$</td>
<td></td>
</tr>
<tr>
<td>0 - 3 years</td>
<td>12</td>
<td>14.8%</td>
</tr>
<tr>
<td>4 - 7</td>
<td>18</td>
<td>22.2%</td>
</tr>
<tr>
<td>8 - 11</td>
<td>20</td>
<td>24.7%</td>
</tr>
<tr>
<td>12 - 15</td>
<td>13</td>
<td>16.0%</td>
</tr>
<tr>
<td>16 or more years</td>
<td>18</td>
<td>22.2%</td>
</tr>
</tbody>
</table>
Table 3, continued

*Summary Profile of Respondents*

<table>
<thead>
<tr>
<th>Sample</th>
<th>Characteristic</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level of Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Executive</td>
<td>5</td>
<td>6.1%</td>
</tr>
<tr>
<td></td>
<td>Senior management</td>
<td>11</td>
<td>13.4%</td>
</tr>
<tr>
<td></td>
<td>Middle management</td>
<td>42</td>
<td>51.2%</td>
</tr>
<tr>
<td></td>
<td>Non-management</td>
<td>24</td>
<td>29.3%</td>
</tr>
</tbody>
</table>

Analysis of the respondent demographics indicated that more than two-thirds (67.1%) of HR professionals who responded to the questionnaire were female and 32.9% were male. The age of the respondents varied with 41.5% indicating they were 34 years of age or younger; 30.5% were between the ages of 35 and 44, and 28.0% were between the ages of 45 and 64.

Additionally, 38.3% of the respondents indicated they had worked in human resources for 12 or more years, while 24.7% had between 8 and 11 years of HR experience, and 37.0% had worked in human resources less than 8 years (see Table 3). Of the respondents with 12 or more years of HR experience, 51.9% (14) were men and 31.5% (17) were women. Of those with 8 to 11 years of experience, 29.6% (8) were male and 22.2% (12) were female. Lastly, 18.5% (5)
of men had less than 8 years of HR experience compared with 46.3% (25) of women.

With regards to the respondents managerial level, 19.5% indicated they held an executive or senior management position in their organization, while 51.2% held positions in middle management, and 29.3% of respondents indicated they did not hold a management position.

Table 4

*Crosstabulation of Age, HR Experience, and Management Position*

<table>
<thead>
<tr>
<th>Category</th>
<th>Executive &amp; Senior management</th>
<th>Middle management</th>
<th>Non-management</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 35</td>
<td>16.3%</td>
<td>40.5%</td>
<td>66.7%</td>
<td>34</td>
</tr>
<tr>
<td>35 - 44</td>
<td>37.5%</td>
<td>33.3%</td>
<td>20.8%</td>
<td>25</td>
</tr>
<tr>
<td>45 - 64</td>
<td>56.3%</td>
<td>26.2%</td>
<td>12.5%</td>
<td>23</td>
</tr>
<tr>
<td>HR Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 7 years</td>
<td>18.8%</td>
<td>29.3%</td>
<td>62.5%</td>
<td>30</td>
</tr>
<tr>
<td>8 - 11 years</td>
<td>12.5%</td>
<td>34.1%</td>
<td>16.7%</td>
<td>20</td>
</tr>
<tr>
<td>12 or more years</td>
<td>68.8%</td>
<td>36.6%</td>
<td>20.8%</td>
<td>31</td>
</tr>
</tbody>
</table>
Table 4 illustrates a crosstab analysis of age, HR experience, and management positions. More than half (56.3%) of the respondents who held an executive or senior management position were between the ages of 45 and 64, while one-third (33.3%) of HR professionals in middle management were between the ages of 35 and 44, and two-thirds (66.7%) of respondents who had non-management positions were 34 years of age or younger. Additionally, 68.8% of respondents with 12 or more years of HR experience held an executive or senior management position compared with 36.6% of those in middle management, and 20.8% in non-management positions.

Results for Research Question 1

Research Question 1: What are the differences in the perceptions of employers' with regard to employer characteristics toward hiring college graduates who earn their degree traditionally or online?

Percentages and frequencies were used to provide a descriptive profile of the respondent's organization. Employer characteristics, such as the size of the organization, the type of organization, the regional location of the organization, industry sector, and the percentage of employees with a bachelor or graduate degree in the organization was collected (see Table 5).
Table 5

*Summary of Employer Characteristics*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>$N = 87$</td>
<td>100%</td>
</tr>
<tr>
<td>Organization Size</td>
<td>$N = 87$</td>
<td></td>
</tr>
<tr>
<td>&lt;= 1,000 employees</td>
<td>21</td>
<td>24.1%</td>
</tr>
<tr>
<td>1,001 - 2,500</td>
<td>17</td>
<td>19.5%</td>
</tr>
<tr>
<td>2,501 - 5,000</td>
<td>12</td>
<td>13.8%</td>
</tr>
<tr>
<td>5,001 - 10,000</td>
<td>10</td>
<td>11.5%</td>
</tr>
<tr>
<td>10,001 - 20,000</td>
<td>11</td>
<td>12.6%</td>
</tr>
<tr>
<td>&gt; 20,000</td>
<td>16</td>
<td>18.4%</td>
</tr>
<tr>
<td>Organization Type</td>
<td>$N = 87$</td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>12</td>
<td>13.8%</td>
</tr>
<tr>
<td>College/University</td>
<td>3</td>
<td>3.4%</td>
</tr>
<tr>
<td>Public</td>
<td>26</td>
<td>29.9%</td>
</tr>
<tr>
<td>Private</td>
<td>46</td>
<td>52.9%</td>
</tr>
<tr>
<td>Region</td>
<td>$N = 87$</td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>20</td>
<td>23.0%</td>
</tr>
<tr>
<td>Midwest</td>
<td>17</td>
<td>19.5%</td>
</tr>
<tr>
<td>South</td>
<td>27</td>
<td>31.0%</td>
</tr>
<tr>
<td>West</td>
<td>23</td>
<td>26.4%</td>
</tr>
</tbody>
</table>
Table 5, continued

**Summary of Employer Characteristics**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional/Financial/Business Services</td>
<td>34</td>
<td>39.1%</td>
</tr>
<tr>
<td>Government/Education/Social Services</td>
<td>9</td>
<td>10.3%</td>
</tr>
<tr>
<td>Entertainment/Recreation/Hospitality</td>
<td>7</td>
<td>8.0%</td>
</tr>
<tr>
<td>Agriculture/Mining/Construction/Utilities</td>
<td>8</td>
<td>9.2%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>20</td>
<td>23.0%</td>
</tr>
<tr>
<td>Wholesale &amp; Retail Trade/Transportation</td>
<td>9</td>
<td>10.3%</td>
</tr>
<tr>
<td><strong>Employees with bachelor or graduate degree</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 20 percent</td>
<td>5</td>
<td>6.0%</td>
</tr>
<tr>
<td>21 - 40</td>
<td>19</td>
<td>22.6%</td>
</tr>
<tr>
<td>41 - 60</td>
<td>19</td>
<td>22.6%</td>
</tr>
<tr>
<td>61 - 80</td>
<td>21</td>
<td>25.0%</td>
</tr>
<tr>
<td>81 - 100</td>
<td>20</td>
<td>23.8%</td>
</tr>
</tbody>
</table>

As indicated in Table 5, employers represented a range of different organizational sizes with 24.1% of the respondents indicating their organization employed 1,000 or fewer employees and 18.4% of respondents worked in organizations with more than 20,000 employees. When asked about the types of
organizations they worked for, 17.2% of the respondents worked for organizations in the government sector or for a college or university while 82.8% worked in the public or private sector (see Table 5).

The data also indicated that respondents were represented throughout the United States with 23.0% located in the Northeast, 19.5% were located in the Midwest, about 31.0% located in the South, and 26.4% were from the West region. Furthermore, when asked to describe their organization's main business function, respondents specified 17 different industry sectors; however, the researcher consolidated the list of industries into six different groups based on the North American Industry Classification System (NAICS) (U.S. Census, 2008; Bureau of Labor Statistics, 2005). Table 5 also depicts the industry sectors represented in this study and the percentage of employees in an organization that held a credential of a bachelor or graduate degree. It is interesting to note that almost half (48.8%) of the respondents indicated that between 61 and 100 percent of their employees have a bachelor degree or higher (see Table 5).

Preference for Job Candidates with Online or Traditional Degrees

To acquire knowledge about the respondent’s perceptions regarding employment for graduates who have earned an online or traditional degree, respondents were asked to choose between a candidate with an online degree and a candidate with a traditional degree, who both appeared equally qualified. The 5-point scale ranged from 1 to 5, where 1 = “prefer online degree”, 2 = “some preference for online degree”, 3 = “no preference”, 4 = “some preference for traditional degree”, and 5 = “prefer traditional degree.” Of those who
responded, 77.5% (62) expressed “some preference” to “prefer” the candidate with a traditional degree and 22.5% (18) had “no preference.” Surprisingly, none of the respondents, if they had a choice would choose a candidate with an online degree.

To analyze the employers’ choice for employment in more detail, crosstab analyses were performed based on organization size, type of organization, and industry sector (see Table 6). The organization size characteristic was collapsed from six categories to three categories with the two lowest sizes (<= 1,000 - 2,500 employees) grouped into a “small” organization group, the next two sizes (2,501 - 10,000 employees) make up a “medium” organization group, and the largest two (10,001 - > 20,000 employees) categories create the “large” organization group.

The crosstabulation shows that 44.7% of respondents working in small organizations “preferred” a candidate with a degree earned traditional. Additionally, the majority (37.5%) of those employed at medium size organizations specified “some preference” for a candidate with a degree earned traditional. Similarly, one-third (33.3%) of those who worked in large organizations indicated “no preference” between a candidate for employment with an online or traditional degree. However, when looking at respondents across organization type, the public sector was distributed fairly even with 33.3% indicating “no preference” or “some preference” when compared to 28.9% of those who “preferred” a job candidate with a traditional degree.
Table 6

*Crosstabulation of Job Candidate Preference by Employer Characteristics*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>No Preference</th>
<th>Some Preference for Traditional Degree</th>
<th>Prefer Traditional Degree</th>
<th>Total (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organization Size</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>50.0%</td>
<td>33.3%</td>
<td>44.7%</td>
<td>18</td>
</tr>
<tr>
<td>Medium</td>
<td>16.7%</td>
<td>37.5%</td>
<td>21.1%</td>
<td>24</td>
</tr>
<tr>
<td>Large</td>
<td>33.3%</td>
<td>29.2%</td>
<td>34.2%</td>
<td>38</td>
</tr>
<tr>
<td><strong>Organization Type</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government &amp; College/University</td>
<td>16.7%</td>
<td>8.3%</td>
<td>21.1%</td>
<td>18</td>
</tr>
<tr>
<td>Public</td>
<td>33.3%</td>
<td>33.3%</td>
<td>28.9%</td>
<td>24</td>
</tr>
<tr>
<td>Private</td>
<td>50.0%</td>
<td>58.3%</td>
<td>50.0%</td>
<td>38</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional/Financial/ Business Services</td>
<td>38.9%</td>
<td>25.0%</td>
<td>50.0%</td>
<td>32</td>
</tr>
<tr>
<td>Government/Education/ Social Services</td>
<td>11.1%</td>
<td>8.3%</td>
<td>7.9%</td>
<td>7</td>
</tr>
<tr>
<td>Entertainment/Recreation/ Hospitality</td>
<td>22.2%</td>
<td>8.3%</td>
<td>2.6%</td>
<td>7</td>
</tr>
<tr>
<td>Agriculture/Mining/ Construction/Utilities</td>
<td>11.1%</td>
<td>12.5%</td>
<td>5.3%</td>
<td>7</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>16.7%</td>
<td>25.0%</td>
<td>28.9%</td>
<td>20</td>
</tr>
<tr>
<td>Wholesale &amp; Retail Trade/Transportation</td>
<td>0</td>
<td>20.8%</td>
<td>5.3%</td>
<td>7</td>
</tr>
</tbody>
</table>
When comparing industries, 50% of respondents working in the Professional/Financial/Business Services sector preferred a job candidate with a traditional degree in contrast to 28.9% of those working in Manufacturing and 2.6% in the Entertainment/Recreation/Hospitality sector. Interestingly, respondents in the Wholesale & Retail Trade/Transportation sector only would choose a job candidate with a traditional degree.

Results for Responses to Policies and Practices

Research Question 2: What are the differences in policies and practices of employers’ toward hiring college graduates who earn their degree traditionally or online?

In evaluating this research question, the dependent variable represents a subscale of seven policy items (see Appendix III) that measured the policies and practices of employer’s toward hiring college graduates who earned their degree traditionally or online (TOD subscale). For each subject, total scale scores were calculated and means, standard deviations, and one-way between-groups analysis of variance (ANOVA) was used to examine differences in scores on the TOD subscale by organization size, organization type, region, industry sector, and percentage of credentialed employees in an organization. Additionally, differences were explored by HR experience and gender. Table 7 depicts the descriptive statistics for the independent variables used in the ANOVA analyses.

Further analyses included calculating the effect size (also know as the “strength of association”) to indicate the relative magnitude of differences
between means (Pallant, 2005). According to Pallant (2005) "there are a number of different effect size statistics, the most common of which are eta squared" (p. 201). To interpret the strength of eta squared ($\eta^2$) values the following guidelines were used from Cohen (as cited in Keppel & Wickens, 2004, p.162):

- .01 = small effect;
- .06 = medium effect; and
- .15 = large effect.

Lastly, the researcher calculated means and standard deviations for all of the policy items (see Appendix III). Responses of select policy statements were reviewed and content analysis was performed on four of the open-ended policy items that requested respondent comments.
Table 7

*Descriptive Statistics for the Independent Variables Used in the ANOVA Analyses*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organization Size (employees)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small (&lt;= 1,000 - 2,500)</td>
<td>25.26</td>
<td>3.94</td>
</tr>
<tr>
<td>Medium (2,501 - 10,000)</td>
<td>24.88</td>
<td>3.04</td>
</tr>
<tr>
<td>Large (10,001 - &gt; 20,000)</td>
<td>25.39</td>
<td>4.02</td>
</tr>
<tr>
<td><strong>Organization Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>27.88</td>
<td>4.52</td>
</tr>
<tr>
<td>College/University</td>
<td>24.00</td>
<td>5.66</td>
</tr>
<tr>
<td>Public</td>
<td>24.57</td>
<td>3.61</td>
</tr>
<tr>
<td>Private</td>
<td>25.12</td>
<td>3.49</td>
</tr>
<tr>
<td><strong>Region</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>26.06</td>
<td>4.22</td>
</tr>
<tr>
<td>Midwest</td>
<td>26.36</td>
<td>3.54</td>
</tr>
<tr>
<td>South</td>
<td>24.54</td>
<td>3.67</td>
</tr>
<tr>
<td>West</td>
<td>24.55</td>
<td>3.47</td>
</tr>
</tbody>
</table>
Table 7, continued

*Descriptive Statistics for the Independent Variables Used in the ANOVA Analyses*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional/Financial/Business Services</td>
<td>25.70</td>
<td>3.37</td>
</tr>
<tr>
<td>Government/Education/Social Services</td>
<td>26.40</td>
<td>4.39</td>
</tr>
<tr>
<td>Entertainment/Recreation/Hospitality</td>
<td>20.33</td>
<td>2.81</td>
</tr>
<tr>
<td>Agriculture/Mining/Construction/Utilities</td>
<td>26.00</td>
<td>4.90</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>25.45</td>
<td>3.66</td>
</tr>
<tr>
<td>Wholesale &amp; Retail Trade/Transportation</td>
<td>25.14</td>
<td>2.48</td>
</tr>
<tr>
<td>Employees with bachelor or graduate degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 20 percent</td>
<td>24.40</td>
<td>2.97</td>
</tr>
<tr>
<td>21 - 40</td>
<td>23.75</td>
<td>3.13</td>
</tr>
<tr>
<td>41 - 60</td>
<td>24.38</td>
<td>3.90</td>
</tr>
<tr>
<td>61 - 80</td>
<td>25.28</td>
<td>3.51</td>
</tr>
<tr>
<td>81 - 100 percent</td>
<td>27.56</td>
<td>3.81</td>
</tr>
<tr>
<td>HR Experience (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 3</td>
<td>25.78</td>
<td>3.77</td>
</tr>
<tr>
<td>4 - 7</td>
<td>24.50</td>
<td>3.48</td>
</tr>
<tr>
<td>8 - 11</td>
<td>26.63</td>
<td>4.21</td>
</tr>
<tr>
<td>12 - 15</td>
<td>26.00</td>
<td>3.93</td>
</tr>
<tr>
<td>16 or more years</td>
<td>23.12</td>
<td>2.67</td>
</tr>
</tbody>
</table>
Table 7, continued

Descriptive Statistics for the Independent Variables Used in the ANOVA Analyses

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>25.48</td>
<td>4.02</td>
</tr>
<tr>
<td>Female</td>
<td>25.00</td>
<td>3.65</td>
</tr>
</tbody>
</table>

Note. The group sizes are unequal and the harmonic means are reported.

Differences in TOD scores by Organization Size

A one-way between-groups analysis of variance (ANOVA) was conducted to examine the impact of organization size on the policies and practices of employers' toward hiring college graduates who earn their degree traditionally or online, as measured by the TOD scale. The groups represent employees employed at small, medium, and large organizations. The means and standard deviations are presented in Table 7. There were no statistically significant differences at the $p < .05$ level in TOD scores for small, medium, and large organizations [$F(2,71) = .094$, $MSE = 12.74$, $p = .91$]. The magnitude of the differences in the means was very small ($\eta^2 = .003$). Only .3% of the variance in TOD scores is explained by organization size.
Differences in TOD scores by Organization Type

In analyzing the impact of organization type (see Table 7 for the means and standard deviations), the researcher found no statistically significant differences at the $p < .05$ level in TOD scores for the Government, College/University, Public, and Private sectors [$F(3,70) = 1.71, \text{MSE} = 13.56, p = .17$]. In addition, a medium effect size, calculated using eta squared was .07, signifying that 7% of the variance in the TOD scores is explained by the organization type.

Differences in TOD scores by Region

There were no statistically significant differences at the $p < .05$ level in TOD scores for the Northeast, Midwest, South, and West regions [$F(3,70) = 1.19, \text{MSE} = 13.84, p = .319$]. The magnitude of the differences in the means was small ($\eta^2 = .05$). Only 5% of the variance in TOD scores is explained by the regional location of the organization. The means and standard deviations are presented in Table 7.

Differences in TOD scores by Industry

While exploring the impact of the six industry sectors (see Table 7 for the means and standard deviations) in TOD scores, a statistically significant difference at the $p < .05$ level was found [$F(5,68) = 2.57, \text{MSE} = 12.60, p = .03$] with a large effect size of .16, calculated using eta squared. Post-hoc comparisons using Tukey HSD test indicated that the mean score for the industry sector Professional/Financial/Business Services was significantly different from the Entertainment/Recreation/Hospitality sector and the Manufacturing sector was significantly different from the Entertainment/Research/Hospitality sector.
Differences in TOD scores by Percentage of Credentialed Employees

There was a statistically significant difference at the $p < .05$ level in the TOD scores for the five groups of credentialed employees (see Table 7 for the means and standard deviations), $[F(4, 64) = 2.90, \text{MSE} = 12.74, p = .03]$. In addition, a large effect size, calculated using eta squared was .15, signifying that 15% of the variance in the TOD scores is explained by the percentage of credentialed employees in an organization. Post-hoc comparisons using Tukey HSD test indicated that the mean score for organizations with 21 - 40 percent of employees with a bachelor or graduate degree was significantly different from organizations with 81 -100 percent of credentialed employees.

Differences in TOD scores by HR Experience

HR experience represents five groups based on the number years a respondent has worked in human resources. The means and standard deviations are presented in Table 7. The researcher found a statistically significant difference at the $p < .05$ level in the TOD scores for the five groups $[F(4,66) = 2.46, \text{MSE} = 13.23, p = .05]$. Despite reaching statistical significance, the actual difference in mean scores between the groups was quite small. The effect size, calculated using eta squared, was .013. Post-hoc comparisons using Tukey HSD test indicated that the mean score for the group with 8 - 11 years experience was significantly different from the group with 16 or more year's experience.
Differences in TOD scores by Gender

In analyzing the impact on gender (see Table 7 for the means and standard deviations), the researcher found no statistically significant differences at the $p < .05$ level in TOD scores for males and females $[F(1,70) = .26, \text{MSE} = 14.29, p = .61]$. The magnitude of the differences in the means is very small ($\eta^2 = .003$).

Review of Select Policy and Practices

While examining employer policies and practices toward hiring traditional or online degree graduates for professional positions, the researcher reviewed individual item responses to investigate differences in policies and practices. As discussed in Chapter 3, respondents were asked to rate (1 = strongly disagree to 6 = strongly agree) policy-oriented statements as to how well each statement reflected their organizations current hiring practices. Employers overwhelmingly (93.0%) “somewhat agreed” to “strongly agreed” that with few exceptions, the completion of a bachelor or graduate degree from a college or university is a minimum requirement for professional positions.

When respondents were asked if applicants who only satisfied the educational qualifications obtained through traditional education (less than 30% of course content taken via Internet/Web) were considered for employment, 58.2% “somewhat agreed” to “strongly agreed” with this policy statement while 41.8% “somewhat disagreed” to “strongly disagreed.” Additionally, almost three-quarters (74.4%) of respondents indicated they “somewhat agreed” to “strongly agreed” that applicants who had satisfied the educational qualifications obtained through online education (80% or more coursework is taken via Internet/Web)
were considered for employment while 25.6% “somewhat disagreed” to “strongly disagreed.” Two-thirds of respondents (66.3%) also favorably (“somewhat agreed” to “strongly agreed”) indicated that an online degree granted by an accredited institution was accepted on the same basis as a traditional degree when evaluating a prospective applicant’s educational background.

Contradictory to the previous response, 50% of the respondents “somewhat agreed” to “strongly agreed” not to have applicants from online degree programs. Moreover, 54.3% of these respondents also indicated favorably (“somewhat agreed” to “strongly agreed”) that online degree programs are too informal and tend to destroy the credibility of a college degree.

Since background checks (i.e., reference and credentials verification) are crucial elements in the hiring process, the researcher examined if respondents found it more difficult to evaluate a candidate with an online degree and if the evaluation of those candidates required longer interviews or more extensive checking through calls or letters. Just less than half (48.7%) of the respondents “somewhat agreed” to “strongly agreed” it was more difficult to evaluate a candidate who earned their degree through an online program while 64.1% “somewhat disagreed” to strongly disagreed” that the evaluation of a candidate with an online degree required longer interviews or more extensive background checking.

*Evaluation of Respondent Comments*

To obtain a better understanding of employers’ policies and practices concerning online degree graduates, the researcher asked respondents to
provide written comments on four of the survey questions. Table 8 shows the question and the number of respondents who provided comments.

Table 8

<table>
<thead>
<tr>
<th>Question</th>
<th>n</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our organization prefers not to have applicants from online degree programs.</td>
<td>84</td>
<td>32</td>
<td>38.1</td>
</tr>
<tr>
<td>We feel that online degree programs are too informal and tend to destroy the credibility of a college degree.</td>
<td>83</td>
<td>16</td>
<td>19.3</td>
</tr>
<tr>
<td>We have found that it is more difficult to evaluate a candidate from an online degree program.</td>
<td>76</td>
<td>17</td>
<td>22.4</td>
</tr>
<tr>
<td>In choosing between two job candidates who appeared otherwise equally qualified, we would be more like to choose the one with a:</td>
<td>79</td>
<td>8</td>
<td>10.1</td>
</tr>
</tbody>
</table>

A content analysis of the written comments was conducted to look for indications of principal concerns. The raw material for content analysis may be any form of human recorded communications, usually written materials, such as books, Web sites, and e-mail messages (Marshall & Rossman, 1999; Babbie, 2004). To assess the comments from the four questions, the researcher created categories of the most frequently occurring keywords and phrases. Accreditation was the most frequent keyword provided and the most frequently mentioned
phrases included the “interaction with others”, “team building skills”, and “classroom experience”. Moreover, many comments provided by respondents indicated that organizations represented in the sample had no set policy and little or no experience with candidates who earned online degrees. Finally, other comments provided by the respondents indicated a strong preference for candidates who earned a traditional degree. Following are some of the actual comments:

“If a degree programs is accredited, we accept as if from a traditional degree program.”

“The manner of how the degree is obtained is not a material to our company as the fact that it must be from an accredited college or university.”

“Several hiring managers view online degrees differently than traditional degrees. There is a strong preference for a traditional degree, yet all applicants are viewed as qualified.”

“There is no set policy on this; however, online degrees are not as highly regarded as in-person degree programs. However, if a person has the appropriate background, that takes precedence.”

“Experience plays a role with individuals with online degrees. The perception of online degrees in our industry is not as good. The interaction with people and leadership/teamwork experience gained through the classroom are important to us.”

“To date most online degree programs do not require the same degree of interaction as would be required in a normal classroom setting and we feel that this diminishes the student’s ability to gain invaluable communication and presentation skills necessary in today’s business environment.”

“Online degree programs do not have enough history or alumni base to help us be confident in the evaluation of the quality and success of their graduates.”

“We have not seen enough candidates who have earned online degrees to make a truly informed judgment. However, if a candidate earned an online degree from a reputable institution, the fact that the degree was
earned online would not be a negative factor in evaluating the candidate unless the skills required by the position were more likely to be developed in a traditional classroom setting."

“There is too much opportunity for fraud with online programs - specifically verifying who is completing some of the assignments and/or exams.”

Comments from respondents suggest an online degree earned from an accredited institution is an acceptable credential for employment although they have a strong preference for a traditional degree. Additionally, respondents are skeptical about online student’s acquiring hands-on experience that traditional classroom environments normally provide and are apprehensive about online student’s development of communication, presentation, and team building skills, which are paramount to be competitive in the workforce.

Results for Research Question 3

Research question 3: What relationships exist between selected independent variables and the dependent variable, which examines the perception of hiring candidates who have earned an online degree?

To analyze this research question, correlation was used to investigate the relationship between two variables. To explore a nonlinear relationship, the eta ($\eta$) coefficient, “sometimes called the correlation ratio” (Hinkle et al., 2003) was computed using ANOVA procedures. “The range of values for eta ($\eta$) is from 0 to +1; the coefficient cannot be negative” (Hinkle et al., p. 540). Similarly, to explore a linear relationship between variables, Pearson product-moment correlation was performed. “The Pearson correlation coefficients ($r$) can take on only values from
The sign indicates whether there is a positive or negative relationship and the absolute value of the coefficient (ignoring the sign) provides an indication of the strength of the relationship (Pallant, 2005; Hinkle et al., 2003). Hinkle et al. (2003) postulates “the interpretation of the eta (\( \eta \)) coefficient is the same as for the Pearson correlation (r)” (p. 540). Thus, to interpret the Pearson (r), Cohen (as cited in Pallant, 2005, p. 126) suggests following the guidelines found in Table 9.

Table 9

*Guidelines for Interpreting the Size of a Correlation Coefficient*

<table>
<thead>
<tr>
<th>Size of Correlation</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>( r = .10 ) to ( .29 ) or ( r = - .10 ) to ( - .29 )</td>
<td>small (positive or negative) correlation</td>
</tr>
<tr>
<td>( r = .30 ) to ( .49 ) or ( r = - .30 ) to ( - .49 )</td>
<td>medium (positive or negative) correlation</td>
</tr>
<tr>
<td>( r = .50 ) to ( 1.0 ) or ( r = - .50 ) to ( 1.0 )</td>
<td>large (positive or negative) correlation</td>
</tr>
</tbody>
</table>

The independent variables selected to examine a nonlinear relationship included employer characteristics such as organization size, organization type, and industry along with respondent demographics like HR experience and age of the respondent. The dependent variable was the total scale scores for the employer’s preference between choosing a candidate with an online degree or a candidate with a traditional degree for employment. The dependent variable was
scaled as 1 = prefer online degree, 2 = some preference for online degree, 3 = no preference, 4 = some preference for traditional degree, and 5 = prefer traditional degree. ANOVA procedures were performed to compute the eta ($\eta$) coefficient and was chosen as the best procedure for this analysis because it allows for an independent variable to be categorical and the dependent variable to be continuous.

There was a small positive correlation between the variables organization size and the preference between a candidate with an online or traditional degree [$\eta = .18$, $n = 79$, $p < .05$], suggesting little, if any, relationship between the variables. The relationship between organization type and the choice between candidates also revealed a small positive correlation [$\eta = .21$, $n = 79$, $p < .05$]. When the correlation ratio was calculated to investigate the relationship between the industry sectors and the preference between the two types of candidates, a medium positive correlation [$\eta = .30$, $n = 79$, $p < .05$] was found, suggesting a moderate relationship between the industry sectors and the preference between choosing a candidate with an online or traditional degree.

Looking at the relationship between the respondents HR experience and the preference of candidate, a medium positive correlation [$\eta = .38$, $n = 79$, $p < .05$] was found, suggesting a moderate relationship between the two variables. Finally, there was a small positive correlation [$\eta = .29$, $n = 79$, $p < .05$] between age and the employer's preference between choosing a candidate with an online degree or a candidate with a traditional degree.
To explore the interrelationships among selected variables, Pearson product-moment correlation coefficient ($r$) was performed. The variables (explained further below) used in this analysis were the total scale scores of the screening mechanism survey items, the total scale scores of the employer's value survey items, and the total scale scores of the survey item that measured the preference of choosing a candidate with an online or traditional degree for employment (see Appendix III).

The screening mechanisms scale included items that measured employer policies and practices related to the selection of job applicants and the reputation of an institution that may influence an employer's choice. The employer's value scale measured the educational qualifications that employers may consider for employment and the credentials that signal an applicant has completed a program of study. Table 10 shows the Pearson ($r$) table between the preference of job candidate, screening mechanisms, and employer's value. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity, and homoscedasticity.

Table 10 depicts there was a large positive correlation between the preference of job candidate and screening mechanisms ($r = .54, n = 71, p < .01$). The coefficient of determination ($r^2 = .2916$) indicates 29.16% shared variance. Therefore, the preference of job candidate helps to explain nearly 30% of the variance in respondent's scores on the screening mechanisms scale. Likewise, there was a medium positive correlation between the preference of candidate and employer's value ($r = .42, n = 79, p < .01$). Moreover, the coefficient of
determination \((r^2 = .1764)\) signifies that preference of candidate helps to explain nearly 18% of the variance in respondents' scores on the employer's value scale.

Table 10

*Pearson Product-Moment Correlations (r)*

<table>
<thead>
<tr>
<th>Measures</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preference of Candidate</td>
<td>—</td>
<td>.54**</td>
<td>.42**</td>
</tr>
<tr>
<td>2. Screening Mechanisms</td>
<td>—</td>
<td></td>
<td>.23</td>
</tr>
<tr>
<td>3. Employer's Value</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*Note.**p < .01, two-tailed.*

Results for Recruitment and Selection Methods

Employer's decisions about the selection of new employees are essential to the operation of organizations. Customarily, when an organization is interested in gathering information about potential candidates, it may use numerous selection methods (Wilk & Cappelli, 2003). Thus, this section reports on findings regarding employer's policies and practices for selecting job applicants.

An overwhelming number of respondents (96.3%) "somewhat agreed" to "strongly agreed" that they review college courses, grades, and degrees obtained when performing background checks for applicants with no work experience.
However, for applicants with work experience, 81.7% of respondents indicated they are primarily interested in a candidates work history. Similarly, when checking references of prospective employees, 61.4% of respondents “somewhat agreed” to “strongly agreed” they give more weight to recommendations from former employers than to those from former professors or placement officers.

Additionally, when evaluating applicants, 42.7% of respondents “somewhat agreed” to “strongly agreed” that they often ask applicants to submit work samples or copies of written reports to assess an applicant’s ability and skill level. Moreover, 60.4% of respondents indicated they “somewhat agreed” to “strongly agreed” that applicants may substitute work experience for academic credentials to satisfy the minimum education standards outlined in job a description. Finally, to understand if the importance of an institution’s reputation is vital in the selection process of candidates, 87.4% of respondents “somewhat agreed” to “strongly agreed” that they tend to hire graduates from colleges and universities whose reputations are strong. In contrast, just over half (52.6%) of respondents “somewhat agreed” to “strongly agreed” the reputation of the academic program is more important than the reputation of the institution when evaluating an applicant for employment.

Summary

This chapter described personal and employer characteristics of the survey sample. The data analysis provided insight to the participant’s perceptions and
policies and practices toward hiring college graduates who earn their degree traditionally or online and participant’s recruitment and selection methods of job applicants. The researcher found that participants have a strong preference for job candidates with a traditional degree. Additionally, the researcher found no statistically significant ($p < .05$) differences in mean scores of policies and practices (TOD scores) for small, medium, and large organization groups. However, statistically significant differences were found in mean scores of policies and practices between the Professional/Financial/Business Services and the Entertainment/Recreation/Hospitality industry sector along with the Manufacturing and Entertainment/Recreation/Hospitality sector. Despite reaching statistical significance in the TOD scores for the HR experience groups, the actual difference in the mean scores between the groups with 8 - 11 years of experience and the group with 16 or more years of experience was quite small. Furthermore, when participants are interested in collecting information about job applicants, they perform background checks by reviewing college transcripts for applicants with no work experience, though for applicants with experience, they are mostly interested in their work history and weigh recommendations from former employers more heavily than from former professors. The final chapter will provide a summary of the study as well as discuss the findings and their implications and possible recommendations for further research.
SUMMARY, DISCUSSION, AND RECOMMENDATIONS

This chapter briefly restates the research problem and reviews the major methods used in the study. The major sections of this chapter summarize the results and discuss their implications. Additionally, recommendations for further research are provided and limitations of the study.

Summary of Research Problem and Methodology

As discussed in Chapter 1, a college student can complete an online program for a degree without ever stepping into a classroom. However, acceptance of an online degree has not kept pace with its demand. Research has shown that employers are not always willing to hire applicants with online degrees (Adams & DeFleur, 2006; Vault Inc., 2006).

With more than 96% of the very largest institutions offering online education (Allen & Seaman, 2006), a large amount of research has focused on student and faculty perceptions of distance learning (Davis et al., 2004; Frey et al., 2004; Hass & Senjo, 2004; Maushak & Ellis, 2003; Ryan et al., 2004). However, little research has been done to investigate employers’ perceptions of online education, particularly around organizational policies and practices towards hiring graduates who obtained their degrees online.
This study addressed the gap in the literature concerning employment of college graduates who obtained an online degree via the Internet/Web by examining policies and practices that employers use in their hiring process. Additionally, this study adds to the body of knowledge about educational qualifications that employers' value and their selection methods in the recruitment of job applicants for professional positions.

As explained in Chapter 3, survey method via the Internet was used to administer a Web-based self-administered questionnaire. The researcher created a Web site at the University of Nevada, Las Vegas that included a link that launched the survey. The questionnaire contained three sections. Section one consisted of five items that gathered organizational characteristics of the respondents. Section two comprised of 27 items and instructed respondents to rate policy-oriented statements regarding their organizational hiring practices on a 6-point Likert-type scale ranging from 1 to 6 (1 = strongly disagree to 6 = strongly agree). The last section included four items that requested respondent demographic information.

Descriptive and inferential statistics using SPSS 14.0 were used to analyze the data for this study. Frequencies, percentages, means, and standard deviations were reported, along with analysis of variance (ANOVA), content analyses, and correlations to answer the following research questions:
1. What are the differences in the perceptions of employers with regard to employer characteristics toward hiring college graduates who earn their degrees traditionally or online?

2. What are the differences in policies and practices of employers toward hiring college graduates who earn their degrees traditionally or online?

3. What relationships exist between selected independent variables and the dependent variable, which examines the perception of hiring candidates who have earned an online degree?

Summary of Results

While the findings of this study are not generalizable, the focus of this study addressed the perceptions of human resources professionals' and employer policies and practices toward hiring college graduates who earned their degree online or traditionally. A summary of the findings from this study are listed below:

- Respondents represented a range of different organization sizes, business industries, and organization sectors. Forty-four percent of employers worked in small organizations with 2,500 or fewer employees; 25% were employed in medium size companies (2,501 - 10,000 employees), and 31% of employers worked in large organizations with more than 10,000 employees. Seventeen different business and industry sectors were identified along with 53% of employers representing the private sector; 30% from the public sector; and 17% of employers worked at organizations in the government sector or for a college or university.
• Respondents worked in various regions of the United States: 23% of employers were located in the Northeast; 20% were located in the Midwest; 31% were from the South; and 26% were from the West.

• Respondents expressed a strong preference for a graduate with a traditional degree compared to a graduate with an online degree for employment. If employers had to choose between a traditional degree job candidate and an online degree candidate, 78% of employers would choose the candidate with a traditional degree.

• Online degrees from accredited institutions are accepted for employment but some employers may only consider an applicant with a traditional degree and prefer not to have applicants from an online degree program. When evaluating an applicant's educational background, 66% of employers expressed their organization’s policy was to treat an online degree the same as a traditional degree as long as the online degree was from an accredited institution. Yet, 50% of employers only wanted to consider applicants for employment who obtained a degree through traditional education, while 54% of employers seemed to think that online programs are too informal and destroy the credibility of a college degree. In addition, half of the employers have a preference not to have applicants from an online degree program.

• Analysis of variance (ANOVA) was used to measure differences in employer policies and practices toward hiring a college graduate who earned their degree online or traditionally (TOD scores) based on
organizational characteristics and respondent demographics. There were no statistically significant differences at the $p < .05$ level for small ($M = 25.26, SD = 3.94$), medium ($M = 24.88, SD = 3.04$), and large organization groups [$M = 25.39, SD = 4.02; F(2,71) = .094, MSE = 12.74, p = .91$]. However, there was a statistically significant difference at the $p < .05$ level in TOD scores for the six industry sectors [$F(5,68) = 2.57, MSE = 12.60, p = .03$]. Tukey HSD test showed that the Professional/Financial/Business Services sector ($M = 25.70, SD = 3.37$) was significantly different from the Entertainment/Recreation/Hospitality ($M = 20.33, SD = 2.81$) sector and the Manufacturing ($M = 25.45, SD = 3.66$) sector was also significantly different from the Entertainment/Recreation/Hospitality ($M = 20.33, SD = 2.81$) sector. Finally, there was a statistically significant difference at the $p < .05$ level in TOD scores for the five groups of credentialed employees [$F(4,68) = 2.90, MSE = 12.74, p = .03$]. Tukey HSD test showed that the group with 21 - 40 percent ($M = 23.75, SD = 3.13$) of employees with a bachelor or graduate degree was significantly different from the group with 81 - 100 percent ($M = 27.56, SD = 3.81$) of credentialed employees.

- There was a relationship between selected employer characteristics and an employers’ preference of hiring an online or traditional degree job candidate. A small positive correlation existed between the size of an organization and an employers’ choice between an online or traditional degree job candidate [$r = .18, n = 79, p < .05$]. Furthermore, there was a
medium positive correlation between the organization's industry and their choice between the two types of job candidates \( \eta = .37, n = 79, p < .05 \).

- There was a relationship between an employers' preference of job candidate and an applicant's educational qualifications for employment. A medium positive correlation existed between the preference of job candidate and what employer's value for employment \( (r = .36) \).

- Employers may use numerous selection methods when they are interested in gathering information about potential candidates: 96% of employers will look at college grades when performing background checks for applicants with no work experience; 61% of employers weigh recommendations of former employers higher than former professors; and 87% of employers prefer to hire graduates from institutions with strong reputations.

Discussion

The findings of this study suggest employers have different policies and practices toward hiring college graduates who have earned their degree traditionally or online. The differences exist in industries where a college degree is often required for employment and work activities require a high degree of expertise and training. These industries include areas like accounting, engineering, and finance. Additionally, differences exist in organizations that have a large percentage of employees with a college credential (bachelor or graduate degree). This finding suggests that some employers may view
applicants with traditional degrees differently than those with online degrees during the hiring process. The importance of this finding provides an indication that academic degree programs such as business and engineering are better suited for completion through traditional classroom instruction compared to online learning. However, among disciplines being offered online, colleges offering face-to-face business programs have the highest penetration rate of also offering online business programs (Allen & Seaman, 2005).

This study also shows that applicants who have obtained college degrees through online education would be considered for employment, particularly if they obtained their degrees from an accredited institution. However, when an employer knows a candidate has earned their degree online, there is a clear bias toward the candidate with a traditional degree. These results signal a misalignment between policies and practices of employers and their perception or acceptance of an online degree candidate for employment. Furthermore, this finding is similar to the Vault survey from 2006 that found employers preferred job applicants with traditional degrees to those with online degrees (Vault, 2006; Carnevale, 2007).

Additionally, my findings show that employers are concerned about the development of social and "soft" skills for students obtaining their degree online such as communication, presentation, and team-building skills that are vital in the workforce. Likewise, HR professionals are pessimistic about students with online degrees acquiring hands-on experience that are afforded in a traditional
classroom environment. This apprehension is related to research by Hass and Senjo (2004) who indicated that:

    Faculty members often express concern over the quality of instruction in distance learning and online courses because of the lack of student access to campus resources (e.g., library, labs, and faculty) and the socialization processes inherent in student-faculty and student-student interactions. (p. 266)

The reality is that higher education institutions are continuing to increase their offerings online and implement more online degree programs. Thus, administrators and stakeholders should understand that while the demands for online education by students are steadily increasing (Benson, 2002; Allen & Seaman, 2006), the employability of graduates with online degrees may not be keeping pace with the growth of this delivery method. Accordingly, decision-makers should keep in mind the impact of their decisions to offer complete degree programs online. Similarly, with rising standards for assessment, federal legislators are also looking at accountability for higher education, and with the 2008 bill to reauthorize the Higher Education Act, colleges will be required to report student learning outcomes — one of which are employment outcomes for all students (Field, 2008).

According to Toutkoushian (2005), “institutions of higher education are looked to by society as the training grounds and gatekeepers for college-trained workers” (p.955). Hence, it will be beneficial for colleges and universities to consider increasing their partnerships with business and industry by working with
HR professional organizations to ensure employers understand the differences between traditional and online delivery systems. Moreover, a stronger partnership can help keep track of graduates who can provide feedback about their employment opportunities, and more importantly, the rigor of online programs. In many cases, employers are naïve about the rigor of online programs because they have not taken an online course themselves or completed a degree through online education. Such collaboration between institutions and business and industry may help change the perceptions of employers and instill confidence in their selection of hiring online degree graduates.

Furthermore, when employer’s look to hire a job candidate, Bills (2003) suggest they operate on widely shared societal assumptions about education and employment and in our current society, employers continue to have reservations about hiring online degree graduates. Since employers have a strong preference for traditional degree candidates, should institutions that offer both traditional and online programs make a distinction in students’ transcripts between degrees earned online and on-campus? Given that the largest providers of online academic programs are public brick-and-mortar colleges and universities (Allen & Seaman, 2006), why shouldn’t they specify the type of degree a student received on school transcripts so employers are fully informed, especially if these institutions purport they are providing the same level of education to online students compared to campus-based students. I suppose this line of thinking is debatable whether it is misleading that brick-and-mortar
institutions do not specify if a student earned their degree through traditional methods or online delivery.

Although employers have concerns about hiring applicants with online degrees, to be competitive in the workforce, a high school diploma or less is no longer sufficient for individuals seeking good jobs (Bureau of Labor Statistics, 2005). Consequently, a degree, whether obtained online or traditionally is crucial to gainful employment in our global economy. My findings reveal that a large number of employers feel that a 4-year college degree is a minimum requirement for a professional position in their organization. For this reason, I believe that having an online degree is better than not having a degree at all, and as Bills (2003) postulates, education helps develop marketable skills and makes an individual more attractive to employers.

However, for those who decide to pursue a college degree through online education, they should be aware of the enormous offerings of online degree programs, primarily since many Web sites and even late night television advertise online degrees. Individuals should be cautious of the programs they decide to take online and be very diligent in researching the accreditation of the institution and academic program they plan to study. In many instances, potential students have little or no knowledge about accreditation of colleges and therefore take for granted that once they complete the degree requirements of their program they will be able to find gainful employment.

Unfortunately, several accreditation and diploma mills grant “fake” degrees that are worthless (Ezell & Bear, 2005), therefore those who pursue a college
degree should fully understand the differences between regional, national, and programmatic accreditation in the United States. Regional accreditation is an institutional-level accreditation status granted by one of eight U.S. regional accrediting bodies, national accreditation is also an institutional-level accreditation granted to specialized institutions, and programmatic accreditation applies to specific programs, professions, and coursework within an institution (USDE, 2007, Accreditation in the United States). Although most institutions identify their institutional-level accreditation, students should be wary if they are unable to find the programmatic accreditation for the academic program they plan to study. Additionally, students should know there are numerous accreditation agencies that are not recognized by the United States Department of Education (USDE) or the Council for Higher Education Accreditation (CHEA), which are the two organizations that recognize U.S. accreditation agencies (CHEA, 2008).

In this technological era where information is at our fingertips, prospective students should take responsibility and become aware of standards in the industry in which they choose to work. Students should explore business requirements to determine if the degree programs they plan to study meets an employer’s requirement for employment. For example, if a student studies a business degree they should ensure the Association to Advance Collegiate Schools of Business (AACSB) accredits their academic program if it is a requirement by an employer since AACSB does not accredit all business schools. Finally, individuals who complete a degree through online education
should attend institutions with strong reputations and consider creating a portfolio that includes samples of the work they completed throughout their degree program so they can show employers the quality of their work during a job interview.

**Recommendations for Further Research**

Areas of further research should include studies that investigate the perceptions of students who have earned an online degree. In particular, a study could explore how students feel their online degree program prepared them for employment. A study could examine if a student received an initial job, promotion, or new responsibilities in their field of study after acquiring an online degree. Additionally, a study could examine if students believe obtaining an online degree was worth their time and money or if they think they should have obtained a degree through traditional methods.

More research is necessary at comparing the quality and effectiveness of online degree programs with traditional degree programs. Specifically in disciplines, that usually has hands-on labs taught in conjunction with a classroom lecture such as engineering, health professions, and biological sciences.

**Limitations**

This study had several limitations that restrict the generalization of the results. First, the findings reported in this study are limited to the participants represented by human resource (HR) professionals and members of the National Association
of Colleges and Employers (NACE) organization. Secondly, the HR professionals were instructed to only consider prospective employees who had obtained a bachelor or graduate degree when answering the survey questions. The HR professionals were also asked to respond according to their organizational culture, not their personal feelings. The researcher assumes all responses were answered under these conditions. Thirdly, the criteria for categorization of employer characteristics might have provided different results. Finally, due to the low response rate, which was discussed in Chapter 3, these results cannot be generalized to the entire HR population but can provide useful information about human resource professionals’ perceptions and employer policies and practices toward hiring online degree graduates.

Conclusion

In conclusion, this study presents the results of a nationwide survey of HR professional’s responsible for employment, recruitment, and placement of job applicants. This study was an attempt to investigate the workforce sentiments concerning employment of college graduates obtaining a degree completed through online education. Using a conceptual framework of human capital theory and the theory of credentialism, online survey methodology was implemented. The study has shown that if employers had to choose between a job candidate with an online degree and a candidate with a traditional degree, 78% of employers would choose the traditional graduate for employment and none would choose an online graduate. In comparison with Adams and DeFleur (2006)
they found 96% of their respondents would choose a candidate with a traditional degree and only 4% would select a candidate with an online degree. Although the present results show a strong preference for a job candidate with a traditional degree, these results also show there is acceptance in the workforce for a graduate who has earned an online degree from an accredited institution. This study has also shown that some organizational characteristics can have an impact on the decisions employers’ make about hiring college graduates that have obtained their degree online or traditionally. However, the completion of a 4-year college degree is a minimum requirement for most professional positions.
APPENDIX I

SURVEY

INFORMED CONSENT

You are invited to participate in a research study. The purpose of this study is to investigate perceptions of human resource professionals' and employer policies and practices toward hiring college graduates who have earned traditional degrees versus those who have earned online degrees.

You are being asked to participate in the study because of your human resource (HR) position as an executive, director, manager, or one with responsibilities for establishing HR policies and practices as well as specializing in employment, recruitment, and placement of job applicants.

If you volunteer to participate in this study, you will be asked to answer questions that are divided into three sections: 1) Organization Characteristics, 2) Policy Statements, and 3) Personal Information. **This questionnaire should take no longer than 20 minutes to complete.**

There may not be direct benefits to you as a participant in this study. However, we hope to learn what human resource organizational policies and practices are important in recruitment and hiring of college graduates for professional positions.

There are risks involved in all research studies. This study may include only minimal risks. You may become uncomfortable when answering some questions. You may refuse to answer questions that make you feel uncomfortable.

There will not be a financial cost to you to participate in this study. The study will take no longer than 20 minutes of your time. You will not be compensated for your time.

If you have any questions or concerns about the study, you may contact Dr. Cecilia Maldonado-Daniels or Leisa Thompson at 702-895-3410. For questions regarding the rights of research subjects, any complaints or comments regarding
the manner in which the study is being conducted you may contact the UNLV Office for the Protection of Research Subjects at 702-895-2794.

Your participation in the study is voluntary. You may refuse to participate in this study or in any part of this study. You may withdraw at any time without prejudice to your relations with the university. You may choose not to answer questions or complete specific tasks.

All information gathered in this study will be kept confidential. No reference will be made in written or oral materials that could link you to this study. All records will be stored in a locked facility at UNLV for at least 4 years after completion of the study. After the storage time the information gathered will be destroyed.

I have read the above information and agree to participate in this study. I have been able to ask questions about the research study. I am at least 18 years of age. I understand that I can print a copy of this consent for my records.

1. By clicking on the "I agree" button, I have read the above information and agree to participate in this study.

   ☐ I agree  
   ☐ I disagree and would like to exit the survey. If I exit, I will be unable to take the survey later.
SECTION ONE – ORGANIZATION CHARACTERISTICS

Directions

In this section of the survey, please consider general characteristics of your organization to answer the following items. Please note that all answers are confidential and data will not be associated with independent responses in any way.

2. How many employees are in your organization? (Check one box.)
   - <= 1,000 employees
   - 1,001 – 2,500 employees
   - 2,501 – 5,000 employees
   - 5,001 – 10,000 employees
   - 10,001 – 20,000 employees
   - > 20,000 employees

3. Which of the following best describes your organization? (Check one box)
   - Government sector
   - College/university
   - Public (non-governmental)
   - Private (non-governmental)

4. Which industry best describes your organization's main business? (Check one box.)
   - Accounting
   - Engineering
   - Education
   - Finance
   - Government
   - Health and medicine
   - Information technologies
   - Law and criminal justice
   - Manufacturing and product development
   - News and entertainment
   - Research and consulting
   - Social services
   - Other (please specify): _____________________________
5. What is the geographic region of the location for which you are responding? (Check one box.)

☐ Northeast
☐ Midwest
☐ South
☐ West

6. What percentage of employees in your organization has a credential, a bachelor degree or graduate degree? (Check one box.)

☐ 1 – 20 percent
☐ 21 – 40 percent
☐ 41 – 60 percent
☐ 61 – 80 percent
☐ 81 – 100 percent

SECTION TWO – POLICY STATEMENTS

Directions

This section of the survey contains brief statements concerning factors important in recruitment and hiring. These statements were developed from in-depth interviews with a small sample of human resource professionals in organizations such as your own. For your organization, some of these statements will probably be more applicable than others.

Some of the statements deal with educational qualifications for prospective employees, and the term “online degree” is used. For the purpose of this study the following definitions are defined:

Credential is a bachelor degree or graduate degree.

Professional is an executive, administrative, professional, outside sales and computer employees often referred to as “white collar” workers or exempt employees.

Online degree is a degree which results from a nontraditional program in which very little classroom attendance is required. The programs tend to be taught to students at remote locations, including their homes, primarily via the Internet/Web. In some of these programs, students can take examinations that test their subject matter knowledge and get course credit, without first taking the courses. Others require the completion of assignments and report or paper-writing under the supervision of a professor or advisor, but no
classroom attendance. Some of the programs are sponsored by colleges and universities, which also have regular classroom-based programs for full-time students; others are sponsored by colleges which grant only online degrees.

Please read and rate the following policy-oriented statements as to how well each statement reflects your organization's current hiring practices. Please rate each statement on a scale of "strongly agree" to "strongly disagree". In your rating, consider your organization's policies and practices, not personal preferences. All answers are confidential and data will not be associated with independent responses in any way.

7. We tend to hire college students for temporary jobs or internships with the intention of hiring many of them later on a regular basis.

☐ Strongly agree
☐ Agree
☐ Somewhat agree
☐ Somewhat disagree
☐ Disagree
☐ Strongly disagree

8. Much of our hiring is circumscribed by specifications set forth by the government or unions as a result we do not feel that we always are free to hire the person we want most for the job.

☐ Strongly agree
☐ Agree
☐ Somewhat agree
☐ Somewhat disagree
☐ Disagree
☐ Strongly disagree

9. All professional positions have written job descriptions that specify the qualifications that a potential employee should have.

☐ Strongly agree
☐ Agree
☐ Somewhat agree
☐ Somewhat disagree
☐ Disagree
☐ Strongly disagree
10. Only those applicants who have satisfied the educational qualifications obtained through traditional education (less than 30% of course content taken via Internet/Web) are considered for employment.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

11. Applicants who have satisfied the educational qualifications obtained through online education (80% or more coursework is taken via Internet/Web) are considered for employment.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

12. With few exceptions, the completion of a credential from a college or university is a minimum requirement for professional positions.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

13. We have a pay scale that automatically gives a higher salary to persons with a higher degree.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree
14. An online-degree granted by an accredited institution is accepted on the same basis as a traditional degree when evaluating a prospective applicant's educational background.

☐ Strongly agree
☐ Agree
☐ Somewhat agree
☐ Somewhat disagree
☐ Disagree
☐ Strongly disagree

15. Our organization prefers not to have applicants from online-degree programs.

☐ Strongly agree
☐ Agree
☐ Somewhat agree
☐ Somewhat disagree
☐ Disagree
☐ Strongly disagree

Comments: ____________________________________________

16. We feel that online-degree programs are too informal and tend to destroy the credibility of a college degree.

☐ Strongly agree
☐ Agree
☐ Somewhat agree
☐ Somewhat disagree
☐ Disagree
☐ Strongly disagree

Comments: ____________________________________________

17. Education makes a person more versatile, better able to accept challenges, and more willing to accept responsibility. For this reason, we encourage our employees to get all the education they can.

☐ Strongly agree
☐ Agree
☐ Somewhat agree
☐ Somewhat disagree
☐ Disagree
☐ Strongly disagree
18. In reviewing an application, we consider college experience, in general, more important than the actual course work. A college graduate generally has a broader perspective and better judgment than someone without as much education.

☐ Strongly agree  ☐ Agree  ☐ Somewhat agree  ☐ Somewhat disagree  ☐ Disagree  ☐ Strongly disagree

19. In evaluating applicants, we find that knowledge in a specific field or evidence of specific ability, such as the ability to write well, is more important than formal education. Often we ask an applicant to submit samples of actual work or copies of reports he/she has written for our consideration.

☐ Strongly agree  ☐ Agree  ☐ Somewhat agree  ☐ Somewhat disagree  ☐ Disagree  ☐ Strongly disagree

20. We have found that it is more difficult to evaluate a candidate from an online degree program.

☐ Strongly agree  ☐ Agree  ☐ Somewhat agree  ☐ Somewhat disagree  ☐ Disagree  ☐ Strongly disagree

Comments: ______________________________________________________

21. Evaluation of online degree candidates requires longer interviews or more extensive checking through calls or letters; unless the candidate appears to be outstanding, we may not bother.

☐ Strongly agree  ☐ Agree  ☐ Somewhat agree  ☐ Somewhat disagree  ☐ Disagree  ☐ Strongly disagree
22. We are only able to hire candidates who meet the minimum educational standards outlined in the job description.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

23. For applicants with no experience, we tend to look at courses, grades or degree(s) obtained.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

24. For applicants with experience, it is primarily their work history which interests us.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

25. We are more likely to consider good experience and excellent references in the selection of personnel than whether or not the applicant has attended college or taken college level courses.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree
26. We tend to give more weight to recommendations from former employers of prospective employees than to those from their former professor or placement officers.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

27. Applicants may substitute work experience for academic credentials to satisfy the minimum education standards outlined in the job description.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

28. Academic requirements are extremely flexible in our organization. Our judgments in hiring professional personnel would be based primarily on non-academic qualifications of the applicant.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

29. The persons doing our hiring are very free to use their own judgment in selecting and rejecting among prospective employees. They are not bound by having to recruit candidates with specific educational or skill qualifications.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree
30. Our organization has a general policy of contributing to and/or paying tuition and fees for our employees to help them obtain further education, particularly if they take courses that are relevant to their work.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

31. The reputation of the academic program is more important to us in making an evaluation of an applicant than the reputation of the institution he/she attended.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

32. We tend to hire graduates from colleges and universities whose reputations are strong.

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

33. In choosing between two job candidates who appeared otherwise equally qualified, we would be more like to choose the one with a:

<table>
<thead>
<tr>
<th>Online Degree</th>
<th>No Preference</th>
<th>Traditional Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Comments:______________________________
SECTION THREE - RESPONDENT DEMOGRAPHICS

Directions

Please answer the following items. Again, please note that all answers are confidential and data will not be associated with independent responses in any way.

34. Which of the following best describes the number of years you have worked in human resources? (Check one box)

☐ 0 – 3 years
☐ 4 – 7 years
☐ 8 – 11 years
☐ 12 – 15 years
☐ 16 or more years

35. Which of the following best describes your current position in your organization? (Check only one box)

☐ Executive
☐ Senior management
☐ Middle management
☐ Non-management

36. What is your gender? (Check one box)

☐ Male
☐ Female

37. Which of the following age category best describes you? (Check one box)

☐ Under 25
☐ 25 – 34
☐ 35 – 44
☐ 45 – 54
☐ 55 – 64
☐ 65 and over
APPENDIX II

COVER LETTER AND FOLLOW-UP LETTER
Cover Letter

Date: April 16, 2008

Name (from survey list)
Title
Address
City ST, ZIP

We are writing to ask your help in participating in the National Survey of Employer's Perceptions of College Graduates. This research project is an effort to learn what organizational policies and practices are important in recruitment and hiring of college graduates for professional positions.

You have been selected for this survey because of your position as a human resource (HR) executive, director, manager or one with responsibilities for establishing HR policies and practices as well as specializing in employment, recruitment, and placement of job applicants.

For ease of completion, this survey is being administered ONLINE and should take no more than 20 minutes of your time. Your answers are completely confidential and will be released only as summaries in which no individual's answers can be identified. This survey is voluntary. However, you can help us very much by sharing your experiences and professional judgments about recruitment and hiring of college applicants.

If you have any questions or comments about this study, we would be happy to talk with you. Our number is 702-895-3410, or you may send e-mail to thomps20@unlv.nevada.edu.

To take the survey, type http://faculty.unlv.edu/cmaldonado/hrsurvey in your Web browser of choice.

Thank you very much for helping with this important study.

Sincerely,

Leisa Thompson, M.Ed.  Cecilia Maldonado-Daniels, Ph.D.
Ph.D. Candidate  Associate Professor
Department of Educational Leadership  Department of Educational Leadership
Follow-up Letter

Date: May 9, 2008

Name (from survey list)
Title
Address
City ST, ZIP

About three weeks ago, a letter seeking your participation in the National Survey of Employer's Perceptions of College Graduates was mailed to you. You have been selected for this survey because of your position as a human resource (HR) executive, director, manager, or one with responsibilities for establishing HR policies and practices as well as specializing in employment, recruitment, and placement of job applicants.

If you have already completed the online survey, please accept our sincere thanks. If not, please do so today. We are especially grateful for your help because it is only by asking people like you to share your experiences and professional judgments that we can understand organizational policies and practices that are important in recruitment and hiring of college graduates for professional positions.

If you have any questions or comments about this study, we would be happy to talk with you. Our number is 702-895-3410, or you may send e-mail to thomps20@unlv.nevada.edu.

To take the survey, type http://faculty.unlv.edu/cmaldonado/hrsurvey in your Web browser of choice.

Thank you very much for helping with this important study.

Sincerely,

Leisa Thompson, M.Ed.
Ph.D. Candidate
Department of Educational Leadership

Cecilia Maldonado-Daniels, Ph.D.
Associate Professor
Department of Educational Leadership

122
APPENDIX III

LIKERT SCORES, SCALE SCORES, AND SUBSCALES
<table>
<thead>
<tr>
<th>Item</th>
<th>Policy Statement</th>
<th>n</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>We tend to hire college students for temporary jobs or internships with the intention of hiring many of them later on a regular basis.</td>
<td>86</td>
<td>1</td>
<td>6</td>
<td>5.07</td>
<td>1.206</td>
</tr>
<tr>
<td>8</td>
<td>Much of our hiring is circumscribed by specifications set forth by the government or unions as a result we do not feel that we always are free to hire the person we want most for the job.</td>
<td>86</td>
<td>1</td>
<td>5</td>
<td>1.84</td>
<td>.956</td>
</tr>
<tr>
<td>9</td>
<td>All professional positions have written job descriptions that specify the qualifications that a potential employee should have.</td>
<td>87</td>
<td>2</td>
<td>6</td>
<td>5.28</td>
<td>.817</td>
</tr>
<tr>
<td>10</td>
<td>Only those applicants who have satisfied the educational qualifications obtained through traditional education (less than 30% of course content taken via Internet/Web) are considered for employment.</td>
<td>86</td>
<td>1</td>
<td>6</td>
<td>3.77</td>
<td>1.477</td>
</tr>
<tr>
<td>11</td>
<td>Applicants who have satisfied the educational qualifications obtained through online education (80% or more coursework is taken via Internet/Web) are considered for employment.</td>
<td>86</td>
<td>1</td>
<td>6</td>
<td>4.14</td>
<td>1.129</td>
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<tr>
<td>12</td>
<td>With few exceptions, the completion of a credential from a college or university is a minimum requirement for professional positions.</td>
<td>86</td>
<td>2</td>
<td>6</td>
<td>5.05</td>
<td>.993</td>
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<tr>
<td>13</td>
<td>We have a pay scale that automatically gives a higher salary to persons with a higher degree.</td>
<td>87</td>
<td>1</td>
<td>6</td>
<td>3.78</td>
<td>1.271</td>
</tr>
<tr>
<td>14</td>
<td>An online-degree granted by an accredited institution is accepted on the same basis as a traditional degree when evaluating a prospective applicant's educational background.</td>
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<td>1</td>
<td>6</td>
<td>3.85</td>
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<td>15</td>
<td>Our organization prefers not to have applicants from online-degree programs.</td>
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<td>1</td>
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<td>3.33</td>
<td>1.175</td>
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<td>Item</td>
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</tr>
<tr>
<td>16</td>
<td>We feel that online-degree programs are too informal and tend to destroy the credibility of a college degree.</td>
<td>83</td>
<td>1</td>
<td>6</td>
<td>3.43</td>
<td>1.095</td>
</tr>
<tr>
<td>17</td>
<td>Education makes a person more versatile, better able to accept challenges, and more willing to accept responsibility. For this reason, we encourage our employees to get all the education they can.</td>
<td>85</td>
<td>4</td>
<td>6</td>
<td>5.26</td>
<td>.742</td>
</tr>
<tr>
<td>18</td>
<td>In reviewing an application, we consider college experience, in general, more important than the actual course work. A college graduate generally has a broader perspective and better judgment than someone without as much education.</td>
<td>84</td>
<td>2</td>
<td>6</td>
<td>4.29</td>
<td>1.001</td>
</tr>
<tr>
<td>19</td>
<td>In evaluating applicants, we find that knowledge in a specific field or evidence of specific ability, such as the ability to write well, is more important than formal education. Often we ask an applicant to submit samples of actual work or copies of reports he/she has written for our consideration.</td>
<td>82</td>
<td>1</td>
<td>5</td>
<td>3.24</td>
<td>1.025</td>
</tr>
<tr>
<td>20</td>
<td>We have found that it is more difficult to evaluate a candidate from an online degree program.</td>
<td>76</td>
<td>1</td>
<td>6</td>
<td>3.43</td>
<td>1.159</td>
</tr>
<tr>
<td>21</td>
<td>Evaluation of online degree candidates requires longer interviews or more extensive checking through calls or letters; unless the candidate appears to be outstanding, we may not bother.</td>
<td>78</td>
<td>1</td>
<td>5</td>
<td>3.18</td>
<td>1.029</td>
</tr>
<tr>
<td>22</td>
<td>We are only able to hire candidates who meet the minimum educational standards outlined in the job description.</td>
<td>84</td>
<td>1</td>
<td>6</td>
<td>4.71</td>
<td>1.188</td>
</tr>
<tr>
<td>23</td>
<td>For applicants with no experience, we tend to look at courses, grades or degree(s) obtained.</td>
<td>81</td>
<td>3</td>
<td>6</td>
<td>5.20</td>
<td>.813</td>
</tr>
<tr>
<td>24</td>
<td>For applicants with experience, it is primarily their work history which interests us.</td>
<td>82</td>
<td>2</td>
<td>6</td>
<td>4.39</td>
<td>.991</td>
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<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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<tr>
<td>25</td>
<td>We are more likely to consider good experience and excellent references in the selection of personnel than whether or not the applicant has attended college or taken college level courses.</td>
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<td>1</td>
<td>6</td>
<td>3.50</td>
<td>1.158</td>
</tr>
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<td>26</td>
<td>We tend to give more weight to recommendations from former employers of prospective employees than to those from their former professor or placement officers.</td>
<td>80</td>
<td>1</td>
<td>6</td>
<td>3.94</td>
<td>1.236</td>
</tr>
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<td>28</td>
<td>Academic requirements are extremely flexible in our organization. Our judgments in hiring professional personnel would be based primarily on non-academic qualifications of the applicant.</td>
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<td>1.143</td>
</tr>
<tr>
<td>29</td>
<td>The persons doing our hiring are very free to use their own judgment in selecting and rejecting among prospective employees. They are not bound by having to recruit candidates with specific educational or skill qualifications.</td>
<td>82</td>
<td>1</td>
<td>5</td>
<td>2.61</td>
<td>1.184</td>
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<tr>
<td>30</td>
<td>Our organization has a general policy of contributing to and/or paying tuition and fees for our employees to help them obtain further education, particularly if they take courses that are relevant to their work.</td>
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<td>6</td>
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<td>1.155</td>
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<tr>
<td>31</td>
<td>The reputation of the academic program is more important to us in making an evaluation of an applicant than the reputation of the institution he/she attended.</td>
<td>80</td>
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<td>6</td>
<td>3.75</td>
<td>1.207</td>
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<td>32</td>
<td>We tend to hire graduates from colleges and universities whose reputations are strong.</td>
<td>79</td>
<td>2</td>
<td>6</td>
<td>4.75</td>
<td>1.080</td>
</tr>
</tbody>
</table>
### Total Scale Scores

<table>
<thead>
<tr>
<th>Measure</th>
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<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
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<tbody>
<tr>
<td>Screening Mechanisms Scale</td>
<td>71</td>
<td>18</td>
<td>44</td>
<td>33.72</td>
<td>5.522</td>
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<tr>
<td>Employer's Value Scale</td>
<td>79</td>
<td>22</td>
<td>41</td>
<td>32.22</td>
<td>4.266</td>
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<td>TOD Subscale</td>
<td>74</td>
<td>17</td>
<td>35</td>
<td>25.22</td>
<td>3.735</td>
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</tbody>
</table>

### Preference of Online or Traditional Degree Candidate Score

<table>
<thead>
<tr>
<th>Measure</th>
<th>n</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
</tr>
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<tbody>
<tr>
<td>Preference of Candidate</td>
<td>80</td>
<td>3</td>
<td>5</td>
<td>4.25</td>
<td>.803</td>
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</table>
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## Employer's Value Scale

<table>
<thead>
<tr>
<th>Item</th>
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<th>$n$</th>
<th>Min</th>
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<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
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<td>.742</td>
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<td>6</td>
<td>4.29</td>
<td>1.001</td>
</tr>
<tr>
<td>22</td>
<td>We are only able to hire candidates who meet the minimum educational standards outlined in the job description.</td>
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## TOD Subscale

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<tr>
<td>11</td>
<td>Applicants who have satisfied the educational qualifications obtained through online education (80% or more coursework is taken via Internet/Web) are considered for employment.</td>
<td>86</td>
<td>1</td>
<td>6</td>
<td>4.14</td>
<td>1.129</td>
</tr>
<tr>
<td>14</td>
<td>An online-degree granted by an accredited institution is accepted on the same basis as a traditional degree when evaluating a prospective applicant’s educational background.</td>
<td>86</td>
<td>1</td>
<td>6</td>
<td>3.85</td>
<td>1.203</td>
</tr>
<tr>
<td>15</td>
<td>Our organization prefers not to have applicants from online-degree programs.</td>
<td>84</td>
<td>1</td>
<td>6</td>
<td>3.33</td>
<td>1.175</td>
</tr>
<tr>
<td>16</td>
<td>We feel that online-degree programs are too informal and tend to destroy the credibility of a college degree.</td>
<td>83</td>
<td>1</td>
<td>6</td>
<td>3.43</td>
<td>1.095</td>
</tr>
<tr>
<td>20</td>
<td>We have found that it is more difficult to evaluate a candidate from an online degree program.</td>
<td>76</td>
<td>1</td>
<td>6</td>
<td>3.43</td>
<td>1.159</td>
</tr>
<tr>
<td>21</td>
<td>Evaluation of online degree candidates requires longer interviews or more extensive checking through calls or letters; unless the candidate appears to be outstanding, we may not bother.</td>
<td>78</td>
<td>1</td>
<td>5</td>
<td>3.18</td>
<td>1.029</td>
</tr>
</tbody>
</table>
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VITA

Graduate College
University of Nevada, Las Vegas

Leisa Dione Thompson

Home Address:
San Antonio, Texas

Degrees:
Bachelor of Science, Computer Science, 1986
California State University, Northridge

Master of Education, Educational Leadership, 2004
University of Nevada, Las Vegas

Publications:

Dissertation Title: Perceptions of Employers Toward Hiring Graduates With Online Degrees

Dissertation Examination Committee:
Co-Chairperson, Cecilia Maldonado-Daniels, Ph.D.
Co-Chairperson, Sterling Saddler, Ph.D.
Committee Member, Robert Ackerman, Ph.D.
Graduate Faculty Representative, Paul Jones, Ed.D.