College choice in distance-based nursing programs

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COLLEGE CHOICE IN DISTANCE-BASED NURSING PROGRAMS

by Jill Lansing

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ABSTRACT

The expansion and diversification of postsecondary education in the United States has led to greater options for students and prospective students for pursuing a college degree. An important trend in higher education today is distance education. Despite the growing prevalence of distance learning opportunities and the expanding body of research on distance education, research on the college-going decisions of distance learners is sparse. As more students enroll in distance-based higher education programs, it is increasingly important to understand how and why students make the decision to enroll in collegiate degree-granting programs. This study bridges the college choice and distance education literatures to better understand students’ decisions to enroll in distance-based nursing degree programs. A factor analysis provides a framework for discussing the elements of the traditional college choice models reported to be important to college decision-making for these distance learners, as well as elements from the distance learning literature shown to impact program quality, student satisfaction, and degree completion.
CHAPTER I
INTRODUCTION

Driven in part by changing demand, new technologies, and globalization, the face of higher education is changing. Higher education is becoming increasingly diverse in its delivery forms. The significant growth of community colleges, the proliferation of higher education, the emergence of distance-based learning options, and recent growth in the for-profit sector have contributed to this remarkable change in landscape. An important trend in higher education today, both in the United States and globally is distance education.

The growth of the Internet has been influential to the expansion of distance education over the past two decades. In 2002, Allen and Seaman (2013) found that approximately 1.6 million college students in the U.S. were enrolled in one or more online courses. By fall 2014, that number grew to over 5.75 million students enrolled in distance education courses, according to the U.S. Department of Education.

Just as distance-based higher education in the U.S. has expanded appreciably in the last decade, research on the distance learner has grown voluminously as well. A number of journals and publications are devoted exclusively to distance education and technology related research and scholarship. The American Journal of Distance Education, for example, is internationally recognized for publishing research in the field of American distance education. Likewise, Open Learning, a publication of Taylor and Francis and The Open University in the United Kingdom, features theoretical and evidence-based scholarly articles on developments in open, distance, and e-learning. Other notable distance education related journals and publications include, for
example, *Online Learning, the Journal of Distance Education, and the International Review of Research in Open and Distance Learning*. Research in these and other journals is increasingly prevalent on topics such as student characteristics and preferences, academic performance, learning styles, and student satisfaction.

Despite the growing prevalence of distance learning opportunities and the expanding body of research on distance education, research on college choice issues that arise from the emergence of distance education is rare. There is a significant gap in the literature on how and why students make the decision to enroll in collegiate degree-granting programs offered via distance learning. Individual research studies have identified certain characteristics of distance-based courses and degree programs that are important to currently enrolled students (Roblyer 1999; Tricker, Rangecroft, and Long 2001; Potter 1999; Rangecroft et al. 1999). Examples include opportunities to study while maintaining family and work responsibilities, quality of technology available for interacting with instructors and other students, availability of academic support services, as well as others. It has not been determined, however, whether these characteristics are also influential to prospective students who eventually make the decision to enroll in a distance-based degree program. As more students enroll in distance-based postsecondary education programs, it is becoming increasingly important to distinguish and understand the college choice process of the distance learner. A systematic examination of what factors influence students’ decisions to choose to pursue a degree via distance education is necessary.

Though research on how and why students choose *distance-based* postsecondary learning opportunities is rare, research on how and why students choose to enroll in a *campus-based* college or university program is abundant. The college choice literature dates back fifty years
and is a rich body of research with models that explain and predict the traditional aged prospective student’s decision to enroll in a campus-based, Baccalaureate degree-granting program (Kinzie et al. 2004). Models of college choice proposed by Chapman (1981), Hanson and Litten (1982), Hossler and Gallagher (1987), and others, depict the development of choice sets and behavioral intentions for traditional college bound students - 16 to 24 year old students who enter Baccalaureate degree-granting colleges as first-time freshmen. The traditional college choice literature, which will be discussed later in this paper, will be used in this study as a foundation for building a better understanding of what factors are influential in students’ decisions to enroll in distance-based degree-granting programs.

Over time, as higher education has diversified in the United States, researchers have used the traditional college choice models as a starting point for understanding the college choice process of other types of learners. Kallio (1995), for example, used the traditional college choice literature as a foundation for understanding the college choice decisions of graduate students. Likewise, other researchers have also used the traditional college choice models as a starting point for illuminating nuances of the college decision-making journey of particular segments of student, such as urban students (Kern 2000) and minority students (Perna 2000). Given the strength of the traditional college choice models, coupled with the precedent of using this literature as a baseline for understanding the college choice process of diverse categories of learners, these traditional models are proposed as a foundation in this study to begin to understand the college choice process of the distance learner.
This Study: Bridging the Gap between College Choice and Distance Education

The expansion and diversification of post-secondary education options in the United States in recent years has led to greater options for students and prospective students for pursuing a college degree. Historically, students were largely limited to place-based options and constrained, for example, by geography and distance from home or work. There were also time constraints associated with taking college courses since classes are traditionally taught by faculty at a designated time and place on designated days of the week on a semester long basis. As the delivery of higher education has diversified, students have more options for pursuing a college degree. These options include, for example, weekend courses, six week compressed courses, competency based education, online education, and more. More options yield more potential choices for would-be students.

This study focuses specifically on distance learners and seeks to understand what influenced students’ approach to selecting a distance-based degree program among all other options available to them for pursuing a college degree.

Figure 1: The traditional college choice literature as a foundation for this study
To prosper in this increasingly competitive market, administrators of both existing distance education programs and historically campus-based programs seeking to expand into the distance learning market, as well as educational consultants and others, have commissioned studies and analyses to predict demand for distance education, identify prospective students, and to help them develop viable recruitment strategies. Despite the availability of market-driven research, scholarship on the factors that are influential in a student’s decision to enroll in a distance-based degree-granting program is markedly limited. Therefore, similar to the studies referenced in the previous section which used the traditional college choice literature as a basis for developing a more reliable depiction of the college decision-making processes of graduate, urban, and minority students, this study is proposed to contribute to the college choice literature by bridging the gap in the literature between college choice and the distance learner and to begin to provide a better understanding of why prospective students choose distance education.

College decision-making is a high-stakes decision for prospective students. Examples of the economic are sociological outcomes of students’ college decisions are described in the literature review. The long-term economic stakes are especially high for the distance learner in that the difference between going to college and not going to college will significantly impact students’ potential wage growth and promotional opportunity. Most distance learners are adult students with jobs and family responsibilities. These students frequently report that they are making the decision to further their education to become eligible for improved career opportunities, a promotion, and higher wages, as well as personal growth. Unlike traditional students, the social and socialization experiences associated with attending college are not reported by distance learners to be as important as earning a college degree and increasing earning potential. However, the social aspects of the distance learners’ experiences in higher
education are important and should not be overlooked in the college decision-making process. Therefore, the outcomes of this study will help administrators and faculty to better understand the unique needs and expectations of distance learners so they can serve them better and support them toward persisting to a degree. The study will also be informative to policymakers, particularly at the State level, as they consider questions about expanded flexibility for financial aid, accreditation standards, and performance-based strategies and funding models.

The traditional college choice literature, which will serve as the foundation for this study, provides important context from which to draw to develop a more concrete understanding of why students choose to enroll in distance-based degree-granting programs. The college choice literature reveals that characteristics of academic programs and colleges and universities, such as academic quality, tuition costs, and the availability of academic support services, are important to traditional students when selecting a college or university in which to enroll. This study will, first, seek to determine the extent to which these traditional indicators are important to distance learners in their college decision-making process. Then, because the purpose of this study is to adapt conventional college choice models to the particular population of distance learners, the study will progress to understand the distance learning literature and to draw from that research to complete the foundation for this study. While research on how and why students choose distance education is rare, the growing body of literature on distance education provides important clues for understanding distance learners’ college choice process. The distance education literature is replete with indicators of quality distance education programs; characteristics of distance learners, their preferences, and learning styles; as well as examples of programs and strategies recognized to drive student success and student satisfaction in distance-
based programs. It is hypothesized that several of these indicators will also be important to prospective distance learners as they are selecting a degree-granting program in which to enroll.

Studies in the distance education literature have identified attributes of distance education that are similar to and different from traditional, campus-based environments. However, these studies analyze program quality, student satisfaction, and student success in distance education – not college choice. For example, Rovai (2001) contends that a sense of classroom community is a critical factor to supporting student learning in distance-based environments. Similarly, Fisher and Baird (2005) find that the availability of opportunities for students to interact and collaborate contributed to student retention and success. Rivera and Rice (2002), Fisher and Baird (2005), Swartz and Biggs (1999), as well as Roblyer (1999), all speak to the importance of quality technology to distance learning programs and to student satisfaction. And, in an attempt to develop a model of support services for distance learners, Potter (1998) studied three Canadian universities offering traditional academic programs and programs at a distance. When students in a distance-based program were asked to recommend improvements to their program, among the most frequently cited recommendations included academic services geared specifically to the distance learner, improved communication with the instructor and other students, and a toll-free number to connect the university. These studies do not, however, address students’ decisions to choose to enroll in a distance-based degree program. An important outcome of this dissertation will be to determine the extent to which these institutional and programmatic characteristics, reported to be important in distance education, impact student choice.

In the end, the primary outcome of this study is an updated model of college choice that better explains the college-decision-making process of the distance learner. This is very important to the college choice research because the existing models of choice are largely
centered on the college choice processes of traditional 16 to 24 year old college-age students. This study will provide an arguably overdue update to the existing models. For institutions, this study will help them to better understand how to effectively recruit students to distance learning programs. It will also provide guidance for colleges on how to effectively deliver on the needs and expectations of their diversifying student body, thereby supporting retention and persistence, which will ultimately impact student success. Distance learners would benefit from a learning experience that is aligned to their learning preferences and personal experiences and also provides the opportunity to carryout work, family and personal responsibilities while they are pursuing a degree. For policymakers, hopefully, this study can inform their work to expand and support quality coursework and degree programs and help students to smoothly transition through higher education to graduation with the least amount of debt.
To address the gap in the literature on college choice and distance education, the proposed study will bridge the traditional college choice literature with studies in the distance learning literature that expose indicators of program quality, student satisfaction, and student success to provide an understanding of what makes a student choose a distance-based collegiate degree-granting program. The existing models of college choice are primarily concerned with understanding how and why students enroll in campus-based undergraduate programs. Many of the variables that students consider when selecting traditional campus-based programs are specifically related to characteristics of the campus and interpersonal interactions with the college community. The distance education student, however, does not physically attend a campus and arguably has quite different interactions with the institution and college community.

In light of the differences between students enrolled in campus-based collegiate programs and distance learners, this study is staged to determine whether the traditional college choice models are valid or invalid for understanding the college decision-making processes of distance learners or whether the models perhaps need modification in translation to be applicable to the distance education student. To that end, a quantitative cross-sectional research study was carried out to respond to the following research question:

1. What factors are important to distance learners in their college choice process?
   1. How are the indicators of choice for the distance learner similar to or different from the significant factors known to influence a student’s decision to enroll in a traditional campus-based collegiate program?
The research question is posed to identify the major factors motivating a student to enroll in a distance-based, non-traditional Baccalaureate degree program. The focus of this study is not on which individual college the study has selected but rather on understanding, first, the student’s decision to enroll in college at all, and second, the student’s decision to enroll in a distance-based program in lieu of a traditional, campus based program. Paralleling the experience of the traditional prospective college students, an important benchmark in the prospective distance learner’s college decision-making process is the decision of whether to go to college. Often laden with work and family responsibilities, thoughts of enrolling in a degree program can be daunting. Time, financial resources, travel, and convenience all impact distance learners’ decisions about whether or not to enroll in college, as well as their decisions around selecting the type of institution that will accommodate their lifestyle and enable students to complete a degree.
The figure below presents a conceptual design for the study.

![Conceptual Design of the Study](image)

**Figure 2**

In this study, students enrolled in a Baccalaureate degree-granting distance-based program were surveyed to determine the importance of each of the factors represented in the above illustration to their college choice process. With a modified version of the Traditional College Choice Scale (TCC), originally used in a pilot study of distance learners and college choice conducted by Kinser and Lansing (2005), each of the indicators from the traditional college choice models (in white circles above) was tested to determine whether or not they were important to distance learners in the study. Likewise, using a modified version of the Distance Learning College Choice Scale (DLCC) from the Kinser and Lansing study, distance learners were asked to indicate the extent to which indicators of program quality, student satisfaction, and
student success in the distance learning literature (in gray circles above) impacted their college choice process. Further, a comprehensive factor analysis of the TCC and the DLCC was conducted to identify the underlying factors that are important to the college choice process of distance learners. The factor analysis helped to further distinguish the influential indicators of college choice for the distance learner and more specifically categorize the indicators beyond the dichotomous traditional (white circles)/non-traditional (gray circles) labels by which they are sorted in the conceptual design above.

While the goal of this study is to provide a fundamental description of the college choice process of the distance learner, as well as a preliminary analysis of the underlying factors behind distance learners’ enrollment decisions, it is limited to only a portion of the multi-dimensional college choice equation. Additional opportunities for seeking to understand, for example, the decision to select one non-traditional, distance-based institution over another, as well the cognitive and behavioral processes by which prospective students come to select a distance-based institution, are questions for future study. While there will be opportunities to set the stage for additional research, this study is limited to why students choose distance education as a first step. This study seeks to contribute to the college choice literature by describing the college decision-making process of the distance learner and proposing an updated model of college choice reflective of this student population. This study also seeks to contribute to the existing literature of college choice research on distance education assessing the extent to which existing research on quality and student satisfaction in distance education also influences college choice.
Definition of Key Terms and Context for this Study on Distance Education and College Choice

A general overview of the foci of this study, distance education and college choice, is presented here to provide context for the current study.

College choice

College decision-making is a cognitive and behavioral process requiring high personal involvement of students (Andreason and Kotler 1987). According to The Chronicle of Higher Education’s Almanac Issue 2017-18, in the United States, there are 4,396 institutions of higher education in which students could potentially enroll. The pool of institutions available to prospective students is large and markedly diverse; reducing that pool to just a few institutions to seriously consider and eventually selecting one in which to enroll is a complex process for many students. Options range from large research universities to Baccalaureate colleges, colleges with arts and sciences foci, colleges specializing in health and technical professions, faith-related institutions and tribal colleges, for examples. Of the nearly 4,000 total institutions, approximately 36 percent (1,600) are public institutions, 38 percent (1,662) are private, non-profit institutions, and 26 percent (1,134) are for-profit colleges.

In the United States, colleges and universities compete for student enrollment primarily within sectors, but also across sectors as well. Whereas the growth of private higher education in some countries, for example, is sometimes bifurcated from the state system, in the United States, institutions in the public, private, and for-profit sectors are all heavily engaged in the
marketplace for student enrollments. A distinguishing hallmark of U.S. academia is the significant competition within sectors and subsectors. Colleges and universities differentiate themselves from competitors in the marketplace a number of ways. Some capitalize on characteristics of the institution such as high quality academic programs, top-notch athletic programs, affordability, and graduates’ job placement rates, to name a few. Other institutions specialize in serving certain niches of the student population including students of color, for example, returning adult students, students of various religious affiliations, etc. Many institutions strive to stand out among their competitors as the best option for prospective students throughout their recruitment cycle. As a result, there is significant communication, information sharing, and relationship-building throughout the college choice process. Ultimately, however, the decision to select just one college or university in which to enroll is in the hands of the individual student. The matter of competition across sectors and across institutions is particularly important to this study, because distance-based, non-traditional Baccalaureate degree programs can be found in the public sector, the private sector, and in the for-profit sector. Also, many prospective distance learners may be deciding between attending traditional campus-based degree programs in their area and distance-based programs across the nation and even the world.

Several researchers have explored college decision-making and have developed models to explain and predict the high-stakes process. In almost all cases, however, the models depict the development of choice sets and behavioral intentions for traditional, 16 to 24-year-old high school students, living with their parents, who intend to enter college as first-time freshmen (Hossler and Gallagher 1987; Cain and McClintock 1984; Dembowski 1980). These models are discussed in greater detail in the literature review.
**Distance education**

For purposes of accreditation and financial aid, the U.S. Department of Education (2018) defines distance education as, “education that uses one or more of the technologies to deliver instruction to students who are separated from the instructor and to support regular and substantive interaction between the students and the instructor, either synchronously or asynchronously. The technologies may include--

(1) The internet; (2) One-way and two-way transmissions through open broadcast, closed circuit, cable, microwave, broadband lines, fiber optics, satellite, or wireless communications devices; (3) Audioconferencing; or (4) Video cassettes, DVDs, and CD-ROMs, if the cassettes, DVDs, or CD-ROMs are used in a course in conjunction with any of the technologies listed in (1) through (3)”. As the definition implies, postsecondary distance education in the U.S. today is markedly diverse. Tools, formats, and methods for providing courses and degrees at-a-distance vary between colleges and universities, across campuses, and even within individual courses. Some distance learning classes take place across two or more physical classroom-based locations. In other courses, the students and the instructor never physically unite at a common location. Students may complete course requirements via technology from their homes, workplaces, or other settings.

Courses can be either synchronous or asynchronous or a combination of the two forms. In synchronous environments, all students and the instructor come together at the same time either physically or via technology to interact in discussions, presentations, and/or lectures. In asynchronous learning environments, all students and the instructor may never interact at the same time. Instead, the teacher and student may leave messages for one another on electronic
Groups of students may meet in Internet chat rooms to discuss team projects, readings and reflections. Students usually submit course assignments and completed examinations to the instructor electronically.

While distance learning has historically been offered in many modalities, including correspondence courses, television broadcasting, and instructional radio, the common link across distance learning in higher education today is technology. Technology is used in lessons, courses, and complete degree programs to facilitate learning. Technology is the tool or the medium through which the traditional teaching and learning process occurs. The National Center for Education Statistics reports that the most commonly used media for distance learning in higher education are the Internet and video technologies. Of providers of distance-based courses, 90 percent offered some form of asynchronous instruction via the Internet (Waits and Lewis 2003). Technology is fundamental to the recent expansion of distance education.

**Distance learners**

While the growth in post-secondary distance education in the United States is certainly significant, it is important to carefully consider the population of students identified as distance learners. In 2011, the USDE released a report analyzing enrollments at all U.S. institutions eligible for financial aid. There they reported only 25 percent of the population of as distance learners – where 13.3 percent were enrolled in both campus- and distance-based courses and only 12.5 percent of students were enrolled exclusively in online classes. These data are important to consider, because while new modalities of higher education are emerging, they cannot be arbitrarily assumed to be having an explosive impact on college-going students and thereby rapidly changing the fundamental tenets of college choice models. Analyzing change,
which is the intent of this study, will require careful consideration of the historical dimensions of college choice coupled with the expectations of students today who are navigating among both traditional college options and new and emerging college models.

While the characteristics of the distance learner are as diverse as the definition of distance education, a profile of the “typical” distance learner studying in the United States has been created for purposes of understanding the needs and expectations of this population of students. The profile reflects demographic and behavioral attributes common among students who complete coursework and academic programs through distance learning. According to the profile created by Collegeatlas.org, females are generally more likely to pursue distance education than their male counterparts. Distance learning students are frequently over the age of 24 and live in homes where English is the primary language. Eighty percent of distance learners are employed with full-time or part-time. Participants in distance education typically earn over $25,000 per year and are often the first in their families to complete college. In sum, the “typical” distance learner can be described as an older, most often female, student with multiple family and work responsibilities.

In The Distance Learner’s Guide, distance learners are described as students who succeed in distance learning environments as independent, highly motivated, active learners with good organizational and time management skills. They typically have the necessary discipline to study without external prompts and can easily adapt to new and changing learning environments. Christensen, Anakwe, and Kessler (2001) initiated a study to determine pre-existing attitudes and beliefs that make a student receptive to distance learning opportunities. They discovered first, that students of distance learning seek flexibility. Students with many home, work, and community responsibilities are more receptive to distance learning. They also concluded that
technology-based learning environments alone were not enough to entice students to distance education. The student must also have a strong *perception* of the usefulness of the technology and specifically, the advantages of distance learning.

The literature differentiates the distance learner from the traditional student by virtue of a number of characterizations including age, income, students’ expectations, and learning needs. These differences further suggest that in a study of the college decision-making processes of distance learners, like the one that is proposed here, the traditional indicators of college choice may not be enough to explain or predict why students choose to enroll in distance-based academic courses and programs. Other indicators – found to impact program quality, and student performance and satisfaction in the distance learning literature - must be introduced into the research on college decision-making for distance learners. This study attempts to do that carryout this goal by merging the two bodies of literature and providing a detailed analysis of the college enrollment decisions of distance learners.

**Next steps: why this study is important to the future of distance education**

As previously described, the primary goal of this study is to begin to bridge the gap between the college choice and the distance education literature to provide an understanding of the reasons why students choose to enroll in distance-based collegiate programs. This study is an important precursor to additional research on the college decision-making process of the distance learner. Beyond the contributions this study is anticipated to make to the literature, however, it is expected that research in this important area could also have potential policy and operational implications that could be influential to the future distance education programs and projects.
Distance education offered via the Internet is increasingly heralded by educators, legislators, policymakers, and others for expanding access and providing students with learning opportunities that might not have otherwise been available. A significant priority of The State University of New York (SUNY), for example, one of the largest higher education systems in the nation, is the development and expansion of Open SUNY. Open SUNY is a major online learning platform that provides students with access to an array of college courses and over 470 degree programs available at SUNY’s 64 campuses to students globally through one common access point. Distance education advocates assert that prospective students who may have historically been limited to attending colleges and universities close to home can now enroll in institutions across the nation and even around the world via distance learning.

In addition, entities such as Coursera and EdX are providing individuals with access to college and university courses online and free of charge from higher education institutions across the globe. While the array of courses and degree programs available to students online significantly improves accessibility to higher education, actual empirical research on college choice and distance education will help policymakers, educators, and others identify the specific reasons why students choose to enroll in distance-based higher education. This information can potentially be used by educators and policymakers to help maximize the benefits of distance education to students in the future.

While individual research studies have provided insights on program and institutional characteristics important to distance learners (Roblyer 1999; Tricker, Rangecroft, and Long 2001; Potter 1998; Rangecroft et al. 1999), a systematic examination of the college choice process for distance learners is becoming increasingly necessary and important for a number of reasons. To appropriately serve students enrolled in distance-based courses and programs and to
help those enrolled in higher education programs to succeed and ultimately graduate, it is important to understand distance learners’ needs and expectations for their collegiate experiences. Also, students’ enrollment decisions and persistence have long been tightly linked. According to Tinto’s (1987) model of institutional departure, the more compatible a student’s preferences, expectations, and background are with the characteristics of the institution in which he or she decides to enroll, the more likely the student will continue study at that institution. Understanding students’ decisions to enroll in distance-based higher education offerings will be central to helping to strengthen retention and graduation rates among these non-traditional learners.

To provide a foundation for a systemic study of the college decision-making process for distance learners, a review of the college choice literature and the distance education literature follows. Each of the indicators depicted in the conceptual design for this study (Figure 2) will be harvested from the literature and described in full in Chapter II. In addition, methodologies used in the distance education and adult education literatures, as well as the college choice literature will be examined and used to provide practical guidance for this proposed study of distance learners and college choice. The literature will become the groundwork for Chapter III – Methodology.
CHAPTER II
LITERATURE REVIEW

Traditional College Choice Literature

This literature review begins with the traditional college choice literature, which serves as a foundation for this study. The review of the traditional college choice literature provides the reader with a general understanding of the existing models that depict why and how students search for and eventually decide to enroll in a college or university. In addition, institutional characteristics and other variables known to impact students’ decisions to enroll in a campus-based institution will be harvested and tested in this study to determine whether or not these items are also influential to students’ decision to enroll in a distance-based program. A map of the studies included in the traditional college choice section of the literature review can be found in Appendix B. The map provides a summary of each study, an explanation of why the research is important to this study, and a list of variables found by each researcher to be important to students when choosing a college.

Extending beyond the traditional models of college choice, the literature review proceeds to discuss emerging literature on college decision-making for non-traditional students and on distance education that suggest that the traditional models of college choice may not adequately explain the college decision-making process of the distance learner – the crux of this research. Emerging distance learning literature suggests that some indicators of choice in the traditional models may no longer be pertinent to distance learners; other studies suggest that there are
indicators that may impact distance learners’ enrollment decisions are not accounted for in the traditional models of choice. A number of studies reveal indicators of quality distance education programs; characteristics of distance learners, their preferences, and learning styles; as well as examples of programs and strategies recognized to drive student satisfaction and degree completion in distance-based programs that may also impact distance learners’ enrollment decisions. Like indicators from the traditional choice literature, these indicators will too be harvested to eventually determine whether or not they are influential in the college decision-making processes of students in this study. A map of the review of the distance learning literature is also provided in Appendix C. The final section of the literature review provides guidance on the methodology used in this study to provide more information on the level of engagement of distance learners in their college choice processes and the extent to which these students are involved with the institutions in their college choice sets.

Since this study is fundamentally about choice, it takes root in the college choice literature. Over the last fifty years, several researchers have explored the college choice process and have developed models of decision-making (Kinzie et al. 2004). Economists who have studied higher education have long framed the process by which students evaluate educational options and eventually select an institution in which to enroll in terms of the potential economic benefits and risks by choosing one college or university over another (Sanders 1990). Since the late 1960s, researchers have investigated the demand for higher education in the United States based upon the economic variables of income and price. For example, Campbell and Siegel (1967) describe a two-pronged approach to the theory of economic demand for higher education. They contend that a student’s decision to enroll in an institution of higher education is both an investment decision and a current consumption decision. A student will enroll in an institution if
the benefits they expect to receive exceed the costs of attending that school. Benefits are usually considered in terms of the income a student expects to receive in the job market as a graduate of an institution and the cognitive and social benefits of attending that college or university. On the other side of the equation, the costs considered by the student include tuition, fees, cost of books, etc. as well as opportunity costs.

Coupled with economics, sociology also provides an important framework for understanding the college choice process. Prospective students examine several social characteristics of a campus community when they engage in the college decision-making process. Specifically, early in the college search process, students will choose to explore a number of schools based on the demographic and sociological qualities of the institutions. Students will examine colleges and universities based on the geographic distribution of students, representation of minority groups, gender distribution, and students’ socioeconomic status, for example. Students will also consider things like the balance of academic and social offerings on campus, and the depth of community interest in social and political issues (Cain and McClintock 1984).

Whereas economists emphasize how enrollment decisions are primarily investment decisions, sociologists look at the process a bit differently. Sociology education research suggests that students may make the decision, for example, to trade-off “global status” for “local status,” which translates to passing up a more prestigious institution to enroll in a college or university where they think they will be held in high esteem. Heath (1993) found, for example, that while prospective students are concerned with indicators of global status such as the reputation of a program or institution in a global market and the status and job opportunities that a degree from a given institution would provide them, they are also concerned about their local
status or where they stand in their immediate collegiate environment. Some students say, for example, that they would rather do well in a less prestigious university and be held in high esteem by faculty and peers than perform average or below average at a prestigious university, even though the value of a degree at a prestigious university may be more recognized globally.

In light of the abundance of literature on college decision-making, arguably the most influential indicators students consider when choosing to enroll in one college over alternatives in their choice sets can be found in the anthropology and educational anthropology literature. The influence of institutional culture is extraordinarily powerful on enrollment decisions of traditional students. Typically, institutional, economic and social factors described previously are important to helping students identify colleges and universities to include in their choice sets; however, once a choice set is defined, the institutions the student is considering are traditionally similar in terms of cost, employment opportunities for graduates, and even size. Masland (1983) contends the true challenge for students is in differentiating an institution from schools with similar characteristics. How does a student distinguish among the two and subsequently make a choice on which college to attend? Organizational culture is a factor that sets one college or university apart from another (Masland 1983).

Kuh and Whitt (1988) define culture as, "the collection of mutually shaping patterns of norms, patterns, values, practices, beliefs, and assumptions that guide the behavior of individuals and groups in an institute of higher education and provides a frame of reference within which to interpret the meaning of events and actions on and off campus". Institutions have unique cultural attributes that sets them apart from other colleges and universities. Culture represents an underlying meaning for the community and dictates how members interact (Masland 1983). Culture is intangible and is therefore difficult to describe, measure, or precisely define (Kuh and
Whitt 1988). It is made up of the organization’s values, beliefs, and ideologies. Clark (1972) contends that an institution’s values and beliefs have widespread influence on the organization’s priorities, policies, standards, curriculum, services, administration, and vision. An institution’s values are the foundations of the college or university culture (Clark, 1972). The most effective method of understanding organizational culture is to unravel the holistic definition of culture into smaller, more discernible components. Kuh and Whitt (1988) argue that there exist a "web of cultural artifacts (history, myths, saga, heroes, traditions, rites, rituals, subcultures, language) that communicates to students how the institution works."

One important component of institutional culture is organizational saga. A saga is a unique contribution or accomplishment of the institution that is respected and promoted by its members (Clark 1972). According to Clark (1972), sagas are deep-rooted and developed and nurtured by members of the community. Pride, loyalty, and unity are fostered by organizational sagas. Other indicators of institutional culture are symbols found on the college campus. Statues, books, markers, or images could symbolize religious values on which the institution was founded (Kuh and Whitt 1988). As pioneers of the implementation of technology within the college community in the 1970s, the computer became recognized at Babson College as a symbol of institutional culture (Masland 1983). Ortner (1973) explains symbols are conduits that allow for differentiation of one's complex thoughts and ideas. Symbols represent institutional values.

Institutional heroes are also representative of college or university culture. Outstanding administrators, faculty members, students, or other community members exemplify the values of the institution. Typically one or two individuals or a particular group of people are held in high regard by other members of the organization. Academic and personal achievements of these
individuals are often portrayed to prospective students during the admissions process. Heroes personify the attributes of the college culture. Their behavior sets a standard of behavior for others in the institution. (Masland 1983). Also, rituals are key factors in organizational culture, representing institutional tradition. Several generations of members of the college community often associate with rituals. Commencement ceremonies, convocations, class nights, and honor ceremonies among the many examples of aspects of institutional culture (Masland 1983).

Understanding how powerful institutional culture is on the college decisions of traditional students is very important in this study. As the traditional college choice literature is applied to a population of non-traditional students – distance learners – will institutional culture still be important in their college selection decisions. What symbols, rituals, heroes, and sagas do non-traditional students identify with in college and are these indicators of culture important in their enrollment decisions?

Models of College Choice

Today, four predominant models of college choice (Jackson 1982; Chapman 1981; Hanson and Litten 1982; and Hossler and Gallagher 1987) account for both the economic and sociological foci of their predecessors. In almost all cases, the models depict the development of choice sets and behavioral intentions for traditional, 16 to 24-year-old high school students who intend to enter college as first-time freshmen. Each of the four combined models can be characterized in terms of three phases from the initial exploratory phase to the development of choice sets and behavioral intentions to eventually enrolling in a single institution. It is in the phases of the decision-making process where we see the economic, social, and anthropological
indicators of choice described previously converge and exhibit their unique influences at various stages of students’ decision-making processes. To demonstrate the differentiation of influences at the various stages of students’ choice processes, the following schema was developed for this study.
During phase I in the four models, a student decides whether or not to pursue educational opportunities beyond high school. According to Jackson (1982), Chapman (1981), Hanson and Litten (1982), and Hossler and Gallagher (1987), the interplay of sociological factors such as family background, parents’ socioeconomic status, parents’ education, parents’ expectations of the student, students’ aspirations, students’ academic ability, and peer influences, are dominant
in phase I and influence whether or not a student progresses further in the college choice process, as well as what schools they begin to consider in phase II.

Each of the four models characterize phase II of the college choice process as the time when students gather information about institutions of higher education and begin to develop choice sets consisting of colleges and universities to which they will eventually submit applications and potentially enroll. Hossler and Gallagher (1987), and Chapman (1981) refer to phase II as the search phase. Similarly, Hanson and Litten (1982) split phase II into the search process and the information gathering process. Jackson (1982) refers to phase II as the exclusion stage, calling upon economic theory to demonstrate that decision-making is centered upon a student excluding colleges from consideration based upon factors including cost, location, and academic quality. These factors and other external influences are said to impact student choice during phase II across the four combined models. Chapman (1981) categorizes important factors in students’ decision-making in terms of influence of significant persons (e.g., friends, parents, school counselors), college characteristics (cost, availability of financial aid, location, academic programs), and college efforts to communicate with the student through written information, campus visits, and other admissions strategies.

Finally, in phase III of the college choice process across the four combined models, students decide which college they will attend. Jackson (1982) and Hossler and Gallagher (1987) refer to this phase as the choice phase. Likewise, Chapman (1981) and Hanson and Litten (1982) describe phase III as the time during which students submit applications to institutions in their choice sets. Phase III is a very significant stage in the student’s decision-making process. Students eventually make the decision to enroll in one college or university based on the admissions decision of the institution, and on the factors from phase II that they considered to be
most important. Masland (1983) suggests that the institutions in a student’s final choice set are typically very similar with comparable features in terms of location, size, services, cost, etc. Colleges also tend to be similar in terms of the economic and social benefits they offer to incoming students as well as in terms of costs associated with attending the institutions in the student’s final choice set. Institutional culture becomes increasingly important to students in phase III, when they have narrowed down their choice sets and are selecting one institution among comparable peers. Hence, during this phase, traditional students typically visit or re-visit the colleges in their choice sets before finally deciding on a college in which to enroll (Cain and McClintock 1984).

Pulling on each of the key elements of the traditional literature on college choice, like other decisions, college decision-making can be analyzed through the lens of decision-making theory (Peterson 2009). In the case of college decisions, prospective students are choosing one college or university over a plethora of alternatives – many of which are similar in nature to the institution the student eventually selects. College decisions can be classified as decisions made with uncertainty or ignorance. These decisions can be tricky. Suppose, for example, a student is considering two individual colleges of similar cost, comparable rankings in comparative guidebooks, and similar reports of students’ receiving quality job offers upon graduation. To economize the cost of college, the student is considering enrolling in a college within driving distance to her family home. She also aspires to develop leadership skills and to holding leadership positions in student clubs and organizations. She visits both College A and College B. College A is close to home. During her college visit, however, she observes that while an array of clubs and organizations are available to students, the majority of presidents and officers of these organizations are male students. College B is significantly further away from home, yet,
when she visits College B, she experiences a campus culture where she reports a sense of “belonging” and where female students are encouraged to engage in opportunities to develop themselves as leaders inside and outside of the classroom. College A would be defined in decision theory as a safe option. Selecting College A would obviously be better than not attending college at all. However, not attending college would be sub-optimal to the student’s future. So, choosing College A would be a safe option in that it would provide her with a solid college education. What is unknown, however, is whether or not the student could achieve opportunities to provide leadership in student clubs or organizations in what she perceives to be a male dominated culture. Perhaps she could – perhaps she only met the leadership of a finite number of organizations when she visited or perhaps she could become a pioneer at the institution – however, she does not know for sure and her experience suggests she will not have the leadership experiences at College A she desires. Dominance theory would suggest that College A would be a dominant choice over not attending college at all. However, in the final choice process, College B might be considered as preferable in the student’s choice set due to indicators of culture that in the end, dominate considerations of cost. Here, the student is unaware of the probability of the outcome of her decision to choose College B but uses cultural indicators as proxies for personal satisfaction and success.

Students use the limited information they have, based on their introductory experiences visiting the college and with college students, faculty, and alumni, to judge whether or not they can be successful in this type of environment – e.g. what is the college culture, what is the student body like, how involved are the faculty in student learning and development, what opportunities are available for graduates of this college, which does it mean to be an alumnus. No matter how much time a student devotes to learning about an institution, comparing it to
other institutions, or “testing it out” by attending on-campus events, it is still impossible for the student to assign meaningful probabilities to the extent to which Institution A, B, or C will lead to success.

Would another college/university in the student’s choice set turn out to be any more or less beneficial to the student than the college in which they decided to enroll? Decision theory tells us that the outcome here is unpredictable, even though unpredictable nature of the decision may actually come as a surprise to the student. Given the uniqueness of each individual student’s decision, not even the law of large numbers will help here (Peterson 2009). When selecting a college, students make a one-time decision based on the information they have in hand at the time. At the time when students are selecting a college, they are making a decision where the true outcome of that decision will be unknown to the student until further into the future. This often perceived “one point in time” decision, however, will have a significant impact on the rest of the students’ lives. In the end, it is impossible to know for sure whether the college in which the student enrolls will yield a higher rate of return than other colleges or universities in his or selection pool. In their college decision-making processes, students toil over the task evaluating an institution based on all potential attributes of that institution that they believe to result in a successful outcome for students like themselves.

While the traditional models of college choice serve as a launching point for this study of the distance learner, they fall short on being able to account for the college choice process of these non-traditional learners. Studies on the distance learner in higher education have also exposed a number of new variables that have not been accounted for in the traditional college choice models that have potential to impact the decision-making processes of distance learners. These studies lend question to the degree of relevance of the more traditional indicators on non-
traditional students’ enrollment decisions compared to the relevance of emerging factors such as convenience, flexible learning options, and quality of technology, for example (Fisher and Baird 2005; Silva, Cahalan, and Lacierno-Paquet 1998; Bers and Smith, 1987; Roblyer 1999; Rivera and Rice 2002). This study will investigate the relevant differences in impact between traditional and non-traditional factors to distance learners’ college choices.

Adaptations of the Traditional College Choice Models

This study begins with the traditional college choice models and introduces indicators of program quality, student satisfaction, and degree completion in the distance learning literature to determine the extent to which they too may have influence on the college decision-making process of distance learners. This specific and deliberate approach was adopted based upon similar approaches taken by researchers in the past to apply and test the traditional college choice models with non-traditional student populations. Examples of such research are provided here. In these studies, researchers have primarily determined that while still relevant, the traditional choice models are a not “a perfect fit” for explaining the choice process of non-traditional students. Other factors not reflected in the traditional models come into play. For example, while Kallio (1995) found similarities between the college choice decisions of graduate students in her study of the models of college choice for the traditional Baccalaureate degree-seeking student, she also identified important differences. Social factors, including opportunities for forging friendships and on-campus social and cultural opportunities, were less important to graduate students than they have historically been to traditional students when selecting a college. The decision-making process of the graduate student, however, was found to be more influenced by work and family responsibilities – two considerations not accounted for in the
traditional models of college choice. Several additional studies in this vein and the specific ways in which the traditional college choice models have been adapted to the non-traditional learners are discussed in detail in Chapter III, in the methodologies section of this paper.

Distance Learning Literature

To begin to identify potential factors that might influence distance learners’ college decision-making processes that are not accounted for in the traditional models, this section turns to the emerging distance learning literature on what attributes of distance learning programs have been found to help student to persist and succeed. The purpose of this section is to identify those indicators of program quality, student satisfaction, and degree completion in distance education programs and determine the extent to which they impact college choice. The work of Haroff and Valentine (2006) provides for a good start as it categorizes key attributes of distance learning programs found to impact student satisfaction and success. It is particularly enlightening for this study, as it suggests that both traditional factors such as academic quality and factors specific to the distance learner, such as quality of technology, are important to program quality and student satisfaction. This is potentially predictive of what we might expect in a new model of college choice for distance learners – a co-mingling of traditional and non-traditional factors influencing student choice.

Haroff and Valentine (2006) reached out to educators and administrators of Web-based courses and programs and asked them to evaluate the importance of student characteristics, organizational and structural characteristics of the course/program, and instructor characteristics on quality. An exploratory factor analysis was used to identify six underlying dimensions of quality in Web-based programs.
1. Quality of instruction: This factor focuses primarily on instruction and interaction between the teacher and the student. While student-faculty interaction is traditionally a mainstay in campus-based learning environments, it cannot be taken for granted in distance-based environments where faculty may never come face-to-face with students and interaction can potentially be limited by time and space. Quality of instruction has a particularly unique and important meaning for the distance learner.

2. Quality of administrative recognition and support: Educators surveyed reported that an institution’s reputation for supporting the unique needs of distance-based environments, as well as providing educators with adequate resources and compensation is important to quality.

3. Quality of advisement: Educators indicated that it was important for distance learners to have quality support, resources, and advisement while being enrolled in a distance-based program.

4. Quality of technical support to distance learning faculty

5. Quality of advance information to potential students: A key indicator of quality for survey participants was the availability of information for prospective distance learners in the recruitment and admissions process that provide students with important information on things like cost of the program, expectations of the student, technical requirements, etc.

6. Quality of course evaluation procedures. Educators indicated that it was important to provide students with the opportunity to share feedback on the course with program faculty and administrators.

In “Is Choice Important in Distance Learning? A Study of Student Motives for Taking Internet-Based Courses at High School and Community College Levels,” Roblyer (1999) surveyed students in a virtual high school system and students in a community college that
offered both traditional and distance-based courses to identify the factors students considered as important in their decision to choose a course delivery mode. Roblyer’s survey consisted of four categories of items – logistical (i.e. distance and driving time, parking, and access to computer resources); control (choosing when to complete assignments and flexibility to complete them); personal interaction with both the teacher and other students; and attitudes and prior expectations of technology and distance learning. Notably, this survey instrument consisted exclusively of potential indicators of choice not accounted for in the traditional college choice models.

Roblyer, however, found that community college students used similar criteria and decision processes when choosing traditional and distance-based courses and programs. The “control” factor was found to be more important for distance learning students and the “interaction” factor was found to be more important for the students in the traditional class section. Logistical and prior experience and access to technology were not determined to be more important among either group. None of the personal characteristics such as age and gender were determined to significantly contribute to the student’s learning format decision. For future research on the factors influential in a distance learner’s college decision-making process, Roblyer introduces new indicators worthy of consideration – opportunity for control over when to study and availability of student/teacher and student/student interactions; logistical factors (i.e. distance and driving time, parking, and access to computer resources); and a student’s a priori attitudes and expectations of distance-based technologies.

Further study conducted by Fisher and Baird (2005) reinforce Roblyer’s contribution to the college choice literature and further suggest the need for additional study to better understand the nuances of the decision-making process for the distance learner. In an exploratory study of
students enrolled in four Web-based courses in a graduate Education Technology program at Pepperdine University, Fisher and Baird found that distance learners in the study were more likely to persist in courses designed to empower students to create an individualized and self-paced learning experience where students could construct knowledge and complete the course requirements in a manner that was consistent with students’ unique needs and flexible enough to accommodate students’ extra-curricular responsibilities. Courses that provided this flexibility were structured more as a learning roadmap where students sought out to accomplish the course’s learning objectives with guidance and support from instructors, as well as with course materials and other resources.

Also, like Roblyer, Fisher and Baird found that distance learners wanted the opportunity to interact with other students in their classes and that engaging in collaborative learning activities was important to distance learners in the study. Because students in traditional, campus-based programs would naturally have the opportunity to interact with other students in their classes, the opportunity to interact with other students is not identified specifically in the traditional models of choice. This attribute, however, cannot be taken for granted in distance-based environments and therefore should be considered among potential indicators of choice for prospective distance learners. Another query worthy of additional deliberation for further study of distance learners and college choice comes about when two factors found by Fisher and Baird to be important to distance learners are juxtaposed; specifically, the opportunity to create an individualized, self-paced learning experience and the opportunity to interact with other students. The opportunity to create and individualized, self-paced learning environment suggests that distance learners may be seeking independence and flexibility in completing academic requirements whereas the opportunity to interact with other students implies that camaraderie
and the involvement of peers in the learning process is important to distance learners. Additional research is needed to determine the relative impact of these somewhat conflicting indicators on students’ decisions to choose distance-based academic programs.

Fisher and Baird also found that poor quality learning technologies could be detrimental to distance learners’ success. This is consistent with the findings of Rivera and Rice (2002), who, in their comparison of traditional, campus-based learners and distance learners enrolled in an undergraduate Management Information Systems course, found that students in the Web-based section of the course were somewhat less satisfied with the course than students in the campus-based sections in part because technology was inconsistent, did not always work properly, and imposed limitations on course delivery. Though not relevant to campus-based students at the time when the traditional models of college choice were developed, technology is fundamental to distance learners’ academic experiences and to their connection to the college or university in which they are enrolled, as well as to other students and faculty. If there is a relationship between quality of technology and distance learners’ satisfaction, as these studies suggest, quality of technology may indeed be an important selection criterion for prospective distance learners and worthy of consideration in a study of students’ college decision-making process.

In addition to the conclusions of Rivera and Rice (2002) on the impact of technology on student satisfaction with distance education, in their comparison of traditional, campus-based learners and distance learners enrolled in an undergraduate Management Information Systems course, their study also brought forward potential indicators of choice for distance learners not included in traditional models. Over three quarters of the distance learners surveyed in the study reported time and place convenience as important criteria in their choice to enroll in an online
course. These considerations were also introduced by Roblyer (1999), who identified logistical factors such as convenience, distance, and driving time, as selection criteria for prospective distance learners. The impact of convenience (an item not accounted for in the traditional models of college choice) relative to the impact traditional indicators such as academic quality, reputation, and cost on distance learners’ college decision-making processes will be an important point of consideration in further study of college choice and distance learners.

Convenience and the opportunity to carry out work and family responsibilities while completing a degree on college choice will be important considerations in this study of distance learners, particularly since a significant proportion of distance learners are adult learners. In focus-group interviews with adult college students, Bers and Smith (1987) found that adult students in their study reported convenience as the primary reason for selecting the college in which they enrolled. This is consistent with the overview of results from empirical analyses on barriers to participation in adult education that was compiled by the National Center for Education Statistics. Silva, Cahalan, and Lacierno-Paquet (1998) provide a profile of 15 studies that investigate the reasons prospective adult students report for not returning to school to pursue higher education, as well as why some adult learners who have enrolled in degree-granting programs do not complete their programs and graduate. In nearly two-thirds of the 15 studies highlighted, adult students surveyed cited at least one convenience-related factor as a barrier to their participation in adult education. Lack of time was among the most predominant factors adult students reported for not pursuing higher education. Respondents in six studies also reported factors such as “courses offered at an inconvenient time/location,” “lack of transportation,” and “time involved in traveling to the location where the courses are offered,” as hindering their ability to further their education. And, adults in one-third of the studies reported
that family and work obligations were keeping them from their academic pursuits.

In addition to introducing new indicators with potential to impact the college decision-making processes of distance learners that have not been accounted for in the traditional college choice models, several researchers have studied the impact of traditional indicators of choice on students’ experiences in distance-based degree programs. In a study to determine the extent to which an academic program is meeting the needs of distance learners, for example, Tricker et al. (2001) found distance learners to be very discerning about their academic programs and cognizant of the time and resources they invest in their education. Students in distance-based management and education programs were asked to reflect upon and assess their decisions to join the distance-based program, course satisfaction, course materials, design of the course, and course assessment. Students were surveyed once related to their expectations of the course and a second time to report their actual experience with the course. There was a remarkably significant gap between the students’ two indicators represents the degree of difference between anticipated and actual experiences.

Tricker et al. found that the quality of program content is very important to distance learners. Students reported enrolling in a distance-based program where the content most closely matches their professional and personal needs. Also, consistent with the research discussed previously in the literature review, Tricker et al. found that opportunities for flexible study in a distance program are attractive to students. Respondents reported that readability and consistency of information is more important than designing a course that maximizes use of the latest technology. And, somewhat unpredictably, Tricker et al. found that support services (e.g., tutorial support) are of little or no significance to distance learners in their study. Since the models of college choice indicate the traditional campus-based students consider an institution’s
student support services as a factor in their college decision-making process, additional research is needed to help determine the extent to which the availability of student support services plays a role in distance learners’ enrollment decisions. Further, Tricker et al.’s conclusions on student support services contradicts the findings of other researchers, including Potter (1998) and Canning (2002), and is worthy of further exploration.

Canning (2002) conducted a qualitative study of students working full-time and in a distance-based program in Scotland over a period of two years, and found, contrary to Tricker et al., that the single most important resource for students in the distance-based program he studied was the availability of a tutor or academic support services from the institution. Research conducted by Potter (1998) also aligns with the work of Canning. In an effort to develop a model of support services for distance learners, Potter studied three Canadian universities offering both traditional academic programs and programs at-a-distance. Distance learners were asked to rate the relative importance of 24 possible support services such as academic advisement, financial aid, childcare, admissions counseling, and others. Students indicated that the most important services influencing student satisfaction were those getting them through the early stages of enrollment and included things like information and advice on distance learning opportunities, and orientation to technology and learning formats. They also rated communication with course instructor as very important. In follow-up interviews, over 50 percent of respondents indicated the importance of high quality material designed specifically for distance-based students.

Respondents were also asked to recommend improvements to their distance education program. Among the most frequently cited recommendations included: increased course availability, more timely and constructive feedback on assessments, academic services geared to
the distance learner, improved communication with instructor and other students, improved access to library services, and a toll free telephone number to connect to the university. Potter concluded with an adapted model of student support services that address the communications and learning needs of distance learners in her study. Potter’s findings suggest that it would be appropriate to consider student support services among indicators of college choice for distance learners in a systemic study.

**Arora’s Involvement with Education Scales to Assess the Extent to which Students are Involved with Institutions in their Choice Sets**

Finally, two scales that originated in the marketing literature will be helpful for gauging the extent to which distance learners were involved with an institution before deciding to enroll. Arora (1982) proposed the Involvement with Education-Situational (IE-S) and the Involvement with Education – Response (IE-R) in an attempt to test the model of involvement proposed by Houston and Rothschild (1977). Arora’s scales are designed to quantitatively gauge students’ level of involvement with education.

A high composite score on Arora’s IE-S is reflective of high levels of situational involvement with an institution on the part of the student. On a six point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree), students are asked to indicate to what extent they agree or disagree with four items posited to gauge situational involvement. Situational involvement represents a student’s level of involvement with an institution evoked by characteristics of the institution and psycho-social stimuli surrounding the student’s college choice process. A student’s level of situational involvement with a college or university is impacted by attributes of the institution such as cost, academic quality, reputation, perceived
benefits, and other performance-related measures. Additionally, situational involvement is affected by psycho-social stimuli such as the quality of students’ interactions with members of the college community in the college search and selection process. These stimuli have the potential to impact student behavior.

Arora’s IE-R, which is also made up of four items, measures students’ level of response involvement with an institution. In this case, response involvement can be characterized as the result of complex cognitive and behavioral processes that make up the college choice process for prospective students. The IE-R measures the extent to which a student is involved with an institution, based in part on the indicators of situational involvement described above, as well as on a student’s predisposition toward an institution or previous exposure to the college community. Like the IE-S, on a six point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree), students are asked to indicate to what extent the agree or disagree with each of the four items. A high composite score on Arora’s IE-R is reflective of high levels of response involvement with an institution on the part of the student.

In this study, Arora’s IE-S and IE-R was used to assess distance learners’ involvement in selecting an institution in which to enroll by measuring their predisposition toward an institution, their perspective on the quality of an institution and other attributes, and their perceptions on the receptivity of the college community.

A summary of the review of the traditional college choice literature and the distance learning literature
In sum, this literature review began with an exploration of the existing models and research attempting to explain and predict college choice. While the models provide diversity, they also consist of similarities upon which to launch a study of college choice for a modern population of students – distance learners. Institutional characteristics such as size, cost, reputation, geographic location, and program availability have remained constant across the models and are therefore important for future research on college decision-making. Similarly, other practical aspects of the traditional recruitment and admissions processes, such as recruitment materials and recommendations of family, friends, college alumni and others should not be overlooked in this study.

As the college choice literature has evolved to account for the experiences of various subsets of the traditional college age student population, as well as populations including adult learners and graduate students, a number of other indicators of choice in the decision-making processes of students have emerged. Examples include convenience, an opportunity to complete degree requirements and maintain family responsibilities, and a college’s willingness to recognize prior learning experience for credit. At the same time, the distance education literature provides potential new variables to also consider when studying distance learners’ college choice processes. Students with multiple work, family, and community responsibilities are likely to seek flexible, convenient learning environments that support their demanding lifestyles. Additionally, new institutional characteristics and student characteristics not identified in the traditional college choice literature have been drawn from the distance learning literature. Opportunities for students to interact with other students and with faculty should be considered in future study of distance learners and college choice. Similarly, according to the literature, quality of technology at an institution could potentially influence a student’s decision to enroll in
a distance-based program. Likewise, student support services for distance learners may also be an important indicator upon which prospective distance learners would evaluate an institution in their decision-making process. Taken together, as illustrated in the figure below the college choice literature and the indicators of program quality, student satisfaction, and degree completion in the distance learning literature make up the conceptual model for this study, as presented in Chapter I.
CHAPTER III
METHODOLOGY

This study seeks to determine the extent to which 16 items from the traditional college choice literature (including academic reputation, cost, and size of institution, for example), as well as 15 items from the distance learning literature (including, for example, quality of college’s technology, self-paced learning environment, and college’s willingness to recognize prior learning experiences for credit), influence students’ decisions to enroll in distance-based degree-granting programs. The purpose of the study is to respond to this central research question:

- What factors do distance learners consider in their college choice process?
  - How much are the indicators of choice for the distance learner similar to or different from the significant factors known to influence a student’s decision to enroll in a traditional campus-based collegiate program?
Figure 2, presented again here, represents the conceptual design for the study and is the basis for the methodology. These items were selected after a thorough review of the literature and after having had conducted a pilot study to test the validity of the Traditional College Choice Scale (i.e., items in white in Figure above) and the Distance Learning College Choice Scale (i.e., items in grey in the Figure above). As a result of the pilot study, select items were removed from the scales, such as “availability of athletics”, for example, which was determined to be irrelevant to the college choice decisions of distance learners. Other items were added, including “availability of distance-based learning opportunities,” which was originally not included on the scale but widely self-reported by survey respondents as influential to their decisions to enroll in a distance-based degree program.

The overarching goal of the research design is to determine the extent to which these indicators were influential in students' decisions to enroll in a distance based degree-granting program. Then, using factor analysis techniques, the research design will:

- reduce the assortment of individual indicators hypothesized to influence the college choice decisions of distance learners, and
- expose the patterns of relationship among the resulting data to more precisely isolate the common underlying factors behind distance learners’ enrollment decisions.

A cross-sectional survey design was used to accomplish these objectives. The cross-sectional design, which is a widely used research design for describing a specified population and for determining relationships among variables (Babbie 1992), provided an opportunity to identify criteria important to distance learners in their college choice process. Specifically, students enrolled distance-based Baccalaureate degree-granting programs in the School of
Nursing at Excelsior College were surveyed and asked to provide information on their college decision-making process, indicating the extent to which each of the factors in the above conceptual design were influential in their eventual decision to select an institution in which to enroll. At the core of the survey instrument are two scales, previously administered and tested in the Kinser and Lansing (2005) – the Traditional College Choice Scale (TCC) and the Distance Learning College Choice Scale (DLCC). Directly aligned with the research questions for this study, the TCC (Appendix E) was used to determine whether the indicators of choice for the distance learner in the study are similar to the significant factors known to influence a student’s decision to enroll in a traditional campus-based collegiate program. The DLCC (Appendix F) was used to determine whether or not indicators beyond those that have been addressed in the traditional college choice literature impact the college decision-making process of distance learners. Via the DLCC, students at Excelsior College were asked to indicate the extent to which indicators of program quality, student satisfaction, and student success from the distance learning literature, were influential to their decision to enroll in a distance-based degree-granting program. Finally, a principal components analysis is used here as a tool to reduce the large set of variables included in the TCC and the DLCC into smaller sets of more meaningful factors to respond to the proposed research question - what factors do distance learners consider in their college choice process?

To ultimately arrive at the methodology proposed for this study of distance learners, studies seeking to illuminate the college decision-making processes of other “non-traditional” college students were reviewed and analyzed. For example, Perna (2000) analyzes data from the third follow-up (1994) to the National Educational Longitudinal Study (NELS) to differentiate the decisions of African American students, Hispanic students, and White students to attend
college using econometric models of choice. Similarly, Corman (1983) uses the United States Department of Education’s Survey on Adult Education, to understand the post-secondary enrollment decisions of both recent high school graduates and older, non-traditional students. Freeman interviewed over 70 high school students in 16 groups to help extend the existing literature beyond research on the experiences of Black students in higher education, to begin to unearth the factors influencing Black students’ decisions to choose historically black colleges and universities and/or predominantly White institutions.

The methodology used in this study is aligned to the research of those who have extended the traditional choice literature and those who have used the traditional literature to either extend the typical analysis of college choice and the traditional student (Corman 1983; Absher and Crawford 1986; Kellaris and Kellaris 1988; Smith, 1990; Canale et al. 1996) or to understand the college decision-making processes of particular types of non-traditional aged students such graduate students (Kallio 1995) and adult students (Bers and Smith 1987; Wolfgang and Dowling 1981), as well as distance learners (Roblyer 1999).

Canale et al. (1996), administered a Likert scale questionnaire to over 540 high school juniors and seniors to investigate the relative importance of particular college characteristics in students’ decisions to choose to enroll in a college. Similarly, in a comparison of two-year and four-year college students’ college decisions, Smith (1990) administered a 29 item questionnaire grounded in the college choice literature to 125 first-time college students in a four-year private college and a two-year public institution in the Midwestern United States. Additionally, Absher and Crawford (1996) developed and administered a questionnaire with 29 variables to a randomly selected sample of students enrolled in four community colleges in Alabama to understand how students select a particular community college among the plethora of
alternatives. Kellaris and Kellaris (1988) chose a one-shot, post-choice decision survey identify factors influencing students’ decisions to choose a small private college and to predict potential longitudinal outcomes. A series of five point Likert scales and open-ended questions were used to determine the relative importance of various factors in the choice process and to understand how relative importance of factors varied according to student characteristics. Precedent has been established in the literature for selecting quantitative methodology for an initial exploration of the college choice process for a particular type of students. To that end, a quantitative, cross-sectional research methodology was used for this very focused study of the distance learner and the factors impacting college choice.

The cross-sectional survey design

Consistent with the quantitative studies on college choice described previously in the literature review including those of Canale et al. (1996); Smith (1990); Absher and Crawford (1996); Kellaris and Kellaris (1988); Erdmann (1983); and Sanders (1990); a cross-sectional survey design is carried out for this study. The cross-sectional design can be used as a predictor of approximate results for a longitudinal study (Babbie 1992). While resulting data are reflective of just one point in time, long-term cognitive and behavioral actions can be speculated. The cross-sectional design is also known to be time-efficient and cost-effective. Data can be collected almost instantaneously without delay. The proposed research design also reduced threats to internal validity, by inhibiting experimental mortality. Because data are captured at one point in time, it is less likely that units of analysis will abandon the experiment before it is
completed. Threats to the effects of history, maturation, and interaction are also minimized since
the data are being collected at one point in time. Since the process of testing and re-testing can
potentially create a testing bias, the cross-sectional design, which requires just one exposure to
the testing instrument, will reduce this threat to validity (Babbie 1992). The goal of the proposed
framework is to link grounded indicators to theoretical concepts to more explicitly understand
choice in distance education (Britt 1997) and to provide a foundation for additional research in
this important area.

Sample selection

Students enrolled in Baccalaureate degree programs in the School of Nursing at
Excelsior College were targeted for this study. Excelsior College was selected as a site for this
study because of its history of providing distance-based degree options for its students, its size,
and its reputation for academic quality and for providing services tailored to meet the unique
needs of distance learners. Excelsior College is a private, not-for profit institution with
administrative offices in Albany, New York. Founded in 1971 as an external degree program of
the New York State Board of Regents, in 1998, Excelsior was granted an absolute charter to
operate independently. Excelsior offers 65 degree programs including 56 associate and
baccalaureate degrees in nursing, the liberal arts, business, technology, and health sciences; and
nine master’s degrees in nursing, business, and liberal studies. Excelsior is a relatively large
college in terms of student enrollment with over 31,000 students currently enrolled. The number
of students at Excelsior is comparable to the number of students enrolled in the University at
Buffalo and Boston University, for example. Of the 31,000 enrolled students, approximately
12,300 undergraduate students and 551 graduate students are enrolled full-time. Approximately
6,000 students graduated last year and Excelsior boasts over 140,000 alumni. The nursing program is the largest of the programs offered at Excelsior with over 53 percent of students enrolled. Excelsior College is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools. Its nursing program, which is reported to be the largest in the country, is accredited by the National League for Nursing Accrediting Commission (NLNAC). The National League for Nursing (NLN) named Excelsior’s School of Nursing a 2011-2016 NLN Center of Excellence in Nursing Education. (Excelsior College Middle States Self-Study Report 2012).

Degree programs at Excelsior College are completed by students at-a-distance. Students complete degree requirements in one of three ways. The first means is through credit aggregation where students can transfer credit they earned previously at other institutions or through other approved sources toward their degree at Excelsior. According to Excelsior’s Middle States Self-Study Report (2012), U.S. News & World Report named Excelsior College the number one transfer college in the country in their 2011 “America’s Best Colleges” report. The second means for students to complete degree requirements at Excelsior is through assessment. This is a particularly effective means of awarding credit to students enrolled in Excelsior’s nursing programs. Students who can demonstrate significant experience, particularly in clinically-based practices, can take structured standardized assessments, and upon demonstrating proficiency of the subject matter on the assessment, are awarded college credit. Types of assessments include Excelsior College and UExcel examinations, assessment of training and credentialing for credit, and portfolio assessments. Finally, over the last five years, Excelsior has dedicated significant leadership and resources toward the development of on-line courses. The College offers over 400 online courses composed of approximately 2,600 course
sections for students as a means toward degree attainment (Excelsior College Middle States Self-Study Report 2012), which represents a considerably large selection of distance-based course options for students.

Students included in this study are all Baccalaureate degree-seeking in the School of Nursing in June 2012 who are completing their entire degree programs at-a-distance without being physically present on campus. Students are completing degree requirements through a combination of each of the three means of earning a degree at Excelsior described above – online coursework, credit accumulation, and assessments. Since the goal of this study is to develop an initial understanding of the factors influencing students’ decisions to choose distance education, this population of students who are exclusively enrolled in distance-based programs will help the researcher to isolate the considerations of distance learners when considering and selecting post-secondary education options.

Whereas studies of the college enrollment decisions of distance learners are rare, studies of college enrollment decisions of Baccalaureate degree-seeking students enrolling in campus-based programs are abundant. Therefore, this proposed study on distance learners is aligned with the robust body of traditional college decision-making literature as tightly as possible. Consistent with the traditional college choice models that are predominantly concerned with explaining and predicting the enrollment decisions of students enrolled in Baccalaureate degree-granting programs, to provide for a fundamental understanding of the college choice process of distance learners, only Baccalaureate degree-seeking students will be asked to participate in this study. Aligning the sample of this proposed study (i.e., Baccalaureate degree-seeking students in a distance based program) with units of analysis in recognized studies that explain and predict the college decision-making processes of traditional Baccalaureate degree-seeking students enrolled
in campus-based programs, will help to ensure the reliability of this study. That said, this study began by acknowledging that distance education is different than traditional campus-based course offerings. It is not expected that the outcomes of this study will mirror the traditional models of college choice. Therefore, it is important to note that this study does not replicate the traditional studies of college choice, but rather adapts the methodologies to better fit the unique attributes of the distance learner. This approach is similar to the approach used by other researchers described previously in this study when seeking to better understand the college decisions of other non-traditional or under-represented college students including minority students and adult learners, for example.

In addition to size, history, and reputation, other characteristics of higher education institutions were considered prior to the decision to select a site for this study. For example, significant attention was given to the sector in which the institution is categorized – e.g., public, nonprofit, private, proprietary. Findings from the preliminary study of college choice and distance education (Kinser and Lansing, 2005) suggests that the in-state tuition factor at public institutions could potentially skew an analysis of the influential factors in distance learners’ decision-making process. In most cases, students who declare residency in a state within the United States are charged a state resident tuition rate that is far less than that of out-of-state students. In such cases, the cost of the institution could have a far more significant impact on students’ decisions to choose a distance learning program in which to enroll compared to other factors such as program quality, reputation, and quality of technology. More research is needed to determine the relative impact of tuition on college choice for distance learners enrolled in public institutions. Similarly, for-profit institutions may inherently draw a larger population of prospective students interested in their programs as a result of their advertising initiatives alone.
In contrast, a private, non-profit institution could potentially provide a balance between the tuition advantage of public institutions and the geographic draw of for-profit institutions. While distance education reduces geographical barriers to attending a given college or university, at the time this survey was administered, there was a tuition differential for out-of-state students attending public institutions of higher education. For this reason, a private, non-profit institution was sought out for this study where the tuition differential is not relevant as tuition is the same for in-state and out-of-state students.

For these reasons, after significant consideration, Excelsior College, a large, private distance education provider was selected for this initial study of college choice and the distance learner. This selection was large enough to provide for an adequate sample size for the study, necessary to ensure the reliability of resulting data. An adequate sample size is important for this study since a primary objective of the research design is to isolate the underlying factors behind distance learners' enrollment decisions through principal component analysis. Factor analysis techniques can be particularly sensitive to missing data and to smaller sample sizes, sometimes resulting in poor correlations and even unreliable correlation coefficients. It is also important that the community of distance learners at the selected institution include a diverse array of Baccalaureate degree-students in the way of gender, ethnicity, previous experience with distance education, etc. Conclusions drawn from the proposed study of distance learners should benefit significantly from a diverse participant population. As highlighted in the literature review, nuances have emerged in the college decision-making processes based upon the characteristics of the individual student. A diverse sample size will provide the researcher an opportunity to provide preliminary data on the extent to which indicators of college choice for distance learners
in this study vary depending on characteristics such as gender, ethnicity, previous experience with distance education, and other distinctive attributes.

**Survey instrument**

The survey instrument used in this study (Appendix G) was administered to students enrolled in the School of Nursing’s Baccalaureate degree program at Excelsior College in 2012. The survey consisted of sets of items designed to extend the traditional college choice literature to distance learning environments and identify similar and contrasting indicators of college choice. The instrument was also designed to determine the importance of indicators of program quality, student satisfaction, and student success from the distance education literature in students’ decisions to enroll in a distance-based Baccalaureate degree-granting program. To accomplish these objectives and thereby address the central research questions of this study, two scales first used as part of the Kinser and Lansing (2005) study of students enrolled in Baccalaureate degree-granting distance education programs – the Traditional College Choice scale (TCC) and the Distance Learning College Choice scale (DLCC) – were used to make up the most significant portion of the survey instrument. The scales were modestly refined for this study.

*The Traditional College Choice Scale*

The Traditional College Choice scale (TCC) was used to assess the influence of indicators found to be important to the enrollment decisions of traditional students in campus-based programs on the enrollment decisions of the students in this study. The TCC consists of 16 items which, following a thorough review of the college choice literature, were identified in
the college choice models and by other researchers as influencing a traditional student’s decision to enroll in a campus-based college or university. Appendix B provides a summary of such studies from the traditional college choice literature that provide guidance for understanding what influences students’ decisions to enroll in distance-based Baccalaureate degree programs. The fourth column in Appendix B delineates those elements identified in the literature as important to the traditional prospective student when choosing a college that were tested in this study to determine whether or not they are also important to the distance learner. These items are also portrayed in white circles on the conceptual design. On a Likert scale ranging from 1 (not important) to 5 (extremely important), respondents to the survey were asked, through the TCC, to indicate how important the following items, which come directly from the traditional college choice literature, were in their college decision-making process:

- size of institution
- cost (tuition and fees)
- availability of financial aid
- academic reputation
- availability of major
- tutoring and academic support services
- student activities and organizations
- geographic location of institution
- accreditation
- diversity of student body
- recommendation of family member
- recommendation of friend
- recommendation of career counselor
- contact with college alumni before enrolling
- contact with current college student before enrolling
- college’s ranking in comparative guidebooks
- college’s recruitment materials

The values respondents assign to each of the individual items were summed to establish composite scores to estimate the importance of traditional indicators of college choice in the college decision-making processes of distance learners in this study. Outcomes will be described in detail in the next chapter. In the inaugural administration of the TCC to students enrolled in distance-based collegiate programs at an institution in the northeastern United States, the
Cronbach’s alpha for the TCC was determined to equal .85, representing an acceptable level of internal consistency and signaling the scale’s potential for further testing and future research.

**The Distance Learning College Choice Scale**

A second set of items included on the survey instrument administered to students at Excelsior were drawn from the distance learning literature. The strategy for addressing the central research question posed in this study, (i.e., what factors do distance learners consider in their college choice process? Are the indicators of choice for the distance learner similar to or different from the significant factors known to influence a student’s decision to enroll in a traditional campus-based collegiate program?), is to begin first with the TCC to determine whether indicators typically associated with college choice were important to distance learners in this study. Recognizing, however, that the traditional indicators of choice, in and of themselves, may not be enough to determine why students choose to enroll in distance-based Baccalaureate degree-granting programs, it is important that other indicators be taken into consideration. Rather than starting from a blank slate to identify indicators of choice beyond those included in the traditional models, the distance education literature was selected as the source from which to draw additional indicators that might also be important to distance learners in their college decision-making process. While not directly related to college choice, the distance learning literature provides insights into what helps students to succeed and graduate in distance learning environments, what makes distance learners satisfied with their learning experience, and what things contribute to a distance-based program being deemed a quality education provider. These indicators were thought to provide important clues into the cognitive and behavioral intentions of
Baccalaureate degree-seeking distance learners and help to shed light on their enrollment decisions.

The Distance Learning College Choice Scale (DLCC) contains 15 items drawn from the limited literature on college choice and distance education and from studies that provide indicators of program quality, student satisfaction and student success in distance learning programs discussed in the literature review. Appendix C provides a summary of studies from the distance learning literature that identify indicators of quality in distance-based programs, as well as attributes of distance-based programs that impact student satisfaction and student success. These indicators and attributes were tested in this study to determine whether or not they are also influential in the prospective distance learner’s college decision-making process. The items are also portrayed in gray circles on the conceptual design. On a Likert scale ranging from 1 (not important) to 5 (extremely important), through the DLCC, respondents were asked to indicate how important the following items were in their college decision-making process:

- self-paced learning environment
- opportunity to create a flexible, individualized learning plan
- opportunity to interact with other class members
- opportunity to interact with the instructor
- opportunity to get prompt and helpful feedback from the instructor
- opportunity to complete my degree and maintain family responsibilities
- opportunity to complete my degree and maintain career/work responsibilities
- availability of distance-based learning opportunities
- similarities of distance-based environment to more traditional college environment
- availability of asynchronous learning opportunities
- availability of toll-free telephone number to access staff
- quality of college’s technology
- clear and understandable requirements for program completion
- organization and design of curriculum
- college's willingness to recognize prior learning experience
- convenience
- not having to travel to class
The values assigned by study participants to each individual item were summed to establish composite scores to estimate the importance of indicators other than those included in traditional models of college choice to the enrollment decisions of distance learners in this study. Outcomes will be fully detailed in the next chapter. In its first administration to students enrolled in distance-based collegiate programs at an institution in the northeastern United States (Kinser and Lansing 2005), the Cronbach’s alpha for the DLCC was determined to equal .79, representing an acceptable level of internal consistency. Items making up the DLCC and the TCC are intermingled on the proposed survey instrument (Appendix G).

**Arora’s Involvement with Education Scales**

In this present study, two scales that originated in the marketing literature were also replicated to evaluate the extent to which distance learners in the study were involved with an institution before deciding to enroll. Understanding the extent to which these students were involved in selecting a distance-based college program provides an important perspective for addressing the proposed research questions for this study and understanding why students choose distance education. Are students with high levels of involvement, for example, more likely to find traditional indicators such as program quality, accreditation, and cost, most influential in their decision-making process? In contrast, do students with low levels of involvement find characteristics such as convenience and not having to travel to class more important when they selected a college in which to enroll? Arora’s Involvement with Education - Response (IE-R) and Situational (IE-S) scales measure distance learners’ involvement in college choice by gauging students’ predisposition toward an institution, their perspective on characteristics of the
institution such as quality and reputation, and their perceptions on the how well they will fit into the college community.

On a scale of 1 (strongly disagree) to 6 (strongly agree), in the study, students were asked to indicate their level of agreement with each of the following four statements on the Involvement with Education-Situational (IE-S):

- The College in which I enrolled has a fine reputation overall.
- The benefits of education at the College in which I enrolled are long-lasting.
- It will be an honor to be a graduate of the College in which I enrolled.
- The College in which I enrolled takes personal interest in the student body.

Scores assigned to individual items are summed to reach a composite score. High scores on Arora’s IE-S are reflective of high levels of situational involvement with an institution on the part of the student. Situational involvement is impacted by students’ perceptions of attributes of the institution such as cost, academic quality, reputation, perceived benefits, and other characteristics. Alpha values of .7, .8, and .78 for the IE-S have been reported by Arora (1982) in the literature.

Similarly, on a scale of 1 (strongly disagree) to 6 (strongly agree), students were asked to indicate their level of agreement with each of the following four statements on the Involvement with Education-Response (IE-R):

- The quality of faculty was important to me in selecting a College to attend.
- The courses offered by a College were important in the choice of a school to attend.
- Class size was important to me in selecting a College to attend.
- The amount of individualized attention was important to me in selecting a College to attend.

Scores assigned to individual items are summed to reach a composite score. High scores on Arora’s IE-R are reflective of high levels of response involvement with an institution on the part
of the student. The IE-R measures the extent to which a student is involved with an institution, based in part on the indicators of situational involvement, as well as on a student’s predisposition toward an institution or exposure to the college community. Alpha values of .79, .86, and .7 have been reported for the IE-R in the literature (Arora 1982).

*Other Items on the Survey Instrument to Help Understand why Students Choose Distance Education*

The college choice models depict common patterns of relationships among variables and consistent themes in the college choice process emerging from countless studies commissioned to explain and predict the enrollment decisions of traditional college age students entering campus-based, Baccalaureate degree-granting programs. As discussed in the literature review, however, while these models are fundamental to understanding college choice, research has shown that certain dimensions of the college choice process vary by particular types or subsets of students; for example, urban students (Kern 2000), minority students (Perna 2000; Freeman 1999), graduate students (Kallio 1995), and adult students (Bers and Smith 1987; Wolfgang and Dowling 1981). Similarly, the distance education literature suggests that there may be differences among various subsets of distance learners that may be important to consider in a study of why students choose distance education.

Several questions on the survey instrument are included to identify key subsets of distance learners and to draw comparisons among these subsets to see if certain indicators and criteria in either the traditional college choice literature or the distance education literature are more or less meaningful to a certain type of distance learner.
The survey instrument includes questions about students' previous experience with distance education. Survey participants were asked to indicate whether or not they have a positive, negative, or relatively neutral attitude toward distance education before deciding to enroll in Excelsior College. Prior experience with distance education as well as a student’s disposition toward a distance-based learning environment was hypothesized to impact students' enrollment decisions. The survey instrument also sought to elicit information on other colleges and universities students were considering in their college choice process, and whether the programs were offered in a traditional, campus-based format, at-a-distance, or via some combination of both. Finally, students were asked to provide personal information including age, gender, ethnicity, annual household income, and work and family information. These data allow for comparisons across respondents based upon these characteristics (Fink 2006) and will enable the researcher to determine whether or not the respondent population is consistent with the profile of the “typical” distance learner discussed in the literature review.

Survey administration

An invitation to participate in this study was sent to Baccalaureate-degree seeking nursing students at Excelsior with a request that they complete and return an online survey (Appendix G). The invitation was sent by a designee at Excelsior via e-mail to just over 700 students. Invited participants were those students enrolled in the Baccalaureate degree nursing program at Excelsior College and enrolled in at least two or more online courses at Excelsior. Students completing their degrees exclusively via assessments and/or credit accumulation or who enrolled in fewer than two online courses at Excelsior were eliminated from the pool of potential survey participants. Including only those students enrolled in at least two online courses helps to
ensure that students participating in this study selected to enroll in Excelsior with the intention of engaging in an academic experience involving teaching and learning. To minimize selection bias, the characteristics of the survey respondents including age, gender, and income are compared to the profile of the larger population of students at Excelsior as well as the profile of the distance learner defined in the literature, later in this paper, to demonstrate that the characteristics of the sample population are similar to those of the population-at-large and the student body at-large (Fink 2006).

The survey instrument was administered through a professional survey distribution service – SurveyMonkey - specializing in creating and hosting Web-based surveys and facilitating the secure transmission and collection of survey data. The survey was made available on a secure Web site exclusively to students invited to participate. A link to the Web-based survey was sent to the prospective participants via e-mail with a request for their participation in the research study (Appendix D). Students were asked to follow the link to access the survey, respond to the survey questions assessing their college decision-making experience, and electronically submit their responses to a secure database on the Surveymonkey.com server. It was estimated that the survey would take students approximately twenty minutes to complete. Students were free to decline participation at any time. All data was submitted by students completely anonymously.

As suggested by Best and Krueger (2004), after the original invitation to participate was sent to prospective participants, two reminder messages were sent via e-mail to all students who received the original invitation to increase the response rate. The first reminder was sent two days after the original request to participate. Crawford, Couper, and Lamias (2001) found that a follow-up request sent within two days of the initial request to complete an online survey yielded...
the greatest rate of return. A second reminder was sent within ten days of the original request. Students who responded to the survey in advance of receiving the reminders were asked to disregard the second and third request. In addition, to further maximize the rate of response to the survey request, an incentive was offered to individuals who completed the online survey. After completing the survey, students who completed the survey within one month of receiving the original invitation, were asked if they would like to participate in a drawing for a gift certificate from Amazon. Students wishing to participate in the drawing were exited from the survey page and were brought to a new Web page where they were asked to complete an electronic opt-in form for the drawing only. Students who opted-in to the sweepstakes provided their name and contact information on the on-line form. This personal information was kept separate and distinct from the submission of the survey and cannot in any way be linked back to individual survey responses. The gift card for the drawing was purchased by the researcher directly through surveymonkey.com. The vendor carried out the entire process of securely collecting all drawing entries, randomly selecting a sweepstakes winner, and distributing the prize to the winner, completely independent of the researcher.

It is particularly important the data submitted via the on-line survey was appropriately cleaned before it was analyzed. Because data are submitted separately from the questions presented in the survey instrument, the researcher carefully analyzed each individual submission to ensure that each response corresponds to the appropriate survey item. Also, when completing a survey online, respondents sometimes inadvertently submit responses to individual items before completing the survey in its entirety. Often, after realizing that they have not completed the entire survey, these same respondents will return to the beginning of the online survey and complete and submit the survey a second time, this time in its entirety. Since these respondents
should only be accounted for once, the survey data was analyzed for instances of duplicative submissions by time stamp and demographic matching, and duplicative responses were removed from the analysis. Surveys returned with no responses were also deleted from the dataset. Usable surveys were returned by 240 students for a response rate of 34 percent, which is acceptable for this analysis.

Data analysis

The data analysis presented here is structured to respond to this study’s central research question:

- What factors are important to distance learners in their college choice process?
  - How are the indicators of choice for the distance learner similar to or different from the significant factors known to influence a student’s decision to enroll in a traditional campus-based collegiate program?

Data resulting from administration of the Traditional College Choice Scale (TCC) and the Distance Learning College Choice Scale (DLCC) were central to addressing these questions. Therefore, a comprehensive analysis of students’ responses to individual items on the scales as well as summated scale scores is fundamental to this research.

Descriptive statistics begin to identify the indicators distance learners in this study reported as important in their decision to select a distance-based, degree-granting program in which to enroll. Specifically, frequencies and percentages as well as measures of central tendency are reported for each of the individual items on both the TCC and the DLCC. For example, on the TCC, students were asked to report on a scale of 1 (not important) to 5
(extremely important), how important they considered the geographic location of an institution in their college decision-making process. Means, medians, and mode scores were calculated based on responses submitted by all survey participants for this item and the other 17 items on the TCC, as well as for the 17 items on the DLCC. In addition, frequencies and percentages of respondents who identify the item to be important in their college decision-making process (by assigning the item a three or higher on the five point Likert scale) are also reported. Likewise, frequencies and percentages of students who identify individual items as being relatively less important or unimportant (by assigning an item a two or one on a five point Likert scale) are included in this study.

Frequencies and percentages as well as measures of central tendency are compared across items to develop a rank order list of indicators ranging from those distance learners reported to be most important in their college choice to those considered by students in this study to be least important. Comparing students’ responses to individual items on the TCC with their responses to items on the DLCC provides an important opportunity to address the second part of the research question, “Are the indicators of choice for the distance learner similar to or different from the significant factors known to influence a student’s decision to enroll in a traditional campus-based collegiate program?” Additionally, an open-ended question is included on the survey instrument requesting students to indicate the three most influential factors in their college choice process. Responses were categorized and frequencies and percentages will be reported for each individual indicator identified by students.

To further address the first proposed research question, the composite scale scores for both the TCC and the DLCC are tallied. A Pearson product moment correlation was used, for example, to determine the relationship between the TCC and the DLCC enabling the researcher
to further determine whether or not the traditional indicators of choice are important to distance learners in this study. The composite scores of the TCC and the DLCC were divided by the number of items in each scale to ascertain an overall rating of traditional indicators and indicators of program quality, student success, and student satisfaction from the distance education literature. With a t-test, the mean score for the traditional indicators on the TCC is compared with the indicators from the distance education literature included on the DLCC to determine whether or not a significant difference exists between the two mean scores to suggest that one set of indicators is more important to distance learners than the other set of items. Also, composite scale scores for the Involvement with Education-Situational (IE-S) and the Involvement with Education – Response (IE-S) scales provide additional information on the extent to which the college decision-making processes of distance learners in the study are aligned with the traditional models. The higher the composite scores on the the IE-S and the IE-R, the more likely students were impacted by traditional indicators of choice such as characteristics and attributes of the institution such as cost, academic quality, reputation, perceived benefits, and other characteristics (as measured by the IE-S); as well as students’ predisposition toward an institution, perspective on characteristics of the institution such as quality and reputation, and students’ perceptions on their ability to join into the college community (as measured by the IE-R).

Resulting data from the TCC and the DLCC are analyzed extensively to address the second research question proposed for this study, “What factors do distance learners consider in their college choice process?” As discussed previously, a significant goal of the research design is to reduce the amalgam of individual indicators outlined in the conceptual design and expose the patterns of relationship among the resulting data to more precisely isolate the common
underlying factors behind distance learners' enrollment decisions. It is here that the researcher will most significantly add to the existing literature, by identifying the factors drawn from the traditional literature that are important to distance learners in this study as well as the factors indicative of program quality and student satisfaction and success in the distance learning literature that are influential to college choice. To accomplish this objective, a principal components analysis, which is exploratory in nature, is applied to both the TCC and DLCC to identify underlying patterns or factors behind the individual variables. According to Field (2000), with factor analysis techniques, such as the principal components analysis, by reducing a data set, such as the TCC and the DLCC, from a collection of related variables to a set of uncorrelated factors, the researcher is able to explain the maximum amount of common variance with the fewest possible explanatory concepts. The principal components analysis for this proposed was carried out using SPSS for Windows in line with the strategies and techniques recommended by Field (2000).

Finally, frequencies and percentages, measures of central tendency, and measures of variation are reported on characteristics of respondents and their college choice processes including:
These techniques enable the researcher to draw comparisons between the respondent population and the typical distance learner portrayed in the literature. Also, these analyses help the researcher to identify differences in college choice process among respondent groups sampled in this proposed study. Chi square analysis, for example, provides an opportunity to test hypotheses of equality for groups based upon categorical data such as gender, ethnicity, marital status, experience with distance learning, predisposition toward distance education, and employment status. Likewise, t-tests and ANOVAs allow the researcher to look closely at the TCC and DLCC scores based upon differences between and among groups.

1. The research design in its entirety provides an opportunity to bridge the traditional college choice literature with the distance education literature to help to build a better understanding of the college choice process of distance learners. Specifically, the design seeks to explain why students choose to enroll in distance-based degree programs and to identify the factors distance learners consider in their college choice process. It is the goal of the researcher that this proposed study will guide the development of a new model of college choice for distance learners. While data resulting from this research design are specific to a particular institution, and not wholly generalizeable to other populations of
distance learners, they can serve as the foundation for future systemic research on college choice and distance education.
CHAPTER IV
RESULTS

The demographics of the students responding to the survey are similar to that of a “typical” distance learner (Clinefelter and Aslanian 2014). The average age of respondents is 44 years old. The vast majority of respondents (86.6 percent) are female.

Nearly 95 percent of respondents are employed and nearly three-quarters of respondents (72.2 percent) report having families for which they are responsible. The majority of respondents (85.6 percent) report “White” as their race/ethnicity; 11.1 percent report their race/ethnicity as African American or Black; and 2.4 percent report their ethnicity to be American Indian or Alaskan Native. A very small proportion of the respondents report being Filipino (1.4 percent), Korean (1.4 percent), and Japanese (1 percent). Among the respondents, only 28.6 percent report that either or both of their parents hold a baccalaureate degree; 71.4 percent report that neither or their parents hold the degree they themselves are seeking at Excelsior College.

Proclivity toward distance education

Over 80 percent of students (80.1 percent) state that they have taken a course or earned a credential through distance education before enrolling in Excelsior College. Most report being either positive (58 percent) or neutral (30 percent) toward distance education. Only 12 percent report a negative attitude toward distance learning.
Survey data suggest that students are heavily engaged in their college search processes, proactively seeking out and analyzing information and recommendations before making the decision to enroll in Excelsior College. First, 84 percent of students surveyed said that they considered other colleges in addition to Excelsior in their selection pool. Just 16 percent of students only considered Excelsior when they made the decision to pursue a Baccalaureate degree. This suggests, consistent with the traditional college choice models, students first identified a set of potential institutions offering the degree they were seeking with characteristics consistent with the students’ goals and needs and expectations. As will be discussed later, these characteristics most often included convenience, cost of college, and students’ perception of the quality of an academic program.
Similar to the patterns of behavior of traditional students, as depicted in the existing models of college choice, as a student begins to seek out college and universities with the potential to help them to achieve their personal and professional goals, the overwhelming majority of this population of non-traditional students (92.3 percent), report researching institutions by reviewing college admissions materials literature and marketing materials. Further, 90.6 percent of students report researching the colleges they were considering online, suggesting direct personal engagement in the college selection process. Details on the level of involvement in the early stages of the college choice process are important because the data tell us that decisions made by students in this study were not made hastily. Rather, similar to the college choice models, which report a purposeful and deliberate process traditional students employ to identify a pool of potential institutions for consideration, narrow that pool to a finite choice set, and finally decide on a college in which to enroll, the non-traditional students in this study also report partaking in an intentional, mindful process.

Over 80 percent of respondents report that they consulted with others during their college decision-making process. Family and friends were reported to be the most sought after voices with 84.3 percent of students sharing that they discussed their college choice process with a family member or friend. Just over 80 percent of students (80.8 percent) say that they spoke with an admission counselor or other college representative in their search process. Fewer than half of respondents (48.1 percent) report speaking with an employer or prospective employer about their decision to enroll in college. This finding is somewhat surprising given that degrees in professional fields such as nursing are typically sought after, particularly by adult students, as a means of entering or advancing a career in that professional field. Students were also split on their reliance on college rankings to inform their college decision making process. Slightly over
46 percent of students say that they reviewed college rankings during their college search and selection process; 53.9 percent did not.

<table>
<thead>
<tr>
<th></th>
<th>% reporting yes</th>
</tr>
</thead>
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<tr>
<td>Did you speak with an admissions counselor or other college</td>
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<td>representative?</td>
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<tr>
<td>Did you review college admissions literature and marketing</td>
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<tr>
<td>materials?</td>
<td></td>
</tr>
<tr>
<td>Did you research the college(s) you were considering online?</td>
<td>90.6%</td>
</tr>
<tr>
<td>Did you review college rankings?</td>
<td>46.1%</td>
</tr>
<tr>
<td>Did you speak with an employer or prospective employer about</td>
<td>48.1%</td>
</tr>
<tr>
<td>your decision to enroll in college?</td>
<td></td>
</tr>
<tr>
<td>Did you discuss your college search process with a family</td>
<td>84.3%</td>
</tr>
<tr>
<td>member or friend?</td>
<td></td>
</tr>
</tbody>
</table>

Figure 6

A description of students’ institutional choice sets

This section focuses on the institutional choice sets of students. Students in the survey report considering anywhere from one institution up to a total of ten institutions in their college decision-making processes. The majority of respondents (62.5 percent) report considering between three to five institutions, which is consistent with the average range of institutions traditional students consider in the final phases of the college selection process as explained in the traditional college choice literature. This also underscores the level of personal involvement of survey participants in the college decision-making process – the majority of whom being adult, non-traditional learners. Most students in the study considered at least three colleges/universities and engaged in a process of evaluating individual institutions and narrowing the pool based upon characteristics of each institution and students’ perceptions about the institution’s ability to help them to meet their professional goals while also fulfilling their needs and expectations around college completion.
In total, 168 individual institutions appeared in the participants’ choice sets. Colleges and universities were located throughout the United States and included distance-based providers, campus-based programs, public universities, private institutions, for-profit schools, community colleges, as well as both large and small campuses. Only one institution appearing in students’ choice sets – Carnegie Mellon University Qatar – was located outside of the United States in Doha, Qatar.

Nearly two-thirds of institutions (65 percent) reported by students to be in their college choice sets were public institutions. While several institutions appeared in multiple students’ choice sets, this statistic represents the total count of public institutions identified in this study. Large, selective institutions such as Pennsylvania State University appeared among the colleges considered by students as did small, publicly supported community colleges such as SUNY Broome Community College, for example. Thirty percent of the institutions students reported considering are categorized as private, independent colleges and universities such as The Sage Colleges, Jacksonville University, Georgetown University, and a number of others. The remaining seven percent of institutions in students' choice sets are for-profit institutions including the University of Phoenix, Walden University, and Chamberlain College of Nursing.

The for-profit University of Phoenix appears most frequently in students’ choice sets. Forty two students report considering the University of Phoenix in their college choice process. The University of Phoenix offers online degree programs and campus-based programs at locations across the United States. The University’s College of Health Sciences and Nursing offers a Bachelor of Science in Nursing and a Master’s of Science in Nursing. After the University of Phoenix, other institutions recurred in students’ choice sets eight times or fewer. Chamberlain College of Nursing, Downers Grove, IL and Kaplan University were reported eight
times each to be among the colleges/universities in students’ choice sets. Like Phoenix, both Chamberlain and Kaplan are for-profit institutions offering both distance and campus-based degrees in nursing. Stony Brook University is a part of the State University of New York (SUNY). It appeared in the institutional choice sets of seven survey respondents. Both SUNY Empire State College, Saratoga Springs, NY and SUNY IT, Utica, NY appeared six times among students’ choice sets. Other institutions reported by three or more times by students to be among their choice sets are depicted in Appendix H, Table 1. Notably, institutions most frequently reported to be among the choice sets of students in this study are recognized either regionally or nationally as providers of nursing education and/or offer students flexible study options such as distance learning opportunities. Most of these colleges and universities also report willingness to recognize prior credits earned by students at previous institutions toward degree completion at their institution.

Why did students choose Excelsior College?

Survey participants were asked to identify the three most influential elements affecting their decision to enroll in a distance-based Baccalaureate-degree program. As depicted in Appendix H, Table 2, a majority of survey respondents report the cost of college (51 percent) and availability of financial aid (47 percent). Cost is predominant in the traditional college choice models, indicating that some elements of the traditional models remain relevant to the new non-traditional population of students such as distance learners. That said, new items, not depicted in the traditional models also emerged among the top three influential items in respondents’ college choice decisions. Convenience may be particularly relevant to the distance learner and does not appear within the items identified in the literature as being influential in the
decision-making process of the traditional college student. Similarly, 31 percent of respondents report that the availability of distance-based/online courses is among the three most important items of consideration in their college search. In addition, as described above, students selected Excelsior among a diverse array of higher education institutions consisting of both campus-based and distanced-based options. Of the 164 survey respondents who identified the colleges and universities in their choice sets in addition to Excelsior College, 28 percent reported considering distance-based degree programs exclusively. Nearly three quarters (72 percent) of students name at least one campus-based institution to be among their choice sets, suggesting that most students weighed the decision to choose a campus-based experience or a distance-based experience. A number of other items frequently cited among the top three items students considered important in their decision-making process were similar to the criteria used by traditional prospective students to select a college or university. Forty-four percent of respondents report program characteristics to be among the top three important items in their college choice process; 43 percent report availability of financial aid in their top three; 28 percent cite curriculum; 22 percent cite reputation of program/institution; and 7 percent cite accreditation.

*The Traditional College Choice Scale (TCC), the Distance Learning College Choice Scale (DLCC), and Arora’s IE-S and IE-R*

The two new scales used in this study - the TCC and DLCC - as well as the scales from the traditional choice literature – Arora’s IE-S, and IE-R - provide additional perspective into whether the indicators of choice for the distance learners at Excelsior College are similar to or different from the significant elements known to influence traditional students. Since these new scales were administered only once prior and for the second time in this study, it was important
to test the reliability of the TCC and DLCC. The two new scales were found to have acceptable levels of internal consistency (Traditional College Choice: alpha=.85; Distance Learning College Choice: alpha=.85) and comparable to the levels determined when the scales were administered for the first time to distance learners at another institution (TCC: alpha=.85; DLCC: alpha=.79). The analysis of the new scales underscores the complexities involved in the college choice of distance learning students. The individual items in the TCC and the DLCC scales were summed to create a composite score for each student. A strong correlation was found between the composite scores for TCC and DLCC ($r=.671$, $p<.001$) suggesting a positive relationship between traditional and non-traditional college choice indicators and emphasizing that traditional elements are considered by distance learners. Conversely, when the composite scores for the TCC scale and the DLCC scale were divided by the number of items in each subscale (16 items and 15 items respectively) for an overall rating of traditional and distance learning college choice items, traditional items are rated lower than distance learning items. The mean rating for traditional factors is 3.21, while for distance learning factors the mean is 4.18 (paired sample $t=28.78$, 188 df, $p<.001$). The significant difference between the mean scores of these two scales emphasizes that distance learning elements are considerably more important to students in this study.

The mean score assigned to each item in the TCC scale and the DLCC scale by the survey participant population also highlights the relative importance of elements from the distance learning literature to college choice. Survey respondents were asked to assign a value of “1” to an item if it was “not important” to their college choice process; “2” if it was “somewhat important”; “3” if it was “important”; “4” if it was “very important”, and “5” if it was “extremely important”. In Appendix H, Table 3, the items appear in order of mean scale score from
“extremely important” to “not important.”

Of the top 11 indicators with the highest mean scores, eight of the 11 are from the DLCC, which again calls attention to the importance of non-traditional indicators of choice to the decision making processes of students in this study. The opportunity to complete a degree and maintain family and work responsibilities was assigned the highest mean score (4.80/5) by respondents among all items in both the TCC and DLCC scales. Other items in the DLCC appearing among the top ten ranked indicators by mean included clear guidelines for what is required to complete a degree (4.73); not having to travel to class (4.66); convenience (4.60); college’s willingness to recognize and award credit for prior experience (4.53); opportunity to create a flexible learning plan to meet students’ individual needs (4.51); availability of a self-paced learning environment (4.39); and design of curriculum (4.29). The three traditional indicators from the TCC appearing among the top 11 items ranked by mean score are availability of the student’s major (4.78); college or program accreditation (4.72); and cost (4.29).

The shading in Table 3 separates items with mean scores above "3" (important) from items with mean scores below "3," roughly distinguishing the items that are seen as more important by the respondents from those which are judged less important. Twenty-one total items appear in the upper half of the table with mean scores above "3." Among those 21 items, 15 (72 percent) are from the DLCC and six (28 percent) are from the TCC. Among the ten items in the lower portion of the table with mean scores below "3," all are from the TCC. The mean scores assigned to two of the items from the TCC - size of college and availability of student activities - fell below “2” indicating students felt as though these items were of low or no importance in the college selection process. This further supports the assertion that the items
from the distance learning literature are considered to be relatively more important than the
traditional indicators of choice by the greatest proportion of survey respondents. Traditional
indicators, however, cannot be disregarded. Traditional items like college/program accreditation,
availability of major, college's academic reputation, cost, and availability of academic support
services were also relatively important in the students' college decision-making process.

In addition to the TCC and the DLCC, two additional scales – Arora’s IE-R and IE-S
were included in the survey instrument to measure students’ involvement in the college choice
process by gauging students’ predisposition toward an institution, their perspectives on
characteristics of an institution such as reputation and quality, and the extent that students feel
like they will “fit in” to the college community. An important goal for this study was to test the
reliability of these recognized college decision-making scales with this population of non-
traditional students. Cronbach’s alpha for the scales replicated in this survey show acceptable
levels of internal consistency (IE-S: alpha=.96; IE-R: alpha=.91), consistent with what has been
reported in the literature (Arora 1982).

A high composite score on Arora’s (1982) IE-S indicates high levels of situational
involvement (i.e., strong involvement with the institution evoked by characteristics of the
institution and psycho-social stimuli surrounding the student’s college choice process). On a six-
point Likert scale, survey respondents indicated to what extent they agree or disagree with four
items. The lowest possible composite score for the IE-S is 4; the highest possible composite
score is 24. Composite scores for survey respondents on the IE-S range from 4 to 24, with a
mean score of 20. These scores indicate a high level of situational involvement with Excelsior
College among respondents. Likewise, a high composite score on Arora’s (1982) IE-R indicates
high levels of response involvement. In this case, response involvement can be characterized as
the result of the complex cognitive and behavioral processes that make up the college choice process for prospective students. Again, on a six-point Likert scale, survey respondents indicated to what extent they agree or disagree with four items. The lowest possible composite score for the IE-R is 4; the highest possible composite score is 24. Composite scores for survey respondents on the IE-R range from 4 to 24, with a mean of 17. This suggests a moderate amount of involvement in the college choice process.

*Principal Components Factor Analysis: the Traditional College Choice Scale (TCC) and the Distance Learning College Choice Scale (DLCC)*

To fully address the primary research question, “What factors do distance learners consider in their college choice process,” a comprehensive factor analysis of the TCC and the DLCC was conducted to identify the underlying factors that are important to the college choice process of distance learners. The factor analysis helps to further distinguish the influential indicators of college choice for the distance learner and more specifically categorize the indicators beyond the dichotomous traditional/non-traditional labels by which they are sorted in the conceptual design developed at the start of this study.

The principal components analysis is an iterative process that, before beginning, requires certain threshold criteria that must be met. The variables at hand must be metric level or dichotomous; this is true of both the TCC and the DLCC. The sample size is greater than 50. The ratio of valid cases to variables (13:1 for the TCC; 14:1 for DLCC) exceeds the minimum 5:1 requirement. A total of 83 correlations are found to be greater than .30 in the correlation matrix in both the TCC and the DLCC, far exceeding the minimum standard. Principal component analysis also requires that the Kaiser-Meyer-Olkin Measure of Sampling Adequacy
be greater than .50 for each individual variable as well as for the set of variables. The Measure of Sampling Adequacy for the set of variables on the TCC is .823. Measures for individual variables range from .589 to .922. The Measure of Sampling Adequacy for the set of variables on the DLCC is .827 and measures for individual variables range from .716 to .898. To that end, no variables were removed from the analysis based upon the outcome of the Kaiser-Meyer-Olkin measure. Lastly, the probability associated with Barlett’s Test of Sphericity for both the TCC and the DLCC is <0.001, thereby satisfying the requirement that the probability associated with the Bartlett’s Test be less than the level of significance. In sum, the survey results satisfied the necessary criteria to proceed. The next phase of the principal component factor analysis is designed to derive a factor model.

**TCC**

Given that the factor model should explain at least half of each original variable’s variance, the communality value for each variable must be greater than .50. Based upon this analysis, three variables displayed communalities less than .50. The variable with the smallest communality was removed and the principal component analysis was computed again. Still the communality values for two variables were below .50. The process was repeated until all communalities of all remaining variables were greater than .50. On examination of the rotated component matrix, no variables were found to have complex structure. One variable, however, was identified to have only a single variable loading, and was removed. The principal component analysis was computed again.

An analysis of the latent root criterion reveals three components with eigenvalues greater than 1.0. Similarly, analysis of the cumulative proportion of variance criteria indicates that extracting three components would explain for 61.6 percent of the total variance. To that end,
three components are extracted for the factor model. Component 1 consists of six common variables: student activities; diversity of student body; recommendation of family member; recommendation of a friend; contact with college alumni; and contact with current college student. Three variables aligned with component 2; namely, academic reputation of the institution, ranking in college guidebooks; and availability of the student’s major. Finally, component 3 is made up of two variables – cost of attending the institution and availability of financial aid.

All three components are comprised of variables that string together logically. The variables grouping as Component 1 all represent the prospective student’s perception of their student experience at the college in which they decide to enroll. The students’ perceptions of their experiences as college students could come from their assessment of the types of student activities available at the institution, assessment of the student body, and what students hear about the college from family, friends, alumni, and current students. Likewise, the variables grouped as Component 2 are inherently linked as indicators of academic offerings and academic reputation of the institution. And, the variables loaded on Component 3 clearly indicate the importance of cost of college in students’ decision-making processes.
**Figure 7: Total Variance Explained**

<table>
<thead>
<tr>
<th>Component</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td><strong>% of Variance</strong></td>
<td><strong>Cumulative %</strong></td>
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<tr>
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Extraction Method: Principal Component Analysis.

**Figure 8: Total Variance Explained**
Figure 9: Scree Plot

Rotated Component Matrix

<table>
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<tr>
<th></th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>Availability of financial aid</td>
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<td>Availability of my major</td>
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<td>Availability of student activities</td>
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<td>Diversity of student body</td>
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<td>Recommendation of family member(s)</td>
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<td>College’s ranking in comparative guidebooks</td>
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<td>College recruitment materials</td>
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<td>College’s academic reputation</td>
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<td>.249</td>
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</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
- Rotation converged in five iterations

Figure 10
To ensure that the factor model explains at least half of each original variable’s variance, the communality value for each variable is examined. Three variables display communalities less than .50. The variable with the smallest communality is removed and the principal component analysis is computed again. Still the communality values for two variables remain below .50. The process is repeated until all communalities of all remaining variables exceed .50. Upon analysis of the rotated component matrix, two variables load on more than one component indicating complex structure. The two variables are removed and the principal component analysis is computed again.

An examination of the latent root criterion reveals three components with eigenvalues greater than 1.0. Further analysis of the cumulative proportion of variance criteria indicates that extracting three components explains for 62.9 percent of the total variance. To that end, three components are extracted for the factor model. Component 1 consists of four variables: opportunities to interact with other class members; opportunity to interact with instructor; opportunity to receive feedback from the instructor; and similarities of the distance-based environment to a more traditional college environment. Together, these individual indicators represent the social dimensions of learning that are important to students and are consistent with traditional learning environments. In traditional, campus-based learning environments, variables such as an opportunity to interact with fellow students and with instructors are implicit, whereas in distance education environments, these attributes can not necessarily be assumed. As a result, students are seeking out evidence to confirm that indeed, these important elements are also present in distance-based learning environments.
Component 2 is also found to be made up of four variables: availability of self-paced learning environment; opportunity to create a flexible individualized learning plan; convenience; and not having to travel to class. The relationship here is logical in that all variables represent students’ expectations for a flexible and convenient program structure that will allow them to, for example, maintain family and work responsibilities, while completing their degrees. And, component 3 is made up of two variables – college’s willingness to recognize prior learning credit toward students’ degrees; and availability of toll-free number to access college faculty and staff. Together, these variables represent an institution’s degree of responsiveness to students’ individual needs and expectations – whether it be as simple as students’ ability to contact faculty and staff or students’ ability to transfer prior learning credits to fulfill degree requirements.

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<th>Component</th>
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Figure 11: Total Variance Explained
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<th>Component</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
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Extraction Method: Principal Component Analysis.

Figure 12: Total Variance Explained

![Scree Plot]

Figure 13: Scree Plot
### Rotated Component Matrix

<table>
<thead>
<tr>
<th>Component</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of self-paced learning environment</td>
<td>-.063</td>
<td>.707</td>
<td>.417</td>
</tr>
<tr>
<td>Opportunity to create a flexible learning plan to meet your individual needs</td>
<td>.025</td>
<td>.717</td>
<td>.376</td>
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<tr>
<td>Opportunities to interact with other class members</td>
<td>.783</td>
<td>.047</td>
<td>.103</td>
</tr>
<tr>
<td>Opportunity to interact with the instructor</td>
<td>.899</td>
<td>.157</td>
<td>.050</td>
</tr>
<tr>
<td>Opportunity to get feedback from the instructor</td>
<td>.842</td>
<td>.259</td>
<td>-.007</td>
</tr>
<tr>
<td>College’s willingness to recognize my prior learning experience and award credit for that experience toward degree</td>
<td>.054</td>
<td>-.002</td>
<td>.764</td>
</tr>
<tr>
<td>Availability of toll-free number to communicate with staff/faculty</td>
<td>.289</td>
<td>.260</td>
<td>.602</td>
</tr>
<tr>
<td>Convenience</td>
<td>.254</td>
<td>.661</td>
<td>-.008</td>
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<tr>
<td>Not having to travel to class</td>
<td>.133</td>
<td>.722</td>
<td>-.143</td>
</tr>
<tr>
<td>Similarities of the distance-based environment to a more traditional college environment</td>
<td>.650</td>
<td>-.043</td>
<td>.367</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.
- Rotation converged in five iterations

Figure 14
In sum, all factors represent a logical grouping of variables to help understand the important indicators in students’ college choice decisions.

<table>
<thead>
<tr>
<th>Summary of Principal Components Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Traditional College Choice Scale (TCC)</strong></td>
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</table>

<table>
<thead>
<tr>
<th><strong>Distance Learning College Choice Scale (DLCC)</strong></th>
<th><strong>Component 1</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Opportunities to interact with other class members</td>
</tr>
<tr>
<td></td>
<td>• Opportunity to interact with instructor</td>
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<tr>
<td></td>
<td>• Opportunity to receive feedback from the instructor</td>
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<td></td>
<td>• Similarities of the distance-based environment to a more traditional college environment.</td>
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<td></td>
<td><strong>Component 2</strong></td>
</tr>
<tr>
<td></td>
<td>• Availability of self-paced learning environment</td>
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<td></td>
<td>• Opportunity to create a flexible individualized learning plan</td>
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<tr>
<td></td>
<td>• Convenience</td>
</tr>
<tr>
<td></td>
<td>• Not having to travel to class</td>
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<tr>
<td></td>
<td><strong>Component 3</strong></td>
</tr>
<tr>
<td></td>
<td>• College’s willingness to recognize prior learning credit toward students’ degrees</td>
</tr>
<tr>
<td></td>
<td>• Availability of toll-free number to access college faculty and staff</td>
</tr>
</tbody>
</table>

Figure 15
CHAPTER V
DISCUSSION

Over the past decade, new formats, modalities, and delivery mechanisms have come on the scene in American higher education and have transformed the landscape radically. According to the Department of Education’s Integrated Postsecondary Data System (U.S. Department of Education IPEDS 2014), in 2012, 26 percent of college students enrolled in at least one on-line course and 13 percent of students reported to be full-time distance learners. As seen here in this study, distance learners are largely adult students with multiple demands including work and family responsibilities that compete with the academic requirements to complete a college degree. Colleges and universities have responded to changing student needs and expectations with new programs and course delivery structures including expansion of part-time enrollment options, online courses and degree programs, prior learning assessments, micro and bridge courses, cooperative education and others that provide students with greater flexibility, individualized options for degree completion, and direct linkages to employment opportunities. At the same time, however, the accompanying literature explaining the student attitudes, behaviors, and expectations in higher education has not kept pace. The outcomes of this study suggest this to be the case in the area of college choice.

To contribute to the literature on college choice and distance education, two central research questions were posed for this study:

• What factors are important to distance learners in their college choice process?
o How are the indicators of choice for the distance learner similar to or different from the significant factors known to influence a student’s decision to enroll in a traditional campus-based collegiate program?

The outcomes of the study confirm that the traditional models of college choice do not wholly explain the college choice patterns of non-traditional students in distance-based learning environments. Nonetheless, the traditional models remain relevant to the distance learner. However, other factors from the distance education literature and emerging studies examining the behaviors of an expanding population of non-traditional students were also found to impact the college choice decisions of students in this study. To that end, an updated model of college choice to reflect the influential factors in the decision-making processes of distance learners and non-traditional students is warranted and posited here in direct response to the research questions.
A Proposed New Model of College Choice for Distance Learners

Figure 16

The new proposed model is a truncated version of the traditional three-staged college choice models of leading researchers discussed earlier in this paper including Hossler and Gallagher (1987); Hanson and Litten (1982); and Jackson (1982) is presented here. The outcomes of the study suggest that the college choice process of the distance learner more closely resembles Chapman’s (1981) model, which consists of the two major phases – search and choice. Using the new model of college choice proposed here, this chapter will respond directly to the two central research questions posed for this study.
What factors are important to distance learners in their college choice process?

In this study, a discreet set of factors is found to be influential in the deliberations in the choice process – some indicators come directly from the traditional choice literature, some indicators are new to the discussion on students’ college choice models, and some have long had a place in the traditional college decision-making but appear to have taken on new characteristics and nuances when applied to the distance learner. To that end, one of the most significant outcomes of the study is that the new model of college choice for distance learners has shifted dramatically from a provider or institution-centric model of choice to a user-centric model. Whereas the traditional models of college choice are largely made up of institutional attributes and characteristics students consider when selecting a college, the new model reflects that when distance learners are selecting a college, they are predominantly concerned with how the institution can help them to achieve their personal and professional goals. The focus shifts from questions such as “Would I prefer a small college to a large university? Does the college offer my major? Will I like being on campus?” to questions such as “Will the college accept my prior learning experience for credit? Are faculty and staff easily accessible? Is the college a good value?” Rather than spending a great deal of time comparing and contrasting colleges based upon its individual attributes, when selecting a college, distance learners are selecting colleges that will provide them with a high quality degree program that is customized to their individual needs and expectations.

The new model of college choice for distance learners is made up of six factors – three from the TCC and three from the DLCC – determined through a principal components analysis to account for students’ decisions to select Excelsior College, a non-traditional and largely distance-based institution, to pursue their Baccalaureate degrees. On the TCC, the first factor
revealed and described here is the affordability component, which consists of two indicators in
the TCC – college costs and availability of financial aid. Costs and availability of financial aid
appear dominantly in all traditional college choice models and, not surprisingly, are also found to
be highly significant to students in this study. Adult and returning students, like traditional
students and their parents, report affordability metrics to be very influential in their college
choice process. Between 2000 and 2013, the average tuition at four-year public colleges
increased by 87 percent (Schoen 2015). And nearly 70 percent of students graduating from
public and private colleges in 2015 had student loan debt, with an average of $30,100 per
borrower (Institute for College Access and Success 2016). In their analysis of an Inside Higher
Ed survey of college and university admissions directors, Calderone and Jones (2016) that
whereas a good college experience can be the gateway to career opportunities and personal and
professional goals, the wrong college experience can be financially devastating to students.
Many students accumulate debt when they accumulate credits and for those who do not
ultimately graduate, they leave college with debt and no degree. In this user-centric college
choice model, distance learners are seeking out colleges where they see value, i.e. institutions
that can respond to their individual needs at an affordable price point.

A second component revealed in the principal components analysis to be important to
students in this study that is also heavily dominant in the traditional college choice models is
quality of academic programs. Despite how higher education changes, expands, and morphs,
quality will remain key to student satisfaction and success. Further, today’s students seek
continue to make decisions on the college in which they enroll based upon their perceptions of
quality of the institution. This study does, however, also suggest that we may be witnessing an
evolving nature of how students are perceiving quality in higher education. Traditional college
students have long reported reputation of a college and a college’s rankings in comparative
guidebooks to be influential to their college selection decisions. However, the students in this
study, who are largely adult learners and enrolling in a Baccalaureate degree nursing program,
consistently report accreditation as a very important indicator in their college choice process.
College or program accreditation is ranked fourth among all indicators on the TCC and the
DLCC by average mean score as being very important in their decision to enroll in Excelsior
College. These data indicate that these students, even more than traditional age students, see
accreditation as an important symbol of the quality of the college’s academic reputation. As
online, for-profit, and other non-traditional forms of education continue to proliferate, proxies for
academic quality and integrity and what qualifies for financial aid will continue to be discussed
at the national level. The outcomes of this study suggest that students are increasingly more
aware of accreditation and are evaluating it to be an adequate and important representation of
quality to the consuming public. Further, as first generation college students that did not go
directly from high school to college with the supports of guidance counselors, parents, and
advisors, the demographics of this population of students suggest that these students may be
more vulnerable in the college choice process than traditional students.

A third component identified in the TCC as an influential factor to distance learners in this
study is prospective students’ perceptions of the student experience. Loading highly on this
component are recommendations about the college from current college students, friends,
alumni, and family; diversity of the student body; and student activities. While by mean score,
these and other traditional indicators of college choice, including size of college and geographic
location of the college, are reported to be relatively less influential in their college decision-
making process, at the macro-level, a prospective student’s perception of their experience as a
student at their selected institution is an important factor in their selection process. Apart from the traditional factors of college choice identified in this study as influential to distance learners, from the DLCC, several new factors not historically included in the traditional models have emerged that appear to be among the most influential factors in students’ college decision making process. Fifteen of the 21 top indicators of college choice from the TCC and DLCC by mean score of 3 (important) or higher are mined from the DLCC; whereas only 6 came from the TCC. Key among them are indicators including “an opportunity to complete a degree while maintaining career and work responsibilities,” “clear guidelines of what is required to meet my degree,” “not having to travel to class,” “convenience,” “opportunity to create a flexible learning plan to meet my individual needs,” and “availability of a self-paced learning environment.” Students report that the new indicators from the DLCC were among the most influential in their decisions to choose a college in which to enroll.

The principal components analysis reveals three underlying factors among the indicators in the DLCC as predominantly important to students in this study. The three factors from the DLCC are the largest drivers behind the shift from the provider/institution-centric traditional models of college choice to the new user-centric model of choice posited here. The first factor, consistent with the mean scores on indicators described above, is the availability of a flexible and convenient program structure. Given the many competing demands on these students’ life aside from academics, these students overwhelming report on the importance of flexibility and convenience in their decisions to enroll in a degree program. The flexible and convenient program structure factor is made up of four variables - availability of self-paced learning environment; opportunity to create a flexible individualized learning plan; convenience; and not having to travel to class. This factor reveals one of the significant findings of this study; i.e. the
unequivocally strong desire of distance learners to determine for themselves the pace and flow of their coursework, the time to degree, and the time and place during which they can complete assignments, assessments, and course requirements.

A second influential factor to college choice that emerges from the DLCC is the social dimensions of learning that are consistent with traditional environments. For traditional students, constructs like interacting with other class members and faculty were taken for granted as inherent in the traditional college classroom and not accounted for in the traditional models of college choice. Today, in distance-based environments, it is highly unlikely that students will interface with faculty and their peers face-to-face. With this understanding, prospective students are looking carefully at distance-based programs in their choice sets to determine the extent to which they will have opportunities to interact with other class members, opportunities to interact with instructors, and opportunities to receive feedback from instructor. Students are seeking out distance-based colleges and universities that can provide them with flexibility and convenience they desire, while also exhibiting similarities to more traditional college environments. While in the past, traditional social dimensions of learning were inherent parts of the student experience, today, technology and distance create some degree of uncertainty around the extent to which students interact with faculty and one another. This study indicates that prospective students are sensitive to this issue and seek out evidence of similarities to the traditional constructs of teaching and learning and peer interaction. To that end, it is important that the existing college choice models be updated to reflect this previously assumed and now predominantly influential factor in non-traditional students’ college decision making processes.

The third and final factor from the DLCC found to be important in students’ college choice decisions is made up of two variables – college’s willingness to recognize prior learning credit
toward students’ degrees; and availability of toll-free number to access college faculty and staff. This factor represents the important ability of a college or university, in this new era of higher education, to demonstrate their ability to be responsive to the individual needs and expectations of individual students. The definition of personal and individualized attention to students is markedly different for this emerging population of non-traditional students. As the data suggest, a high proportion of students are older than traditional age students and have gained experience through work experiences and potentially college credits at other institutions where they may have attended previously. This is also particularly pertinent to veteran students, for example. When seeking a Baccalaureate-degree institution in which to enroll, students in this study indicated that they were seeking an institution in which to enroll that would recognize their prior experience and award credit for that experience toward degree. These data suggest that colleges offering prior learning assessments, CLEP examinations, and other expedited pathways to degree would gain a competitive edge among non-traditional learners. This coincides with the data discussed previously citing the importance of affordability to distance learners in this study. Earning credit to degree for previous experience reduces tuition costs, translating to greater affordability. Prospective students in this study also underscore the importance of having opportunities to contact college faculty and administrators by phone free of charge and/or by email or instant chat to discuss their individual experiences and goals for degree completion.

How are the indicators of choice for the distance learner similar to or different from the significant factors known to influence a student’s decision to enroll in a traditional campus-based collegiate program?
Structurally, to conceptualize the college decision-making process for distance learners, a side by side comparison of the three-staged traditional college choice models and the proposed new model for distance learners will be discussed here. In comparing and contrasting the two models, it is very important to note that the models presented here are not opposites, either/or models, nor alternatives to one another. The purpose of this study is to update college choice models to explain the college decision-making process of a certain population of students – distance learners. However, given the changing nature of higher education today and shifting student demographics, elements of the new model proposed here for distance learners, may also have implications for students enrolling in traditional campus-based environments. Fewer students are attending college full-time today, for examples and many students – not just distance learners – are attending college while also managing family and work responsibilities. Factors such as “flexible and convenient program structure” and “demonstrated responsiveness to students’ individual needs and expectations” posited here in the new model of college choice for distance learners are likely to also have influence on the choice processes of students today enrolled in traditional, campus-based degree-granting programs.
Summary Depiction of the Traditional Models of College Choice

PHASE I: PREDISPOSITION
Ambiguity: Am I Going to College?
Personal Expectations
Close/Away from Home
Social Expectations
Prepare for a Career

PHASE II: SEARCH
Cost
Quality of Education
Services
Campus Environment
Publications
Admissions Staff
Other

PHASE III: CHOICE
Two to Three Similar Institutions
Campus Visit/Re-visit
Institutional Culture

Initially, students consider and learn more about several different institutions

Throughout the three phases of decision-making students narrow the colleges in their choice sets down to a select few.

A Proposed New Model of College Choice for Distance Learners
A brief glance and comparison of the two models of college choice (Figures 3 and 16) will reveal similarities as well as significant areas of variance. The traditional three-stage models describe college choice as a developmental or formative process whereas distance learners in this study describe their choice process as more as a judicious or discerning process with discreet expectations around outcomes. Hossler and Gallagher (1987) for example, draw a distinct separation between what they refer to as “the predisposition phase” and “the search phase” before students reach the last and final phase – “choice.” Similarly, Hanson and Litten (1982) draw clear distinctions between “deciding to go to college,” “investigating college,” and “application, admission, and attendance.”

Starting at the very beginning of the college choice process, Hossler and Gallagher (1987) describe the first phase of the college choice process for the traditional student as the predisposition phase. The hallmark of the predisposition phase is ambiguity. In the traditional models, in this first stage of the process, students are contemplating whether or not they even want to go to college at all. Feeding into that decision are factors such as parental encouragement, whether or not students’ peers are going to college, socioeconomic status, students’ achievements in high school, and early exposure to college and career opportunities. So vastly on the contrary, distance learners first approach the college choice process already inclined toward pursuing a degree in a particular discipline or career cluster. Distance learners in this study indicate that in the early stages of their choice process, they tend to more simultaneously decide to go to college and investigate those colleges and universities that offer their major of choice. Students report that once they established an inclination to enroll in college to either advance on the career ladder, qualify for a higher pay scale, or to fulfill professional and personal goals, the primary driver beyond the search process was what colleges
offered the degree program in which they were seeking to enroll – in this case, nursing programs. Whereas the traditional college choice models depict students entering the choice process with the question or whether or not they should go to college, distance learners begin the process with the question, “What college will help me to meet my goals?” Keep in mind that this question may also impact the decisions of prospective students in today’s campus-based degree-granting programs as well. While this study is focused on identifying factors influential to the choice processes of distance learners, additional research is needed to determine the impact of these factors on contemporary students college and to contribute to the literature on college choice.

In the search phase, which is depicted as the first formal stage in the decision-making process for distance learners and the second phase on the process for traditional students, both traditional students and distance learners alike begin to identify a set of institutions for consideration by gathering and analyzing information about the attributes and characteristics of colleges and universities. Students evaluate colleges based on attributes such as availability of the students’ majors, cost and availability of financial aid, evidence of academic quality, and characteristics of current students. Other attributes such as size of the institution and the institution’s geographic location, which have long been integral to the models of college choice for traditional students were not found to be as influential to distance learners in this study. Both traditional students and distance learners, however, rely upon common sources for identifying and analyzing potential institutions to include in their choice sets – recommendations of family and friends; rankings in college guidebooks; and by communicating with current students and alumni.

Another key significant difference between the college choice processes of the traditional college student and the distance learner takes place beginning in the search phase. For the
traditional student, both the search and choice phases are dominated by a dynamic interplay and exchange between the student and the institutions he or she is considering in which to enroll. As the search phase of the process progress and students are identifying colleges in which they may be interested in exploring, the process itself stratifies the available options for the student. GPA, SAT score, and economic eligibility - limit the number of options available to the student and narrows down the colleges in the student’s choice set. At that point in the search phase, colleges and universities are almost as active in the search process as the students. Once institutions have their potential pool of students identified by GPA, SAT and income, admissions offices recruit the students they want in their admissions pool. In the traditional models, with the conclusion of the search phase and the dawn of the choice phase, students generally narrow down the pool of colleges in their choice sets to 3-5 similar institutions from which they choose one.

In contrast to the traditional models of college choice, the search phase for distance learners as depicted in the proposed new model of choice is significantly more practical and goal-driven, and at the same time simplified and streamlined. As discussed previously, distance learners in this study are predominantly adult students seeking a degree that will help them to achieve their career aspirations. To that end, distance learners engage in the search phase in a straightforward manner, seeking out colleges and universities that offer their major, are perceived to offer quality degree programs, and are affordable. Colleges and universities distance learners report to consider in the search phase are generally similar in terms of selectivity and cost. Even in the most preliminary of lists of institutions distance learners report they exploring it is unlikely one would see both highly selective institutions with relatively high pricetags in the same mix as more affordable and accessible public and private options. Unlike the search process of traditional student where there is significant interplay between the student
and the college, in the search and choice phase of the choice process for distance learner, the pressure to deliver in a competitive environment is more on the college to demonstrate that they can meet the expectations of the prospective distance learner and help them to achieve their educational and professional goals.

Though the survey data indicate that the structure and length of term of the college choice process for this group of students is more condensed than that of the traditional student, their selection process appears to be no less deliberate. Eighty four percent of students report considering other colleges in addition to Excelsior in their selection pool. Nearly two-thirds report selecting Excelsior College from a pool of three to five colleges in their choice sets. Students’ choice sets reflect a variety of colleges and universities offering both distance-based and place-based Baccalaureate degree programs in nursing. Like traditional students, students in the study demonstrate evidence of significant personal involvement in the college choice process. Students’ high mean scores on Arora’s IE-S and IE-R also reinforce students’ high level of involvement and attachment to the college search and selection process.

For both traditional college choice students and distance learners in this survey, the choice phase appears to be the crux of the college choice process. Here students compare and contrast the set of schools identified in the search process and narrow down that set to just one institution in which to enroll. This requires serious consideration and significant effort and contemplation on the part of the individual student. According to the traditional college choice literature, the two most dominant factors students use to differentiate the college in which they enroll and other colleges in their choice set in the final phase of their college decision-making process are institutional culture and availability of financial aid. In the choice phase, colleges are still courting traditional students and students are making final decisions about the college
environment in which they perceive to be the place where they can be most successful as a student and an alumnus/a.

When distance learners enter in to the choice phase of the college decision-making process, students have narrowed the colleges in their choice sets based upon indicators of quality, including accreditation, and affordability. According to factor analysis conducted in this study, in the choice phase, similar to the traditional choice models, one significant factor influencing students and helping them to differentiate between institutions is: indicators of the student experience at the institution. The student experience of the distance learner and the perception of the experience is, however, vastly different from the traditional student. This is a critical factor to the new user-centered college choice model. Unlike in the traditional college choice models where students physically visit campuses to evaluate the student experience, in distance learning environments, colleges need to meet students where they are – perhaps at home or at work – and delivering a positive and inviting student experience to the prospective user. To that end, competitive colleges will need to be creative about advancing the student experience concept to prospective students through Web-based platforms and social media. Further colleges will be best served by upholding their commitment to quality and success for all students, which will also help to build the college’s reputation among alumni, current students, and others who advise prospective students as they scrutinize, compare, and evaluate colleges in their choice sets. Other factors found to be influential to distance learners in the choice phase and their work to differentiate colleges in their choice sets are introduced in the college choice literature for the first time here in the proposed new model of college choice. In the final stages of their college choice process, distance learners are evaluating potential colleges and universities by examining: 1) which colleges offer flexible and convenient program structures; 2) the social dimensions of
learning at the institution recognizable to the student and consistent with the traditional dimensions of college; and 3) which of the colleges in the distance learner’s choice set best demonstrates their responsiveness to the student’s individual needs and expectations. Based on these factors, consistent with the traditional models of college choice, distance learners make the final transition of the college decision-making process by selecting on one single institution in which to enroll.

Limitations of this study and opportunities for future research

This study represents an important step toward updating the college choice literature so that it reflects the new delivery modalities of higher education and the changing demographics of college and university students. The research described herein provides a platform to increase awareness among researchers of the need for an updated model of college choice. Deciding on a college in which to enroll, however, is a process whereby the answer to the question, “did I get it right,” does not come immediately after the decision is made. The best outcomes of a decision occur when all of the properties of the decision are known during the deliberation process – before the decision is made. This assumes rationality both on the state-of-mind of the decision-maker and the decision he or she makes (Peterson 2009). In the college decision-making process, it is impossible for the prospective student to know a priori what it really means to be a student or alumni of any institution in their choice set. Characteristics of the college such as its size, its cost, its ranking in comparative lists can and are frequently researched by students during the college choice process. However, the student’s actual experience at the college, how much time the student will spend interacting with other students and faculty, and real job or career advancement opportunities available to the student upon graduation from the institution
will take months or even years to realize. And no students and families approach the college decision-making process with 100 percent rationality. A student may select a college to be in their final choice set because they had positive interactions with other students without ever asking about persistence and graduation rates at the institution.

In this sea of complexity that exists around college decision-making process, it is important to note that the gap between the knowledge prospective distance learners in the search process and the actual outcome of their college choice decision is significantly more narrow than the gap between traditional college-age students’ and their families’ perceptions of college and its potential outcomes and the student’s actual experience as a college student and alumnus/a. The search process for the distance learner is very deliberate, however, it is less complex and less ambiguous than the process described in the traditional choice literature. Questions that come up in the predisposition phase in the traditional choice models are not at play in the decisions-making processes of distance learners – questions about moving away from or staying close to home, social expectations of college, and preparing often unknown career opportunities. Nonetheless, risk remains and the ultimate outcome for the prospective student – whether it be a traditional student or a non-traditional student, including distance learners, is unknown. Therefore, this study is limited in that, though the model identifies factors influential students in their college decision-making processes, whether or not the decision to enroll in a given college is “the right decision” for the student’s long-term success is not predictable in the choice phase.

Also, it is very important to consider the limitations and inherent bias of self-reported survey data. In the marketing literature, Chandon, Morwitz, and Reinartz (2005) find that when comparing purchase intentions and actual behavior, something known as “self-generated” validity comes into play, where the correlation between intention and actual behavior increases.
significantly when individuals are surveyed about their decisions and purchase intentions are being measured. Some studies in the past have, unfortunately, ignored the possibility that measurement in and of itself may actually have predictive power over decision-making. We should be cautious, therefore in this study, about overly aggrandizing the reports of survey participants on the positive attributes of the institution in which they selected to enroll as well as underestimating the attributes of institutions in their choice sets in which they did not enroll.

What is promising about this study is that the reliability and validity scores for the TCC and DLCC coupled with the adequacy of response rate on the survey allow for a new model of college choice to be posited to reflect the factors influencing the college decisions of students in this study. The conclusions, however, may not be generalizable. Additional research is needed to validate the proposed model of college choice. To that end, opportunities for future research include the following recommendations:

- As technology and trends that impact higher education delivery modalities continue to evolve, it would be valuable to repeat this study again in the future to see if the findings continue to hold up over time.

- Expand the survey invitation to reach a sample that would include students enrolled in a diverse array of majors at several different institutions offering degree programs through distance education and other non-traditional modalities. This study was administered in a school of nursing at Excelsior College. Historically, the greatest proportion of students in schools of nursing are female. Consistently, 87 percent of the respondents in this study were female. Also, 86 percent of students in this study reported to be White/Caucasian. A more diverse population of respondents would be achievable by expanding the sample
size and reaching out to students majoring in an assortment of majors in the next administration.

- A comparative study should be conducted with a control group of traditional age students and distance learners. Consideration also could be given to further disaggregating the traditional students into traditional age students enrolled in campus-based Baccalaureate students and traditional age students enrolled in community colleges, for-profit colleges, and in distance-based college environments. The outcomes of such a comparative study would further support or critique the new college choice model presented in this study. It may also suggest that the traditional models of college choice, several of which are nearing 25 years old maybe also need to be updated to reflect the changing nature of higher education for all students.

- The traditional college choice literature emphasizes the important role of institutional culture on prospective students’ decisions to select one institution in which to enroll from the other colleges in their choice sets. A qualitative research design to more carefully study the impact of institutional culture in the final stages of the college selection process for non-traditional distance learners would be a recommended next step. Such a study would also shed light on ways in which distance-based degree programs demonstrate and articulate their indicators of institutional culture to prospective students.

- Examine some of the variables in the TCC and DLCC in more detail. For example, the question about the influence on institutional quality on the student’s choice of colleges is important. Distance learners in this study reported quality to be among the more influential variables in their college decision-making processes. However, a researcher would be challenged to hypothesize a situation where a prospective student would not say
quality is important in their choice process. This challenge presents an opportunity, therefore, to examine the different ways in which students today define and evaluate quality in higher education.

- A panel of experts in college choice, non-traditional students, and distance education should carefully evaluate the model to assess its relevance to non-traditional students in distance-based environments. Their expertise would expose nuances to the college choice process for distance learners that may have been overlooked and not reflected in this model.
CHAPTER VI: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

As distance education expands and enrollments in distance-based degree-granting programs continue to grow, a more systemic understanding of the college choice process for the distance learner will help to address existing gaps in the literature and serve as a foundation for further study in this important area. Rapidly emerging research on distance education suggests that the traditional models of college choice may not wholly or adequately depict the college enrollment decisions of distance learners. Newly identified variables, not accounted for in the traditional college choice models, that have emerged in the distance education literature, could potentially also be impacting the decision-making processes of distance learners. It is hypothesized that this study will help to provide for a more systemic explanation of the college choice process for distance learners. The research questions posed for this study are:

- What factors are important to distance learners in their college choice process?
  - How are the indicators of choice for the distance learner similar to or different from the significant factors known to influence a student’s decision to enroll in a traditional campus-based collegiate program?
This study sought to determine whether or not variables included in traditional models of college choice such as academic reputation of an institution, cost, geographic location, and student activities are still influential in the college selection processes of non-traditional learners considering enrolling in a distance-based program. At the same time, a thorough review of the distance learning literature revealed several variables demonstrated to impact program quality, student satisfaction, and student success in distance education programs. These variables included, for example, the availability of flexible program options, not having to travel to class, quality of technology, accessibility of faculty and staff, and convenience. These items were included in the conceptual design for this study to determine the extent to which variables known to influence student satisfaction and success in distance-based programs also impact student choice.

Two new scales were designed to measure the impact of these collective items on prospective students’ decisions to enroll in a distance-based degree program. The first scale, known as the Traditional College Choice (TCC) scale asked students to report on the degree to which each of the traditional indicators of choice were important to their college selection process. The Distance Learning College Choice (DLCC) scale is comprised of those variables known to impact program quality, student satisfaction, and student success in distance-based degree-granting programs. Students were also asked to indicate the degree to which these items were influential in their college choice process.

Students enrolled in Baccalaureate degree programs in the School of Nursing at Excelsior College in Albany, NY were targeted for this study. Excelsior College was selected as a site for this study because of its history of providing distance-based degree options for its students, its size, and its reputation for academic quality and for providing services tailored to meet the
unique needs of distance learners. In addition, the College was an accessible option for the researcher. Leadership in the College of Nursing were willing to disseminate the survey to students enrolled in their program hoping to be able to learn more about the interests and expectations of students considering Excelsior College as an option for pursuing a Baccalaureate degree. Students enrolled in the college were asked to complete a comprehensive online survey which included the TCC, the DLCC, and respond to other key questions to provide insight into their decision to enroll in Excelsior College.

In direct response to the research question, the study revealed that a number of the variables included in the traditional college choice models remain relevant to this population of distance learners. Participants indicated that the academic reputation of the institution and affordability were extremely important in their college selection decision. However, other variables included in the traditional models of choice such as size of the college and availability of student activities in college, were reported not to be very important to distance learners in this study. Also, several of the variables extracted from the distance learning literature found to impact program quality, student satisfaction, and success were also found to be significantly influential to students when selecting a college. Students reported that variables such as the ability to complete their degree while maintaining family and work responsibilities and flexible and convenient program options, were priorities in their selection criteria. Students also reported that they sought out colleges that were willing to accept previous credits and prior learning for credit toward degree.

Collectively, the results provided evidence to suggest that the existing models of college choice should be reviewed and updated to accurately describe the college selection process of the non-traditional distance learner. To that end, a principal component analysis of the TCC and the
DLCC was conducted to determine specifically what factors are important to distance learners in their college choice process. Three factors emerged from the TCC including 1) quality of academic program; 2) Affordability; and 3) Perception of student experience. Likewise, three factors emerged from the DLCC and they are: 1) Flexible and convenient program structure; 2) Social dimensions of learning that are consistent with traditional environments; and 3) Demonstrated responsiveness to students’ individual needs and expectations. With these factors and additional details on students’ attitudes and behaviors toward their college selection processes rendered through the survey, a new model of college choice was posited to describe the college choice process of non-traditional distance learners (Figure 16).

An important outcome of this study is an opportunity to contribute to the education literature on college choice so that models of college choice reflect the new non-traditional learner who represents a growing percentage of the college-going population. In addition, the
study suggests implications for higher education leaders and policymakers as they consider student recruitment and service expectations in the future. Also, because college choice is the beginning of a student’s college career and is a precursor to persistence and degree completion, understanding the college choice process of the distance learner may provide important information for predicting and ensuring both the long-term academic success of these non-traditional students and the long-term reputation of distance-based program providers. Identifying the complexities of the distance learner can help colleges and universities to strengthen their ability to meet distance learners’ needs and expectations, and thereby strengthen persistence and retention. And, insofar as they consistently meet the needs and expectations of these non-traditional learners and maintaining high standards of program quality, distance-based degree programs remain competitive in an increasingly diversified higher education environment.

*Implications of this study for higher education institutions and policymakers*

The outcomes of this study have substantial implications on a practical level for colleges and universities offering academic programs at-a-distance. Further, as the structure of traditional institutions continues to change and the expectations of students as consumers of higher education expand, the findings are more broadly applicable. Several of the data points suggest that traditional higher education service models and communication strategies may need to be re-examined and updated for institutions to continue to be competitive with recruitment and retention today and in the future.

Consistent with the traditional models of college choice, this study indicates that academic quality continues to be a very important factor in the college selection process for non-
traditional learners. That said, however, most distance learners will not physically visit a campus before enrolling in a program of study and may not actually meet with a faculty member. Therefore, symbols and artifacts upon which non-traditional students use to evaluate quality are, in many cases, markedly different from those traditionally revered as indicators of quality in campus-based institutions, as are the means by which these indicators are communicated to students. Also, many institutions like Excelsior College have academic reputations that have historically been recognized regionally. Distance learning provides the opportunity for institutions to eliminate hurdles associated with geographic boundaries and recruit students from across the nation and the world.

In light of the importance of academic reputation and accreditation to non-traditional students, as seen in this study, to successfully recruit prospective students, it is important for colleges and universities with distance-based programs to have a strong expansive marketing and communications strategy that effectively promotes institutional quality indicators that target student populations nationally and internationally. Colleges and universities would be well-suited to seek out opportunities to “advertise” the accreditation status of both their institution and their programs on the Web, through social media, and in print. Likewise, promoting the direct relationship between accreditation status and academic quality at an institution could be advantageous, as well as helping students to better understand why accreditation is important and the factors impacting an institution’s accreditation status.

Over 90 percent of students surveyed reported reviewing college admissions literature and researching the colleges they were considering online, highlighting the enormous impact of marketing and communications on distance learners in this study. Nearly half of students surveyed also reported reviewing college rankings in guidebooks, suggesting that investing more
resources in marketing academic reputation and accountability at a national level may be advantageous for distance learning providers. Also, a significant proportion of students in this study reported career advancement opportunity as an important reason for enrolling in a Baccalaureate degree-granting program. Nearly half of survey respondents reported speaking with an employer or a prospective employer about their intent to pursue a degree. This suggests that communicating indicators of quality to prospective employers such as notable accomplishments of graduates and a college’s willingness to partner with employers to help grow the future workforce could prove to be effective mechanisms for communicating quality to prospective students. Within the last several years, Excelsior College was named by the USA Today College Contributor network as one of the top ten colleges in the nation with the highest paid liberal arts graduates, along with Harvard University, Yale University, Georgetown University, and others (Stockwell 2014). Here, Excelsior effectively used salary of Excelsior graduates as a proxy for institutional quality and successfully promoted salary to the national news media. These innovative efforts resulted in Excelsior being named on a short list among the premier institutions in America, thereby widely conveying their reputation for quality to prospective students, alumni, and employers alike.

In addition to academic reputation, consistent with the proposed new model of college choice for non-traditional distance learners, affordability continues to be an important factor for students in their college decision-making process. Institutions that can demonstrate that they are a high value for students will have a dominant presence in the ever expanding higher education marketplace. The key to successful marketing and communications will be and institution’s ability to play to the new user-centric model of college choice by communicating quality and value in ways that resonate with prospective students. Non-traditional students in this study
report that accreditation is a fitting proxy for quality so communicating the endorsement of program and institutional accreditors will be important play an important role here as well. Likewise, another important factor for distance learners in the new model is similarities of distance-based institution to the traditional campus environment. To that end, if a campus offers both campus-based and distance-based degree programs, they may be well-served to market traditional symbols of institutional quality such as statues of iconic campus leaders and images of library buildings and commencement ceremonies to prospective distance learners. More importantly, however, long-term success will depend upon a college’s success with adopting a business model in which cost savings realized from not having to bear the expenditures of a physical plant, for example, are reinvested into recruiting top-notch faculty, providing high-quality student services, and in state-of-the-art technologies. Policymakers should take note as well. Survey respondents also reported on the importance of flexible and convenient program options to complete their degrees. Federal and state tuition aid, such as New York State’s Tuition Assistance Program and federal Pell grants, are anchored around the traditional semester-long course structure, offering little flexibility for students interested in completing degree requirements through prior learning assessments, micro-courses, cooperative education experiences, and other new innovative course designs. For federal and state programs to continue to play an important role in keeping college affordable for students, it will be important that they be reviewed and updated to meet the needs and expectations of today’s college students.

Lastly, substantively strengthening and conveying strong student service models could be the lynchpin to competitiveness in the evolving higher education environment. Non-traditional learners in this study reported that they were seeking out colleges and universities that would
allow them to complete their degrees while maintaining work and family responsibilities. This research suggests that institutions that can offer these students courses at suitable times of the day/week, the opportunity to work toward course and degree requirements at their own pace, and other convenient options like, not having to travel to class, will have a competitive edge in the marketplace. Students were also looking for colleges that would allow them to apply prior education and experience toward their degree, making institutions with seamless transfer policies and prior learning assessment practices far more appealing over institutions with more rigid and less flexible rules for awarding credit toward degree.

In addition to the new trends in student services that have emerged as important to the non-traditional learner, the social dimension of learning consistent with the traditional college environment, is also an important factor in students’ college choice processes that cannot be overlooked. Students in this study reported that opportunities to interact with faculty and other class members, as well as similarities of the distance-based environment to a more traditional college environment were influential in their decision to enroll in Excelsior College. Developing a reputation as an institution with faculty and staff who are accessible and student-centered is important for cultivating relationships with prospective students. Among the biggest challenges facing distance-based institutions today is how to convey a sense of institutional culture to students and prospective students that help them to feel part of a college community and set the stage for students to grow into role of proud alumni upon graduation. Without a physical campus that brings students, faculty, administrators, and alumni together and student activities and rituals that help create community and long-term allegiance to an institution, distance learning providers are challenged to provide creative solutions for cultural transference. Those institutions that have advanced effective strategies to convey culture to prospective students, by
using the Web and social media, for example, to convey community and commitment to the traditional values of higher education, have the added advantage in a growing market.

While this study was focused on the experiences of students enrolled in a distance-based learning environment, the results suggest that the implications apply to traditional campus-based institutions recruiting future students. Only one-third of students in this study reported looking specifically for distance-based learning options, indicating that traditional campus-based programs were also in the mix. To be competitive, however, traditional programs must be able to demonstrate that they can provide flexible and convenient learning options the prospective distance learners identified as very important in their selection process. Trending now are students who at any age, whether considered traditional and non-traditional, no longer wish to be constrained by antiquated time and learning constraints. Increasingly, even high school students are looking for three year degree programs in college and opportunities for transferring Advanced Placement (AP) and early college high school credits to college. In the future, only a finite number of colleges and universities will be able to retain the original tenets of service associated with the traditional higher education experience. For most, the pressure is on to recognize and be responsive to students’ evolving needs and expectations. Student demand for a new and improved service model discussed in this study are critical issues for all segments of higher education. New strategies and modalities created originally and advanced by non-traditional and distance-based higher education providers may be significant contributing factors toward the blueprint for the college of the future.

This study on the factors influencing the enrollment decisions of distance learners is significant in several ways. First, it accomplished one of the main objectives for the researcher in that contributes to the college choice literature by introducing a new model of choice for
consideration in a body of research that up until now has largely exclusively sought to explain the college decisions of traditional students entering college after graduating from high school. Second, while exhibiting similarities to the existing models of college choice, the proposed new model of choice demonstrates a significant shift from a supplier of college-centric model to customer-centric model where colleges are working to demonstrate that they “have what it takes” to meet the needs and expectations of the distance learner for quality, affordability, flexibility, and convenience. Whereas the traditional models suggest a greater interplay and exchange between prospective students and institutions, distance learners in this study enter the college choice process with a discreet set of expectations they have for the college in they plan to enroll. Lastly, this study opens the door for a tremendously exciting area of future research. There are many potential opportunities for further exploring the new factors revealed in this study as important for distance learners as well as opportunities for re-examining and potentially updating the traditional models of college choice to better reflect both the student and university of today. Similar to the outcomes seen in this study, the college choice literature is a research body with a long history. At the same time, it is a rich and dynamic literature to continue to study into the future as demand shifts; services grow; definitions of factors such as quality, flexibility, and cost change; as modalities of higher education diversify; and students evolve. The future of research in college choice and in distance education is ripe with opportunity.


A FIRST LOOK AT DISTANCE LEARNERS AND COLLEGE CHOICE: DRAWING FROM THE TRADITIONAL COLLEGE CHOICE LITERATURE AND INDICATORS OF PROGRAM QUALITY, STUDENT SATISFACTION, AND STUDENT SUCCESS IN THE DISTANCE LEARNING LITERATURE

Setting the stage for this study and for more systemic research on the college choice process for distance learners, a quantitative study (briefly described in the Introduction) was conducted to begin to identify the influential indicators of a student's decision to enroll in a distance based higher education program (Kinser and Lansing, 2005). A Web based survey was administered to students enrolled in exclusively distance-based Baccalaureate degree programs at a college (hereafter referred to as “The College”) in the northeastern United States that offers undergraduate degrees to working adults through regional centers, distance learning, corporate partnerships and special programs.

The survey instrument consisted of two primary sets of items. First, the Traditional College Choice Scale (TCC) was developed to assess the influence that traditional college choice factors, described previously in the literature review, had on students selecting The College. The TCC was made up items most frequently identified by researchers as influencing a student’s decision to enroll in a campus-based college or university. A second set of items, Distance Learning College Choice Scale (DLCC), was drawn from the distance learning literature and included items purported to impact program quality, student satisfaction, and student success in distance-based programs. Participants were asked to indicate how important each of these items on the TCC and the DLCC was in their college decision-making process. Also, Arora’s (1982) IE-S and IE-R were used to measure students’ level of situational and response involvement with
an institution. Additionally, students were asked to provide personal information and general information about their college search process.

Findings from the study suggested that the reasons students select distance learning educational opportunities are inadequately described by traditional college choice measures. Students tended to discount traditional campus-based factors such as characteristics of the student body and availability of student activities and support services, while emphasizing convenience and distinctive program-related components designed for the distance learner (e.g., asynchronous learning opportunities, recognition of prior experience, organization and design of the curriculum). The traditional factors were not irrelevant, however. Students still valued the academic reputation of the institution, and were looking for an institution that offered a major in their field of study. Like most college students today, they were concerned about tuition and fees, yet perhaps because they are older and working, the availability of financial aid was less important. This preliminary study suggests that additional research is needed in this area. Based upon the study, the traditional models of college choice serve as a strong starting point for understanding the college decision-making process of the distance learner. However, the traditional models of choice alone are inadequate to understanding the behaviors of students choosing distance-based program options. These findings are fundamental to the conceptual model for this current study.
APPENDIX B
AT-A-GLANCE MAP TO THE TRADITIONAL COLLEGE CHOICE LITERATURE

Summary of studies from the traditional college choice literature that provide guidance for understanding what influences students’ decisions to enroll in distance-based Baccalaureate degree programs.

<table>
<thead>
<tr>
<th>Researcher(s)</th>
<th>Summary of Research</th>
<th>Why the Research is Important to this Study</th>
</tr>
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</table>
| Jackson (1982) | Proposes a combined (accounts for both economic and sociological factors) model of college choice that is largely student-centered | - Jackson’s three consecutive stages of college choice (Preference, Exclusion, Evaluation) will be used, in conjunction with the other models of choice, as a “blueprint” for understanding the choice process of the distance learner.  
- The elements Jackson contends to be influential to the traditional student when choosing a college will be tested to see whether or not they are also important to prospective distance learners.  
- student’s family background  
- student’s social context  
- student’s academic achievement  
- student’s aspirations  
- resources available to student  
- student’s rating scheme for colleges considered based on:  
  - location  
  - cost  
  - academic quality  
  - job prospects for graduates |
| Chapman (1981) | Proposes a combined model of college choice focusing on how the interplay between student characteristics and external influences result in the student’s general expectation of college life | - Chapman’s model consists of the pre-search stage, the search stage, applications, choice, and enrollment; the model will be used, in conjunction with the other models of choice, as a “blueprint” for understanding the choice process of the distance learner.  
- The elements Chapman contends to be influential to the traditional student when choosing a college that will be “tested” in this study to determine whether or not they are also important to the distance learner.  
- Student characteristics  
  - socioeconomic status  
  - aptitude  
  - educational aspirations  
  - academic performance  
- External influences  
  - Significant persons (friends, parents, high school personnel)  
  - College characteristics (cost, financial aid, location, program availability) |
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<th>Researcher(s)</th>
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<tr>
<td><strong>Hanson &amp; Litten (1982)</strong></td>
<td>Propose a combined model of college choice that portrays college choice as a continuing process</td>
<td>Elements identified as important to the traditional prospective student when choosing a college that will be “tested” in this study to determine whether or not they are also important to the distance learner.</td>
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<td>○ College efforts to communicate with students (written information, campus visit, recruitment efforts)</td>
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<td>○ Hanson &amp; Litten’s comprehensive model proposes three overarching stages (Decision to partake in post-secondary education, investigation of institutions and development of choice sets, process of applying and enrolling) consisting of five “steps” (having college aspirations, starting the search process, gathering information, sending applications, enrolling); the model will be used, in conjunction with the other models of choice, as a “blueprint” for understanding the choice process of the distance learner.</td>
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<td></td>
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<td>○ The elements Chapman contends to be influential to the traditional student when choosing a college will be tested to see whether or not they are also important to prospective distance learners.</td>
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<tr>
<td><strong>Hossler &amp; Gallagher (1987)</strong></td>
<td>Propose a simpler combined model of college choice that isolates the process and allows for basic conceptualization</td>
<td>○ Return on investment of choosing to pursue higher education vs. other alternatives (e.g., work, military, etc.)</td>
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<td></td>
<td></td>
<td>○ Academic and social attributes of institutions</td>
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<td></td>
<td></td>
<td>○ Unique characteristics of institutions</td>
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<tr>
<td></td>
<td></td>
<td>○ Students’ social conditions</td>
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<td>○ Hossler &amp; Gallagher propose a simplified model of college choice consisting of three phases (Predisposition, Search, Choice); the model will be used, in conjunction with the other models of choice, as a “blueprint” for understanding the choice process of the distance learner.</td>
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| | | ○ The elements Hossler &
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<th>Researcher(s)</th>
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| Erdmann (1983) | Surveyed over 1,000 high school students and over 1,000 guidance counselors to establish an empirical basis for understanding what affects college choice | Gallagher contend to be influential to the traditional student when choosing a college will be tested to see whether or not they are also important to prospective distance learners  
• Similar to this proposed study, Erdmann uses the traditional models as a foundation for an empirical analysis of college choice. Erdmann used this strategy to provide admissions staff with helpful information on what makes students choose a particular institution as they develop recruitment plans. In this proposed study, a strategy similar to that of Erdmann will be used to help understand what makes students choose a distance-based degree program.  
• Erdmann developed a survey instrument for the research; strategies for developing and administering survey and for ensuring the reliability of the instrument will be used to guide this study.  
• The elements found by Erdmann through a survey to be influential to the traditional student when choosing a college will be tested to see whether or not they are also important to prospective distance learners.  
• availability of specific academic programs  
• reputation or prestige of the college or university  
• location of institution  
• size of institution  
• recommendation of parent  
• recommendation of counselor  
• cost  
• suitability: based upon the characteristics of the student, how well will he/she “fit” within the college community |
| Sanders (1990) | Surveyed 800 high school students, 400 sets of parents, and over 340 guidance counselors to | • Like the Erdmann study and this proposed study, Sanders uses the traditional models as a foundation for an empirical analysis of college choice.  
• employment opportunities after graduation  
• variety of courses  
• costs of attendance  
• faculty teaching reputation |
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<th>Researcher(s)</th>
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| Cain and McClintock (1984)    | Presented a thorough review of the traditional college choice literature and identified elements/characteristics influential in students’ college choice process | • Elements/characteristics identified by Cain and McClintock through an in-depth literature review will be tested to see whether or not they are also important to prospective distance learners.  
• ideology of the institution (e.g. political or religious orientation)  
• the demographic profile of the institution’s student population;  
• social, extra-curricular and athletic opportunities offered at the institution  
• student services (e.g. study space and computer time, counseling, library services)  
• student’s prospect of success |
|                               | provide information on what elements and characteristics each of these three groups use to evaluate and differentiate among colleges and universities | • Sanders developed a survey instrument for the research; strategies for developing and administering survey and for ensuring the reliability of the instrument will be used to guide this study.  
• The elements found by Sanders to be important to students when evaluating colleges will be tested to see whether or not they are also important to prospective distance learners.  
• specific academic programs  
• career counseling  
• college faculty  
• housing opportunities |
APPENDIX C

AT-A-GLANCE MAP OF THE REVIEW OF THE DISTANCE LEARNING LITERATURE

Summary of studies from the distance learning literature that identify indicators of quality in distance-based programs, as well as attributes of distance-based programs that impact student satisfaction and student success. These indicators and attributes will be tested in this study to determine whether or not they are also influential in the prospective distance learner’s college decision-making process.

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<tr>
<th>Researcher(s)</th>
<th>Summary of Research</th>
<th>Why the Research is Important to this Study</th>
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<tr>
<td>Roblyer (1999)</td>
<td>Exploratory study; 27 students in a virtual high school and 33 community college students (in traditional and distance-based classes) were surveyed to identify attitudes or characteristics that affect students’ decisions to choose a distance-based or traditional learning format</td>
<td>Roblyer’s study is among the few studies that examines students’ motives for taking courses at a distance, via the Web. • Roblyer’s study is among the few studies that examines students’ motives for taking courses at a distance, via the Web. • Attitudes and characteristics identified by Roblyer as influential to distance learners’ choice will be tested to determine whether or not they are important to distance-based Baccalaureate degree seeking students in this study. • Logistical ○ convenience ○ distance and driving time ○ access to computer • Control ○ Choosing when to complete assignments ○ Flexibility • Personal interaction with teacher and other students • Attitudes and expectations of technology and distance learning</td>
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<tr>
<td>Shea, et.al 2002</td>
<td>Survey of 935 online students. Investigated aspects of the</td>
<td>Seven principals correlate significantly with student satisfaction and perceived learning. • Prompt and quality feedback from instructor</td>
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<tr>
<td>Researcher(s)</td>
<td>Summary of Research</td>
<td>Why the Research is Important to this Study</td>
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<td>Chickering and Gamson, (1989) 7 Principals of Good Practice in Undergraduate Education with online students</td>
<td>Indicators of quality, student satisfaction, and student success will be “tested” in this study to determine whether or not they are also important in distance learners’ college choice process.</td>
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<td>Fisher &amp; Baird (2005)</td>
<td>Over 100 students were observed participating in a 12 week online course. E-mail exchanges, blogs, IM records, postings, synchronous communications and student portfolios were analyzed.</td>
<td>Organizational and structural characteristics of courses identified by Fisher &amp; Baird as influential to program quality will be tested to determine whether or not they are important in the college choice process of distance learners. Opportunity to interact with other students Availability of a flexible, individualized, and self-paced learning experience Opportunities to maintain family and work responsibilities Quality of technology</td>
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<tr>
<td>Swartz &amp; Biggs (1999)</td>
<td>Qualitative study of eight students at four distinct sites taking a synchronous distance-based course with a single instructor via live video. Observations and interviews were conducted.</td>
<td>Indicators of student satisfaction with the distance-based format identified by Swartz &amp; Biggs will be tested to determine whether or not they are important in the college choice process of distance learners. Quality of technology (symbolic of institution’s commitment to distance education) Degree to which the distance learning experience engages students in group work (student to student interaction)</td>
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<td>Tricker et al. (2001)</td>
<td>Attempts to develop a tool to determine whether or not a distance-based program is meeting the needs of its students. Resulting tool sent to over 468 students in two distance learning programs.</td>
<td>Indicators of student satisfaction with distance-based programs identified by Tricker et al. will be tested to determine whether or not they are important in the college choice process of distance learners. Tricker et al. developed a survey instrument with 36 questions targeted to distance learners; aspects of Tricker et al.’s methodology are used to guide this proposed study. Supporting the tenets of this proposed study, Tricker et al. Quality of program content - extremely important Opportunities for flexible study – appealing to students Some reported enrolling in the program because content meets personal and professional goals Support services (tutorial support) – little or no significance to distance learners</td>
</tr>
<tr>
<td>Researcher(s)</td>
<td>Summary of Research</td>
<td>Why the Research is Important to this Study</td>
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<td><strong>Indicators of quality, student satisfaction, and student success will be “tested” in this study to determine whether or not they are also important in distance learners’ college choice process.</strong></td>
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</tr>
</tbody>
</table>

| **Canning (2002)** | Conducted in-depth interviews of students working full-time and enrolled in a distance-based vocational education program. | • Indicators of student satisfaction with distance-based programs and student success identified by Canning will be tested to determine whether or not they are important in the college choice process of distance learners. |
| **Potter (1998)** | Surveyed 224 students enrolled in three Canadian institutions and conducted follow-up interviews with 15 students to develop a model of support services for distance learners. | • Indicators of program quality and student success identified by Potter will be tested to determine whether or not they are important in the college choice process of distance learners. • Potter developed a survey instrument with 24 items targeted to distance learners; aspects of Potter’s methodology are used to guide this proposed study. • Similar to this proposed study, which ultimately seeks to develop a proposed model of the college decision-making process of distance learners, Potter sought out to develop a model – of support services for distance learners. |
| **Harroff and Valentine (2006)** | Survey of educators’ perceptions of quality of online courses | • Indicators of program quality identified by Harroff and Valentine will be tested to determine whether or not they are important in the college choice process of distance learners. |

- Written brochures and employer influence – items ranked lowest by students
- Availability of a tutor or academic support services – most important resource for distance learners in Canning’s study
- Student support services (academic, financial aid, learning skills, etc.) – important for adults studying at-a-distance
- Flexibility
- Convenience
- Information and advice on distance learning opportunities
- Orientation to technology and distance learning formats
- Communication with course instructor
- Course material and academic services designed specifically for distance learners
- Availability of courses/programs
- Library services
- Toll-free number to connect to university
- Quality of instruction and faculty
- Reputation of institution
- Advisement and student support
<table>
<thead>
<tr>
<th>Researcher(s)</th>
<th>Summary of Research</th>
<th>Why the Research is Important to this Study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Indicators of quality, student satisfaction, and student success will be “tested” in this study to determine whether or not they are also important in distance learners’ college choice process.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The exploratory factor analysis used by Harroff and Valentine will provide practical guidance for this proposed study.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX D

DRAFT E-MAIL INVITATION TO PARTICIPATE IN STUDY

Dear Student:

As distance-based education programs increase in popularity, it is becoming increasingly important to understand the factors that affect a student's decision to enroll in a distance based learning environment. You have been identified by [NAME OF COLLEGE] as being enrolled in a distance-based program. As a distance learner, your assistance would be appreciated in an effort to better understand your motivations to study at-a-distance and hopefully, to inform future policy and initiatives related to distance education.

At the end of this message is a link to a survey designed to identify the factors that influenced your decision to pursue distance-based education at [NAME OF COLLEGE]. Your participation would be very much appreciated. Please read each question carefully and submit your responses by clicking the "submit" button at the bottom of the Web form. All information you provide will be kept confidential. Completing the survey should take approximately 20 minutes. Your participation is completely voluntary. You may discontinue your participation at any time. You may also choose not to answer any question(s) you do not wish to for any reason. If you do not wish to participate, please do not complete and submit the survey. Submitting the survey indicates your consent to participate.

Your individual responses will be anonymous. We do not anticipate any risks in your participation. While we cannot promise you any direct benefit from your participation in this study, we hope to provide more information on the factors that affect a student's decision to enroll in a distance based learning environment. If you have questions or need more information regarding the survey, please contact Jill Lansing, Graduate Student, University at Albany at jlansing@albany.edu. If you have any questions regarding your rights as a participant, contact the Compliance Office, Office for Sponsored Programs, University at Albany at (518) 437-4569.

Thank you very much!

Please click on the link below to complete the survey.
[INSERT LINK HERE]

If your browser does not open automatically from this link please copy and paste the link into your browser's navigation bar and press your Enter key to access the survey.

Sincerely,

Jill Lansing
Graduate Student, University at Albany, Albany, NY
APPENDIX E

TRADITIONAL COLLEGE CHOICE SCALE

TRADITIONAL COLLEGE CHOICE SCALE (TCC)

Items identified in the college choice literature as influencing a student’s decision to enroll in a campus-based college or university (items are listed alphabetically)

<table>
<thead>
<tr>
<th></th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>academic reputation</td>
</tr>
<tr>
<td>2</td>
<td>accreditation</td>
</tr>
<tr>
<td>3</td>
<td>availability of financial aid</td>
</tr>
<tr>
<td>4</td>
<td>college’s ranking in comparative guidebooks</td>
</tr>
<tr>
<td>5</td>
<td>contact with college alumni before enrolling</td>
</tr>
<tr>
<td>6</td>
<td>contact with current college student before enrolling</td>
</tr>
<tr>
<td>7</td>
<td>cost (tuition and fees)</td>
</tr>
<tr>
<td>8</td>
<td>diversity of student body</td>
</tr>
<tr>
<td>9</td>
<td>geographic location</td>
</tr>
<tr>
<td>10</td>
<td>major</td>
</tr>
<tr>
<td>11</td>
<td>recommendation of family member</td>
</tr>
<tr>
<td>12</td>
<td>recommendation of friend</td>
</tr>
<tr>
<td>13</td>
<td>recruitment materials</td>
</tr>
<tr>
<td>14</td>
<td>size of institution</td>
</tr>
<tr>
<td>15</td>
<td>student activities</td>
</tr>
<tr>
<td>16</td>
<td>academic support services</td>
</tr>
</tbody>
</table>
APPENDIX F

DISTANCE LEARNING COLLEGE CHOICE SCALE

DISTANCE LEARNING COLLEGE CHOICE SCALE (DLCC)

Items identified in the distance learning literature as important to program quality, student satisfaction, and student success (items are listed alphabetically)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>availability of asynchronous learning opportunities</td>
</tr>
<tr>
<td>2.</td>
<td>availability of toll-free telephone number to access staff</td>
</tr>
<tr>
<td>3.</td>
<td>clear and understandable requirements for program completion</td>
</tr>
<tr>
<td>4.</td>
<td>college's willingness to recognize prior learning experience</td>
</tr>
<tr>
<td>5.</td>
<td>convenience</td>
</tr>
<tr>
<td>6.</td>
<td>not having to travel to class</td>
</tr>
<tr>
<td>7.</td>
<td>opportunity to complete my degree and maintain career/work responsibilities</td>
</tr>
<tr>
<td>8.</td>
<td>opportunity to create a flexible, individualized learning plan</td>
</tr>
<tr>
<td>9.</td>
<td>opportunity to interact with the instructor</td>
</tr>
<tr>
<td>10.</td>
<td>opportunity to get feedback from the instructor</td>
</tr>
<tr>
<td>11.</td>
<td>opportunity to interact with other class members</td>
</tr>
<tr>
<td>12.</td>
<td>design of curriculum</td>
</tr>
<tr>
<td>13.</td>
<td>quality of college’s technology</td>
</tr>
<tr>
<td>14.</td>
<td>self-paced learning environment</td>
</tr>
<tr>
<td>15.</td>
<td>similarities of distance-based environment to more traditional college environment</td>
</tr>
</tbody>
</table>
Have you previously taken a course or completed a program offered primarily through distance education? ___ Yes ___ No

In general, before enrolling in a distance-based Baccalaureate degree program, would you say you had a more positive or negative attitude toward distance education?

_____ Positive _____ Negative _____ Neither positive not negative

When you were considering degree-granting programs in which to enroll, how many colleges or universities did you consider (including the college in which you are now enrolled)? ____

Please identify, by name, the colleges and universities you considered during your college search process. Also, please indicate whether you considered a distance-based program, a campus-based program, or both at each institution you identify.

<table>
<thead>
<tr>
<th>Name of Institution(s)</th>
<th>City, State</th>
<th>Please check if you considered a campus-based program at the institution.</th>
<th>Please check if you considered a distance-based program at the institution.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
On a scale from “not important” through “extremely important,” please indicate how important the following factors were in your college decision-making process.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Not important</th>
<th>Somewhat important</th>
<th>Important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of college</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Geographic location of the college</td>
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<tr>
<td>Cost (tuition and fees)</td>
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<tr>
<td>Availability of a self-paced learning environment</td>
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<tr>
<td>Opportunity to create a flexible, individualized learning plan</td>
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<tr>
<td>Availability of asynchronous learning opportunities (i.e., listservs, e-mail communications, on-line lecture notes, videos, etc.)</td>
<td></td>
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<tr>
<td>Availability of financial aid</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>College’s academic reputation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of my major</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>College or program accreditation</td>
<td></td>
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</tr>
<tr>
<td>Clear and easy-to-understand guidelines on what is required to complete a degree</td>
<td></td>
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<tr>
<td>Organization and design of curriculum</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Opportunities to interact with other class members</td>
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<tr>
<td>Opportunity to interact with the instructor</td>
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<tr>
<td>Opportunity to get feedback from the instructor</td>
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<tr>
<td>Availability of academic support services</td>
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<tr>
<td>Availability of student activities</td>
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<tr>
<td>Diversity of the student body</td>
<td></td>
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<tr>
<td>The College’s willingness to recognize my prior experience and award credit for that experience toward my degree.</td>
<td></td>
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<tr>
<td>Availability of a toll-free phone number to access College faculty and staff</td>
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<td></td>
</tr>
<tr>
<td>Quality of the College’s technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>An opportunity to complete my degree and maintain career/work responsibilities</td>
<td>Not important</td>
<td>Somewhat important</td>
<td>Important</td>
<td>Very important</td>
<td>Extremely important</td>
</tr>
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<td>-----------</td>
<td>---------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Recommendation of significant family member(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommendations of friend(s)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Contact with College alumni</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact with current College students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College’s ranking in comparative guidebooks (e.g., Peterson’s Guide)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College recruitment materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convenience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not having to travel to class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Similarities of the distance-based environment to a more traditional College environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[Note: Items in shaded boxes make up the Distance Learning College Choice (DLCC) scale and items in un-shaded boxes make up the Traditional Choice Scale (TCC); shading will be removed prior to distribution.]

Please list, in order of importance, the three factors most influential in your decision to enroll in a distance-based Baccalaureate degree program (with 1 being the most important)?

1. ______________________________________________________________

2. ______________________________________________________________

3. ______________________________________________________________

Please indicate the extent to which you agree or disagree that the following statements reflect your college search process.

<table>
<thead>
<tr>
<th>The College in which I enrolled has a fine reputation overall.</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Tend to disagree</th>
<th>Tend to agree</th>
<th>Agree strongly</th>
</tr>
</thead>
</table>

144
The benefits of education at the College in which I enrolled are long-lasting.

It will be an honor to be a graduate of the College in which I enrolled.

The College in which I enrolled takes personal interest in the student body.

The quality of faculty was important to me in selecting a College to attend.

The courses offered by a College were important in the choice of a school to attend.

Class size was important to me in selecting a College to attend.

The amount of individualized attention was important to me in selecting a College to attend.

[Arora’s Involvement with Education scales]

**In what city and state do you reside?** ______________________________

**How close to your home is the nearest campus-based program offering the program of study in which you considered enrolling?**

_______ miles  ○ I don’t know

**What is your gender?**  _____ male  _____ female

**What is your race/ethnicity** (check all that apply)?

___ White, non-Latino  
___ Latino or Hispanic  
___ Asian: Chinese, Japanese  
___ Southeast Asian  
___ Other Asian  
___ Black, African American  
___ Pacific Islander (Samoan, Filipino, etc.)  
___ Native American (American Indian)  
___ Other – please specify: ____________________________

**What is your age?**  _____ years

**What is your marital status?**

___ single  ___ married  ___ separated  ___ divorced  ___ widowed

**Do you have one or more dependent child/children?**  ___ yes  ___ no
What is your average annual family income? $_____

Are you employed? ___ yes ___ no

If you are employed, are you employed full-time or part-time?
_____ full-time    ___ part-time

Do either or both of your parents hold a baccalaureate degree?
___ yes ___ no

If you would like to comment on the survey or if there is anything else you would like to share about your college decision-making process, please feel free to do so below.
# APPENDIX H

## DATA CHARTS

### Table 1

<table>
<thead>
<tr>
<th>Name/location of institution identified by students to be a part of their college choice set</th>
<th># of times institution was reported by respondents to be among the colleges/universities in their choice sets</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Phoenix, Phoenix, AZ (distance/campus)</td>
<td>42</td>
</tr>
<tr>
<td>Chamberlain College of Nursing, Downers Grove, IL</td>
<td>8</td>
</tr>
<tr>
<td>Kaplan University (distance)</td>
<td>8</td>
</tr>
<tr>
<td>Stony Brook University (SUNY), Long Island, NY</td>
<td>7</td>
</tr>
<tr>
<td>Empire State College (SUNY), Saratoga Springs, NY (distance)</td>
<td>6</td>
</tr>
<tr>
<td>SUNY IT, Utica, NY (distance/campus)</td>
<td>6</td>
</tr>
<tr>
<td>Thomas Edison State College, Trenton, NJ (distance)</td>
<td>5</td>
</tr>
<tr>
<td>Drexel University, Philadelphia, PA</td>
<td>4</td>
</tr>
<tr>
<td>Jacksonville University, Jacksonville, FL</td>
<td>4</td>
</tr>
<tr>
<td>Indiana University/Purdue University, Indianapolis, IN</td>
<td>4</td>
</tr>
<tr>
<td>Binghamton University (SUNY), Binghamton, NY</td>
<td>3</td>
</tr>
<tr>
<td>Hunter College (CUNY), New York, NY</td>
<td>3</td>
</tr>
<tr>
<td>Lehman College (CUNY), Bronx, NY</td>
<td>3</td>
</tr>
<tr>
<td>Maria College, Albany, NY</td>
<td>3</td>
</tr>
<tr>
<td>Plattsburgh State University (SUNY), Plattsburgh, NY</td>
<td>3</td>
</tr>
<tr>
<td>St. Joseph’s College, New York, NY</td>
<td>3</td>
</tr>
<tr>
<td>The Sage Colleges, Troy, NY (campus/distance)</td>
<td>3</td>
</tr>
<tr>
<td>Walden University</td>
<td>3</td>
</tr>
<tr>
<td>Western Governors’ University</td>
<td>3</td>
</tr>
</tbody>
</table>
Table 2

Indicators self-reported by students to be among the top three influential factors in their decisions to choose to enroll in a distance-based Baccalaureate-degree program

<table>
<thead>
<tr>
<th>Indicators</th>
<th>% of students reporting the item to be among the top three factors influencing their decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>51%</td>
</tr>
<tr>
<td>Availability of financial aid</td>
<td>47%</td>
</tr>
<tr>
<td>Flexible scheduling and self-paced learning</td>
<td>40%</td>
</tr>
<tr>
<td>Reputation of the college</td>
<td>25%</td>
</tr>
<tr>
<td>College’s willingness to accept previous credits and prior learning for credit toward degree</td>
<td>22%</td>
</tr>
<tr>
<td>Convenience</td>
<td>21%</td>
</tr>
<tr>
<td>Ability to complete degree while maintaining work responsibilities</td>
<td>17%</td>
</tr>
<tr>
<td>Availability/quality of advising</td>
<td>14%</td>
</tr>
<tr>
<td>Not having to travel to class/ability to complete work from home</td>
<td>13%</td>
</tr>
<tr>
<td>Students’ program of choice was available via distance education</td>
<td>13%</td>
</tr>
<tr>
<td>Opportunity to expedite time to degree</td>
<td>9%</td>
</tr>
<tr>
<td>Availability of the students’ selected majors at the college</td>
<td>7%</td>
</tr>
<tr>
<td>Recommendation of a colleague</td>
<td>6%</td>
</tr>
<tr>
<td>Students’ previous experiences with the college</td>
<td>5%</td>
</tr>
<tr>
<td>College offers degree program needed by student for job entry/promotion</td>
<td>5%</td>
</tr>
<tr>
<td>Quality of technology</td>
<td>3%</td>
</tr>
<tr>
<td>Personal goals</td>
<td>2%</td>
</tr>
</tbody>
</table>
### Table 3

**Rank order of indicators of college choice from the TCC and DLCC by mean score**

<table>
<thead>
<tr>
<th>Indicator of College Choice</th>
<th>Scale in which the indicator appears</th>
<th>Mean Score (lowest score = 1; highest score = 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>An opportunity to complete my degree and maintain career/work responsibilities</td>
<td>DLCC</td>
<td>4.80</td>
</tr>
<tr>
<td>Availability of my major</td>
<td>TCC</td>
<td>4.78</td>
</tr>
<tr>
<td>Clear guidelines of what is required to complete a degree</td>
<td>DLCC</td>
<td>4.73</td>
</tr>
<tr>
<td>College or program accreditation</td>
<td>TCC</td>
<td>4.72</td>
</tr>
<tr>
<td>Not having to travel to class</td>
<td>DLCC</td>
<td>4.66</td>
</tr>
<tr>
<td>Convenience</td>
<td>DLCC</td>
<td>4.60</td>
</tr>
<tr>
<td>College’s willingness to recognize my prior experience and award credit for that experience toward my degree</td>
<td>DLCC</td>
<td>4.53</td>
</tr>
<tr>
<td>Opportunity to create a flexible learning plan to meet my individual needs</td>
<td>DLCC</td>
<td>4.51</td>
</tr>
<tr>
<td>Availability of self-paced learning environment</td>
<td>DLCC</td>
<td>4.39</td>
</tr>
<tr>
<td>Cost (tuition and fees)</td>
<td>TCC</td>
<td>4.29</td>
</tr>
<tr>
<td>Design of curriculum</td>
<td>DLCC</td>
<td>4.29</td>
</tr>
<tr>
<td>College’s academic reputation</td>
<td>TCC</td>
<td>4.15</td>
</tr>
<tr>
<td>Opportunity to get feedback from the instructor</td>
<td>DLCC</td>
<td>4.09</td>
</tr>
<tr>
<td>Quality of the college’s technology</td>
<td>DLCC</td>
<td>4.09</td>
</tr>
<tr>
<td>Availability of asynchronous learning opportunities</td>
<td>DLCC</td>
<td>4.00</td>
</tr>
<tr>
<td>Availability of academic support services</td>
<td>TCC</td>
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<td>Opportunities to interact with the instructor</td>
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<td>Availability of a toll-free number</td>
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<td>College’s rankings in comparative guidebooks</td>
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<td>Availability of student activities</td>
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