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College Choice and Retention of International Students in the United States

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ABSTRACT

The global transformation of the world has not precluded international education, as international students are increasing in number on many college campuses today. This quantitative study investigates factors influencing the choice and retention of international students at institutions of higher education in the United States. To date, very little research has been conducted in this area. International F-1 undergraduate students from two large, public research I universities were surveyed to examine what factors influence college choice and retention. Descriptive statistics yielded findings that suggest that preparation for the future, academic quality/reputation of the institution, and strength of the academic program influence college choice, while retention influences included personal motivation, good grades, and good knowledge of the English language. Correlations suggested that students who consider academic factors in college choice believe that academic factors are critical to one's success in retention, while those influenced by social factors in college choice believe social factors are critical in retention. Findings have implications for international student advisors, admissions recruiters, and professors.

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CHAPTER ONE

Introduction

As technological advancements expand geographical borders and make the world seem smaller, institutions of higher education strive to prepare students to live in a highly global society. In order to do so, many colleges and universities encourage more American students to study overseas and increasingly recruit international students to study in the United States. International student enrollment in higher education in the United States has increased by 135,000 over the past ten years, and the enrollment of new international students at U.S. institutions increased by 10% from 2005 to 2007. While the impact of September 11, 2001, resulted in a more extensive process and greater difficulty to obtain a visa to enter the United States to study, the total enrollment of international students has continued to rise since that year, though at a slower pace. The percentage of newly enrolled students each year actually decreased from 2002 to 2006, but the 2006/2007 school year saw a 3.2% increase in new enrollments from the previous year (Bhandari & Chow, 2007). The United States is considered the most popular study destination for international students (Sidhu, 2006; Bhandari & Chow, 2007). In the 2006/2007 school year, 582,984 international students studied at institutions of higher learning in the U.S., hosting 22% of the 2.7 million students pursuing higher education outside their home country (Bhandari & Chow, 2007).

However, not only do international students benefit from studying in the United States, but the United States benefits from the presence of international students. Stephen A. Edson, Director of the Office of Visa Services, presented information regarding international students to the Subcommittees on 21st Century Competitiveness & Select Education Committee on

Education and the Workforce, stating that “international students attending U.S. colleges and universities account for \$13 billion in revenues each year. Beyond the economic benefits, we as a nation gain immeasurably from international students and scholars who study at our colleges and universities and conduct research at our leading medical and scientific facilities” (Edson, 2005). In the 2006/2007 school year, international students contributed \$14.5 billion to the U.S. economy, a \$1.5 billion increase from 2005 (Bhandari & Chow, 2007). In addition to the positive economic effect, international students also bring new perspectives into the U.S. classroom. American students and professors benefit academically, culturally, and socially from the interactions and experiences that international students provide.

Despite this great movement of students across country borders and the economic, academic, and global perspective benefits that international students bring to the United States, very little is known regarding the college choice and retention of this student population. If these invaluable students are coming to the U.S., higher education administrators should be aware of why they choose to study in the U.S., why certain institutions of higher learning are chosen over others, and how to keep the students enrolled in college. Although international students come to the U.S. in record numbers to study, some leave before completing their degrees. Not only is this at a great cost to the individual, when the goal of degree attainment is not achieved, but this is also of great financial loss to the institution. In order to understand why students leave, one might first try to determine why they initially come.

International student college choice has not been researched in great depth, and it can not be assumed that international and American students are influenced by similar factors. However, research has identified factors that influence the choice of institution of higher learning for

American students. These factors range from the academic and financial to the social and personal needs. The academic reputation of the school, strength of the academic program, cost, availability of financial aid, social atmosphere, athletic reputation, proximity to home, and size of the school have been found to influence a student's decision to attend a certain institution (Anderson, 1985; Ihlanfeldt, 1985; Martin & Dixon, 1991; Paulson, 1990; Reynolds, 2007; Strayhorn, 2006; Weiler, 1994).

Numerous factors have also been identified that influence a student's decision to remain in college until degree attainment. These include the academic, financial, social, and psychosocial factors. In particular, strong faculty support, social support, personal motivation, living on campus, grade point average (GPA), commitment to the institution, and availability of financial aid have been found to affect students' persistence (Anderson, 1985; Astin, 1975; Bean, 1990; Boyer & Sedlacek, 1988; Lenning, 1982; Pascarella & Terenzini, 2005; Tinto, 1987; Yorke, 1999).

Research has been published regarding the college choice and retention of U.S. students as well as various subgroups of this greater population (e.g., Strayhorn, 2006). However, international students have not been the focus of this research, and thus, more information is needed to determine the extent to which college choice theory and retention theory can be applied to international students.

Given the differences between U.S. and international societies, it seems reasonable to assume that, in comparison to their U.S. counterparts, international students may consider different factors when choosing to attend a certain school. In addition, international students may have different needs in order to persist to attain a degree including, but not limited to, cultural

adjustment. “Some of the world’s best students come to the U.S. and Canada to study. Despite their strong academic backgrounds, they face real challenges adapting to the university environment” (Witherall, 2008, p. 44).

Recruiting international students and retaining them are two different issues, and both are important in today’s global society. “Attracting international students has become a priority for U.S. universities regardless of size or location. Recruiting foreign students, however, is not the only area of concern; enrollment does not guarantee their graduation” (Tompson & Tompson, 1996, p.53). It is only natural for institutions, which are also businesses, to want to keep their customers throughout the period of study towards a degree. This not only enhances the institution’s reputation as a successful place to study, but also takes the student’s best interests into consideration. Schools that truly care about their students should want to do all that is possible to create a positive, warm environment conducive for student growth, development, and retention.

However, the implementation of these ideals may not be easy, especially in regards to international students. Cultures vary in values, customs, and beliefs, and these differences influence interaction with others. Intercultural interaction and communication can be negative if the participants do not demonstrate intercultural competence. This negativity can lead to an international student dropping out of school and returning to his or her home country. Therefore, while the existing research and theories focus on college choice and retention of American students, a gap remains in the literature regarding international students and the college choice and retention of this population.

Purpose of the Study

While it is known that American students consider social and academic features when selecting a college and both social and academic factors influence retention, the extent to which the same factors influence the decisions of international students at U.S. institutions is still unclear. Thus, the purpose of this study was to investigate factors influencing the choice and retention of international students at U.S. institutions of higher learning. As the world is becoming smaller, it is not simply enough to encourage an international student to matriculate to a certain university; the school must also do its best to ensure a positive experience for the student so that he or she will want to continue to study at the same institution until the completion of the degree. Investigating college choice and retention is critical in determining what factors influence international students in these areas; the results of such research can be applied to current and future students.

Drawing on Hossler and Gallagher's (1987) college choice theory and Tinto's (1993) retention theory, this study examined international student choice and retention at two four-year, large, public, Research I institutions of higher learning. The following questions guided the analysis:

- a. What factors influence choice of the U.S. institution one attends among international students at four-year, large, public, Research I institutions?
- b. What factors influence student retention among international students attending four-year, large, public, Research I institutions in the U.S.?
- c. What is the relationship between choice and retention factors for international students attending four-year, large, public, Research I institutions in the U.S.?

Significance of the Study

Significance for Practice

This study was significant for several campus constituencies. One group that could benefit from the results of this study includes international student recruiters. The results of this study provide recruiters with data regarding the factors that influence the college choice of international students. Recruiters might use the results to assess current recruiting practices and information to highlight in recruitment brochures, at college fairs, and on the University website.

Another group that might benefit from these results includes international student advisors. The results of this study present advisors with data about the factors that influence the retention of international students. Advisors might use these results to evaluate new student orientation sessions, the availability of certain resources on campus, and behavioral interaction with students seeking advice.

A third group that could benefit from the results of this study includes professors who work with international graduate student teachers and researchers. The results provide professors with information regarding factors that influence retention of international students. As professors work closely in research and teaching with international graduate students, the professors have vested interests in retaining the students. The professors could use the results of the survey to encourage students and to evaluate their own interactions with the students.

Another constituency that might benefit from the results of this study is the international student population. Students may use these results to identify and articulate reasons why they are or are not satisfied at their school, and to then ameliorate the situation through the use of available resources.

Significance for Theory

In addition to its relevance for future research, the study was significant regarding future theory. At present, college choice theory has focused on a variety of student demographic groups, but all of these demographics involve American student college choice. The present study offered insight into how non-American students choose to study in the United States and which college to attend in the U.S. The information gathered from this study could be used to expand existing theory to include information regarding the college choice of international students.

Retention theory has also focused on various demographics of American students. Results from the present study identify how certain factors influence the persistence of international students. These results might be used to expand the existing information regarding retention theory to include international students.

Delimitations

This study had some initial delimitations. The first two involved the sample. All of the participants were F-1 visa holders at two similar institutions in the southeastern United States. It is possible that F-1 students are influenced by factors involved in college choice and retention to a greater or lesser extent than students with J-1, work, or refugee visas. This could have influenced the results in an unanticipated manner. In addition, all of the participants were students at only two large public Research I institutions. It is possible that students at private colleges, community colleges, smaller colleges, or other large public institutions differ from these students in an important way. If so, this also may have affected the results.

A third delimitation includes the quantitative nature of the study. Quantitative studies lack breadth and depth and allow for limited responses to the questions asked. It is possible that a qualitative or mixed-methods study would yield different results.

While there are delimitations, this study provides valuable information regarding F-1 students at these two institutions. The majority of international students in the United States study on F-1 visas, and there are also many large public institutions in the U.S. to which some of these findings may apply.

Definitions

For the purposes of this study, certain terms will be defined as follows:

- a. International student: a non-U.S. citizen taking classes at a U.S. institution of higher learning to attain a U.S. degree or to count towards the degree in his or her home country; the student must be studying on a valid visa acceptable for study
- b. F-1 student: a nonimmigrant who is pursuing a "full course of study" to achieve a specific educational or professional objective at an academic institution in the United States that has been designated by the Department of Homeland Security (DHS) to offer courses of study to such students, and who has been enrolled in the Student and Exchange Visitor Information System (SEVIS). Once the educational or professional objectives have been attained, the F-1 student is expected by the U.S. government to return to his or her residence abroad (Immigration and Nationality Act, section 101(a)(15)(F), as reported in the NAFSA Adviser's Manual of Federal Regulations Affecting Foreign Students and Scholars, 2006)
- c. J-1 student: a nonimmigrant who is on an exchange visitor visa. "The objective of the Exchange Visitor category is to increase mutual understanding between the people of the United

States and the people of other countries by means of educational and cultural exchanges." The J exchange visitor category is a SEVIS category, meaning all exchange visitor programs must operate with in the context of the Student and Exchange Visitor Information System (SEVIS) (NAFSA Adviser's Manuel of Federal Regulations Affecting Foreign Students and Scholars, 2006)

d. Persistence: remaining within the system of higher education to attain a degree (Tinto, 1987)

e. Retention: remaining within the individual institution of higher learning to attain a degree (Tinto,1987). Persistence and retention are used interchangeably in this paper.

Organization of the Study

The study is organized around five chapters. Chapter One introduced the topic of the study, the research questions and the significance of the study. Literature relevant to the study is reviewed in Chapter Two. Chapter Three describes the methodology of the study, including the sampling techniques and the procedures used to collect and analyze the data. The results of the study are described in Chapter Four. The fifth chapter discusses the results and their implications for future practice, research, and theory.

CHAPTER TWO

Literature Review

In order to explore college choice and retention of international students in the United States, the literature on college choice and retention of American students and the scant literature on college choice and retention of international students were examined. Academic, financial, social, and personal factors emerged in the literature as influential on college choice, while academic and social factors influence retention. As numerous cultural factors influence a student's experience and perception of the college environment, cultural competence is also reviewed.

Theoretical Frameworks

As no theories on international student college choice and retention exist, the theories regarding American students were examined. While it can not be assumed that these theories will apply directly to international students, it is possible that similar factors regarding college choice and retention hold true for both American and international students, as both groups are attending institutions in the United States. Thus, it was necessary to investigate the factors that lead to college choice and the factors that lead to retention. Hossler and Gallagher (1997) propose a three-stage model leading to one's final college choice, and Tinto (1987) examines the academic and social factors that influence retention.

College Choice

College choice is a complex process and has been studied extensively (Anderson, 1985; Ihlanfeldt, 1985; Martin & Dixon, 1991; Paulson, 1990; Reynolds, 2007; Weiler, 1994). Models differ, yet for the purposes of this study, Hossler & Gallagher's (1987) model was employed.

The three stages of predisposition, search, and choice as well as the factors that influence each are examined.

Predisposition. The first phase of the model is the predisposition stage, which is a developmental stage that begins with the student's desire to further education beyond high school. For international students, this may not only involve the desire to achieve a higher education, but to gain this education in the United States. There are a variety of factors that influence one's predisposition to attend college, including both individual factors and organizational factors. Individual factors include student characteristics, significant others, and educational activities, while organizational factors include high school and college characteristics (Hossler & Gallagher, 1987)

The student characteristics of socioeconomic status and academic achievement lead to the predisposition of attending an institution of higher learning. Studies have shown that socioeconomic status influences the school which a student chooses to attend (Martin & Dixon, 1991; Horvat, 1996; Weiler, 1994). Students from low-income families experience a fear of debt and financial constraints that influence the student's choice to attend certain schools (Callender & Jackson, 2008). Academically, students who rank high in their high school class are more likely to attend college than those who do not (Weiler, 1994).

Parental and peer encouragement influence a student's predisposition to attend college. Parents are influential in the lives of their children, and they can aid in the formation of the student's educational aspirations to attend an institution of higher learning. Students whose parents have an undergraduate degree are also more likely to attend college (Bouse & Hossler, 1991; Weiler, 1994), and students who have friends who are headed to college experience peer

pressure to attend college (Weiler, 1994). Regarding international students, should one's parents or friends attend college in the United States, this may lead the student to also desire to spend those four years in the U.S.

Organizationally, participation in high school activities, attending a high-quality high school, and having a positive attitude towards education also influence predisposition. The more one participates in high school activities, the more likely he or she will be predisposed to attend college. Students who attend high-quality high schools can be considered more prepared to enter college than those who are not (Hossler & Gallagher, 1987). The outcome of the predisposition phase is that the student either has college options or will conduct a search for non-college options.

Search. The second phase of Hossler and Gallagher's (1987) model is the search phase, where students begin to research information about institutions of higher education. In the predisposition stage, there was very little interaction with possible institutions, whereas in this second stage, a greater amount of interaction between the student and the institutions occur. The student's search activities are influenced by the values and attributes of the college that the student desires. Organizational factors include the search activities which colleges carry out, in order to recruit students. The type of interaction the student has with the institution can vary, as international students do not always physically travel to the campus in order to carry out the search. Institution websites and email interaction may play a greater role in acquiring information about the college or university in the search phase for some students than for others.

Socioeconomic status and academics are among personal preferences that influence the search process. Regarding socioeconomic status, students choose to attend schools whose

population consists of students from similar race and class backgrounds as the student (Horvat, 1996). In addition, students who can obtain information early regarding cost and financial aid have a clearer picture of what the school has to offer and may be more inclined to attend schools with financial aid options (Hossler & Gallagher, 1987).

One of the most important factors in choosing a college involves academics. Finding a college that has a strong major in the student's field of interest, excellent teachers, preparation for a career, and accessible professors is important to the student's decision, and these factors are consistently ranked as the top reasons for choosing an institution in national surveys (Martin & Dixon, 1991; Reynolds, 2007). As students attend college in order to receive an education in a certain field, research has shown that the student would want academics to play a strong role in the college choice process.

The search activities of students vary from student to student. Students from low-income families rely on school counselors for advice and tend to perform less efficient college searches (Litten, 1982). Choosing a non-college option, then, remains a greater possibility, as potentially good schools are eliminated in the search due to lack of accurate information received about the school (Hossler & Gallagher, 1987).

In examining the values and attributes of different institutions, the student determines a choice set of schools in this phase. A choice set is the group of institutions that a student has decided to seek more information about and apply to in order to make a better decision (Hossler & Gallagher, 1987). The outcome of the search phase is that the student has created his or her choice set or has decided upon other non-college options.

Choice. The third and final phase of the model is the choice phase, in which the student applies for admission, is admitted to the school(s), and enrolls at an institution. Individual influences in the choice stage include the evaluation of the choice set of colleges, and organizational influences are the persuasive activities of the college to encourage the student to matriculate. Cost of the institution, financial aid awarded, and perceptions of quality have been found to influence this final decision. As the student's choice set of colleges is evaluated in this phase, these factors determine the school in which the student chooses to enroll (Hossler & Gallagher, 1987).

Over the past seventy-five years, the cost of education for each full-time student has risen substantially (Archibald & Feldman, 2008). According to the Higher Education Research Institute survey comparing freshmen attitudes toward college costs and financial aid, financial reasons influenced the college choice of first-year students (Geraghty, 1997). The availability of financial aid is a great factor in choosing which college to attend, and affordability is one of the top reasons for choosing to attend a certain college (Geraghty, 1997; Hoover, 2008; Hossler & Gallagher, 1987). In the survey of freshmen, 39% identified that a financial aid offer was critical to their final decision (Hoover, 2008). While the majority of students surveyed were accepted to their first-choice institution, only 64% actually enrolled at that institution. Financial factors are believed to be the primary consideration when choosing to attend a different school in these instances (Hoover, 2008). For international students, not only can cost of tuition prove to be a factor in college choice, but the additional costs that must be considered. International students must pay out-of-state fees and additional fees specifically required of international students. Cost of communication with family back home must be considered as well as travel: how many times

can the student fly back home during academic breaks, or will the family choose to travel to see the student? The international student must consider a variety of financial factors in this process.

Quality and strategies employed by the institution are also important. The perceived quality of the institution and the persuasive activities, such as personal letters and phone calls from the dean or professors, merit-based financial aid, and marketing and recruitment fairs, also seem to influence a student's decision to matriculate (Hossler & Gallagher, 1987). When the student perceives the institution to be of quality, this increases the likelihood of matriculation. Persuasive activities, or "courtship" activities, are those behaviors by the school which encourage the student to enroll at the particular institution. The outcome of the choice phase is the decision to enroll at a particular institution of higher education.

The predisposition, search, and choice stages explain the process through which a student progresses to reach matriculation to a particular institution. Numerous factors are involved in this process, including the characteristics of the student, academics, parental encouragement, and financial considerations. Each of these factors has been found to influence American student college choice, and it is possible that these factors influence international students to a certain degree. The next section outlines retention theory and the factors which lead to remaining at one's institution of higher education until degree completion.

Retention

Retention is a complex process and has been studied extensively (Anderson, 1985; Astin, 1975; Bean, 1990; Boyer & Sedlacek, 1988; Lenning, 1982; Pascarella & Terenzini, 2005; Tinto, 1987; Yorke, 1999). While retention models differ in terms of the factors considered, Tinto's (1987) theory of retention was chosen as it is the most widely cited in higher education research.

The transition to college is not always an easy one. The student must adapt to the social environment as well as the academic environment of the school. High school academics and socialization are quite different, and students must separate themselves from those patterns of behavior physically, socially, and intellectually (Tinto, 1987). These factors should remain the same for international students, who are attending the same institutions of learning, which require at least academic success in order to graduate.

Academic. Student persistence and degree completion can be predicted by student grades, and GPA has been shown to be influenced by different factors (Pascarella & Terenzini, 2005). According to a study by Boyer and Sedlacek (1988) of college students over a period of four years, self-confidence and availability of a strong support system consistently predicted GPA. Students must feel confident, determined, and independent, and have another individual to talk to and rely on; these are important determinants of academic success. If a GPA falls below a certain pre-determined average, a student can be faced with academic dismissal. This obstacle could prohibit the student from ever returning and attaining the degree, no matter if the student is from the United States or a country outside of the U.S. The student must meet the institution's academic standards in order to remain at the school (Tinto, 1987).

Social. Students need to find a compatible social or academic group in order to feel as if they belong, or matter, to the institution. Finding one's niche provides for the social integration that encourages student retention (Astin, 1975; Tinto, 1987). While the particular niche is important, the location of the niche in the social community is also significant. Tinto stated that "the social and intellectual life of most institutions has a center and a periphery" (1987, p. 59).

The closer one's niche is to the center of the social and intellectual life of the school, the more likely the student member of the niche will persist to graduation.

Astin (1975) found that social involvement is important also. Identification with an activity or program at an institution was found to be related to the probability that the student would remain in school. International students have been found to become involved in or even create organizations based entirely on their country or region of the world, in order to attain this social integration. In addition, the size of the school can influence social integration both positively and negatively. The larger the school, the more communities established that one can join, and thus feel connected and remain at the school. However, faculty interaction also predicts retention, and the larger the school, typically the less contact a student will have with faculty and staff (Tinto, 1987).

Individual goals and commitments influence students' responses to the stress of transition. Some students will be able to persevere while facing challenging obstacles, while others will return home when the slightest stressor arises (Tinto, 1987). Personality can affect the adjustment of the student; those who are more flexible and adaptive typically adjust with greater ease than those who do not have those characteristics.

In addition, "fit" with the institution is a factor in persistence. Needs, preferences, and interests of the individual and the institution must be similar in order for the student to integrate well at the school. Incongruence between the institution's and individual's values regarding needs, preferences, and interests may lead to academic and social difficulties, which in turn, could lead to withdrawal (Tinto, 1987)

In sum, Tinto (1987) claimed that the student needs to be integrated both socially and academically at the institution in order to persist. With respect to initial goals, commitments, and traits of the student, often it simply takes some time to discover the academic and social cultures of an institution and to adapt in order to continue. This may even take a longer period of time for international students, who are not only attempting to integrate socially and academically, but are faced with cultural differences and obstacles that must also be overcome.

College Choice and Retention of International Students

While college choice and retention factors of American students may be applicable to international students in the United States, it is critical to also examine the scant literature on college choice and retention of international students.

College Choice

Though little research has been conducted on factors influencing college choice of international students, one study was presented at the 2007 annual NAFSA Association of International Educators Conference. While financial factors enabled or prohibited students from studying in the U.S., academic factors were the strongest influence of choice to study in the United States (Redden, 2007).

Indeed, the top two reasons that international students study in the United States are the strength of the education system and career preparation. Redden (2007) found that attending a college or university in the United States improves international students' opportunities for careers abroad, allows students to gain experience, and better prepares the students for future careers in their home countries. International students hailing from developed countries desire to study in the U.S. to gain new experiences. Students from less developed countries, however, tend

to consider U.S. schools to gain a higher quality education and to prepare for careers.

Furthermore, these students expect that their academic institution in the U.S will have a strong reputation for a particular course of study (Redden, 2007).

According to the study, students expected adequate sources of funding from their U.S. institutions. The most common barrier to study in the U.S. was the cost of tuition and fees as well as the cost of living. Chinese and Indian students cited scholarships as the most important source of funding for their studies, while citizens of other countries reported supporting themselves or relying upon family to finance their education in the U.S. Some students considered grants, sponsorships, bank loans, and part-time work in their decision as to how to fund a U.S. education (Redden, 2007).

Though the importance of each factor varies by country of citizenship as well as the student, safe location, responsive staff and good service, and good facilities were also cited in students' expectations of U.S. educational institutions, in addition to academic and financial factors (Redden, 2007). As this study represents the only work on international student college choice, it sheds great light on the topic. However, it is important to realize that it only represents one study, and it is possible that other studies may yield different results.

Retention

Factors that lead to retention can not always be viewed in the same manner when international students are involved. Integration in the classroom and social integration may also hold true for international student retention, but achieving this integration can be more difficult due to cultural differences. In addition to cultural differences, social and academic integration is more important to persistence for minority students. Tinto's (1982) research has shown that

establishing academic and social membership at majority institutions can be difficult. This integration can be more critical to retention for some minority students than for majority students.

Academic. The U.S. academic system is different than the systems in most countries, not only regarding course material, but also length of classes, the credit system, and the means of testing (Boyer & Sedlacek, 1988). These differences require a greater transition on the part of the international student than for American students to adapt to the U.S. college system. Classroom climate and teacher communication is critical to academic success, and thus, students must adapt accordingly in order to succeed (Levy, Wubbels, Brekelmans, & Morganfield, 1997).

In contrast with white and black American students, as most commonly studied in retention research, many more variables are related to the persistence of international students. For black and white students, self-confidence and realistic self-appraisal were predictive of GPA in Boyer and Sedlacek's (1988) study. For international students, self-confidence and the availability of a strong support person were the predictors. While these factors lead to retention, international students must also successfully adjust to the academic system and the external environment to persist (Boyer & Sedlacek, 1988).

Six major academic issues of international students that arise in the U.S. include mastering English, adjusting to the North American classroom, learning the rules of academic honesty, expressing their own views in papers, class discussions, research, and asking for help (Kok-Soo, 2008; Liberman, 1994; Thompson & Thompson, 1996; Witherall, 2008). Thompson and Thompson (1996) investigated both professor response and student response regarding adjustment to a U.S. university. From the study, the majority (77%) of the professors surveyed reported that

international students do not fully participate in class discussions, even when the syllabus states that class participation would be counted toward the final grade; debating issues, disagreeing with others' opinions, or challenging the norm rarely occurs (Tompson & Tompson, 1996). This lack of apparent participation in class negatively affected the student's grade. Students also reportedly did not ask for clarification on assignments. This was also reflected in work by Kok-Soo (2008) who found that Asian students are passive, obedient, and tolerant of others. They rarely challenge authority, the academic system, or request change. In addition, all international students need to recognize the necessity of strengthening their ability in the English language, in order to facilitate learning (Kok-Soo, 2008).

Language skills attribute to the probability that students will participate in class. If there is a difficulty understanding what the professor is saying, the student would be less likely to respond. Even if the student understands the vocabulary that the professor is using, the specific response that the professor is asking for or how to appropriately respond may not be understood (Tompson & Tompson, 1996). This can be quite challenging and result in a lack of discussion participation.

In a study by Liberman (1994), Asian students found the U.S. classroom to be quite different from that at home. In the home countries of the students' interviewed, the student is to fully respect the teacher and agree with all that the teacher says. The student is required to memorize what is read and lectured and then must regurgitate the information; there is little room for critical analysis and reflection. These Asian students found the U.S. university classroom to encourage critical thinking, asking questions, and challenging the professor when one felt the need to do so. While this was seen by most as an inappropriate lack of respect for the

professor, many still appreciated the fact that they could interact on a more relaxed and mutually respected basis than with their professors in their home country. Many students were not used to seemingly treating their professors with less respect by raising questions for clearer understanding and deeper thought, and it took time to adjust to speaking in class (Lieberman, 1994).

In addition to classroom interaction, the students were quite surprised with the freedom given in choosing a major, changing majors, and taking classes completely unrelated to the major finally chosen. Just as in the classroom, students were encouraged to think for themselves, not just follow as directed (Lieberman, 1994). Many international students face obstacles to academic integration, simply from growing up in a different academic environment. Class participation, expressing unique and personal thought, and language skills are differences that must be overcome. This change from the way in which they were raised and instructed to be a student must be factored in when considering adaptation to a university and retention.

Social. Involvement in a social community is important to student retention. Students need to find a compatible social or academic group in order to feel as if they belong, or matter, to the institution. Finding one's niche provides for the social integration that encourages student retention (Tinto, 1987).

As with American students, not only is the niche important, but also the location of the niche in the social community. International students are not part of mainstream culture when they arrive on campus. As the university has dominant and subordinate subcultures, the international students fall into the subordinate culture. The degree to which this subculture is central or on the outer edge of the mainstream of the college community can influence the

subculture's effect on persistence. The more distance between the subculture and the dominant culture, generally the less institutional commitment the student will have. In turn, this institutional commitment serves as a predictor of the student withdrawing from school or staying to attain the degree (Tinto, 1987).

Critical aspects of adjustment to a U.S. university include developing a social network and language skills, in addition to loneliness and the fear of "not fitting in." The latter two factors have been considered to be more important and mentally time-consuming to the students than the world of academia (Tompson & Tompson, 1996). Tompson and Tompson (1996) reasoned that Maslow's hierarchy of needs is demonstrated in this study; the self-actualization activity of academics will not be engaged in until socialization and self-esteem, as fundamental needs, are met.

Seen especially in responses from students who had recently arrived in the United States, the third most difficult adjustment area was that of being aware of norms, rules and regulations of the U.S. university culture. The proper way to address different people (secretaries, professors, and peers, for example) and the proper way to behave in the classroom were situations of uncertainty for the students (Tompson & Tompson, 1996).

Liberman (1994) conducted a study between 1985 and 1992, interviewing almost 700 students from Asian countries who were studying at a public U.S. university. These interviews demonstrated the differences that students had to adapt to in both their social and academic lives. While students were quite critical of certain U.S. social customs and their strong independence, the majority of the Asian students were extremely positive regarding the differences in the U.S. higher education system to that of their home country. The students found Americans to be very

self-centered, egocentric, and not serious about their studies, and this carried over into the classroom setting.

Psychosocial. For international students, self-confidence, determination, independence and the availability of a strong support person are predictors of retention (Boyer & Sedlacek, 1988). This is seen in financial difficulties and immigration issues, as well as adjustment to living in a new culture and usually speaking a second language.

The variables of understanding the English vocabulary as well as the customs and norms of Americans directly affect communication between international students and American students and international students and American professors. In order to succeed, students must be able to properly communicate. “[The learner’s] acquisition of *knowledge* depends upon his response to what is communicated” (Dewey, 1916, p. 221). But this is much easier said than done. Communication differences between cultures of the world are influenced by many factors, but understanding these leads to cultural competence, affecting success both inside and outside of the classroom.

Intercultural Competence

Cultural competence is reviewed in this final section, as numerous cultural factors can influence a student’s experience and perception of the college environment. Communication, cultural patterns, behavioral characteristics, and cognitive characteristics are discussed.

Communication

There is more than a verbal tie between the words common, community, and communication. Men live in a community in virtue of the things which they have in common; and communication is the way in which they come to possess things in common. What they must have in common in order to form a community or society are aims, beliefs, aspirations, knowledge – a common understanding- like-mindedness as the sociologists say.....The communication which insures participation in a common understanding is one which secures

similar emotional and intellectual dispositions – like ways of responding to expectations and requirements (Dewey, 1916, p. 5).

Whether one is crossing boundaries for one week, one year, or permanently, cultural differences influence one's success and effectiveness in the new situations. Intercultural communication is the process through which shared meanings are created by people of different cultures (Lustig, 2003). Culture can be defined in numerous ways, one of which includes the knowledge, beliefs, and values collected and accepted by a group of people over time (Novinger, 2001). Verbal and nonverbal communication processes as well as perception construct the culture matrix (Novinger, 2001). Simply stated, according to E.T. Hall (1959, p. 169), "culture is communication and communication is culture."

Daily communication and interaction between persons are constructed by one's culture, and different cultures dictate daily communication and interaction in different ways. The main barrier to intercultural communication is cultural difference. People are usually not attracted to others who seem different (Novinger, 2001). Communication problems then also arise as most people try to avoid the unfamiliar as opposed to demonstrating intercultural sensitivity. Intercultural sensitivity involves accepting cultural differences and tolerating cultural ambiguity in addition to comfortably assimilating within other cultures (Novinger, 2001).

The goal of a professor is to teach and guide the student to learn and think critically about the subject matter. This involves communication that must be received, understood, and accepted correctly by the student. While numerous factors influence effective communication, certain aspects typically hinder communication between persons of different cultures. Personality, Growing, and Being are three factors that define different cultures. In Personality cultures, there is a stress on action and doing; in Growing cultures, importance is placed on spiritual growth; in

Being cultures, *who* you are is more important than what you do or how you are growing (Martin & Nakayama, 2004).

Cultural patterns

In addition to these, many other aspects of culture influence intercultural communication. Individualism/collectivism, power distance, and uncertainty avoidance are three of Hofstede's (1991) five cultural patterns that can easily influence communication effectiveness. Individualism and collectivism are two cultural values that involve how people relate to larger social group, and involves the degree of allegiance an individual has to the self and to the group. While the United States, Canada, and the Netherlands have a high degree of individualism, Trinidad, Venezuela, and Panama stress the importance of collectivism (Lustig, 2003). Thus, people who have grown up in highly collectivistic societies such as Venezuela may find it difficult to work alongside others in a country where the degree of individualism is greater, such as the United States.

Individualistic cultures stress the importance of the individual's autonomy. The good of the individual, not the group, is the basis for decisions and actions (Lustig, 2003). Developmental goals encouraged by individualism include independence, self-reliance, individual achievement, and personal self-esteem (Greenfield, Davis, Suzuki, & Boutakidis, 2002). If people have problems or concerns in an individualistic country, they are taught to speak out and ask questions (Lustig, 2003). They also find pride in being praised in front of others. This may be difficult for one from a collectivist society, as collectivism focuses on interdependence, group needs and goals, and personal modesty (Greenfield et al, 2002). One is not to stand out from the rest of the group, nor point out others in front of the group. One may even shy away from or feel

uncomfortable when given public compliments. This could be an issue when group work or class presentations are assigned to students from collectivist countries, and the student could have a very difficult time adjusting to these expectations.

The individualism-collectivism dimension helps to distinguish one culture from another (Triandis, 1995). While this is a strong factor, there are other areas that influence communication competence. The power distance dimension of Hofstede involves the idea that less powerful members of a society expect and accept that power is distributed unequally in their country (Hofstede, 1991). Cultures with a high degree of power distance stress the importance of social order and each one's place in it. Authority should not be challenged or questioned and those in power may use their power for whatever they desire. Teachers and parents should not be questioned; they should be obeyed. Conversely, cultures with a low degree of power distance feel that human inequality is wrong. There is less distance between social class power and it is acceptable to speak beliefs in questioning authority (Hofstede, 1991). It is normal, and even encouraged by some professors and supervisors, to challenge authoritative figures. For a student from a country with a high degree of power distance, it could prove uncomfortable in the classroom to observe other students questioning the professor or sharing opinions of their own that contradict the professor's beliefs. Not only could this be uncomfortable to observe, but the student may even shy away from participating in class, even if expected to raise questions and contribute personal thoughts.

Uncertainty avoidance is another dimension of Hofstede's theory. Different cultures cope in different manners to uncertainty. While humans of all cultures experience anxiety, the tolerance for uncertain situations varies across the world. Cultures with a high degree of

uncertainty avoidance try to avoid ambiguity as much as possible in life; rules and regulations are set in order to structure and secure their lifestyles. The feeling of control is important. Cultures with a low degree of uncertainty avoidance tend to take more risks and tolerate others who are against the norm. The number of rules on human behavior is minimized, and members of these cultures can be viewed as unconventional and unstructured (Hofstede, 1991). A student from a culture with a high degree of uncertainty avoidance will feel added pressure in a class where the professor gives very little instruction and guidance on research papers and assignments. This would be different from what the student is used to, and since this freedom may not have been experienced before, it may be difficult to know where to begin in completing the assignment.

Hofstede's cultural patterns display three differences between cultures that affect one's view of the world. In order to relate and interact with others of different cultures, intercultural communication competence must be demonstrated. This is needed to communicate effectively and appropriately with others. Effective communication competence involves the ability to convey one's intended effects in these interactions. Appropriateness is shown through the ability to recognize verbal, relational, and environmental contexts and display communicative messages properly, according to the culture (Chen & Starosta, 1996). Numerous scholars have published theories describing specific characteristics or behaviors needed in order to be competent in this area of study (Hammer, Gudykunst, & Wiseman, 1977; Koester & Olebe, 1987). According to Hammer, Gudykunst, and Wiseman (1977), behavioral and cognitive characteristics influence satisfaction in living in a different culture, which will be discussed in the following two sections.

Behavioral characteristics

According to Koester and Olebe (1987), there are eight culture-general dimensions, as opposed to one's personal characteristics, that describe one's actions in being interculturally competent. Display of respect, orientation to knowledge, empathy, interaction management, task role behavior, relational role behavior, tolerance for ambiguity, and interaction posture allow for this competence.

The ways by which respect is shown in one culture may differ from that in another. Verbal and nonverbal signals, tone of voice, and the formality of language influence the demonstration of respect among cultures. Orientation to knowledge involves the ability to see beyond the characteristics of one's own culture and to display an understanding that all actions are not universally shared or perceived in the same manner. Empathy involves being aware of another person's thoughts, feelings, and experiences (Lustig, 2003). If one can demonstrate identification with and interest in another, he or she is considered to be more culturally competent. Interaction management, the fourth dimension, reveals the ability to maintain a discussion and interact appropriately in conversation with others. Task role behavior refers to problem-solving activities within a group and the way by which tasks are accomplished. For example, socialization and business are intertwined in some cultures, whereas other cultures view these as being completely separate activities. One must be open to the time period and manners by which tasks are accomplished in order to be culturally competent. Relational role behavior involves personal relationships with others and the manners by which these relationships are formed and maintained. Competence includes showing interest towards the other person and willingness to compromise. Tolerance for ambiguity involves the ability to cope

with new, unfamiliar situations, similar to uncertainty avoidance as described by Hofstede. Finally, interaction posture concerns responding to others in a way that is descriptive, nonevaluative, and nonjudgmental (Hofstede, 1991). Competence is shown by using messages that convey openness and nonjudgmental views of cultural norms, as different cultures accept different responses as the appropriate way to handle daily situations.

Cognitive characteristics

According to Hammer, Gudykunst, and Wiseman (1978), the ability to handle psychological stress, to communicate effectively, and the ability to establish interpersonal relationships are three dimensions of intercultural effectiveness that impact the cognitive level. Psychological stress is present to a degree in any new situation. The ability to deal with this stress is an area that separates the culturally competent from those who become frustrated by the situation. Competence is shown through the ability to handle such factors as frustration, stress, anxiety, changes in political systems, pressure to conform, social alienation, financial difficulties, and interpersonal conflict. Effective communication can include many different characteristics, including meaningful dialogue with others, initiation of interaction with strangers, dealing with communication misunderstandings, and handling different communication styles. Establishing interpersonal relationships is the third factor in competent communication. One must have the ability to develop and maintain satisfying relationships with others. Through this, others' feelings must be understood and the ability to effectively work with others and deal with different social customs must take place (Hammer et al, 1978).

It does not matter how talented and committed a person trying to interact with another culture may be, there is still a need to discover a way to learn and understand as much as possible

regarding the target culture and then taking this information, communicate and act in such a manner that is beneficial for all involved (Nipporica Associates, 1997). Novinger (2001) suggests that in order to improve intercultural communication competence, one needs to know his or her own culture, have a positive attitude and respect for the other, be motivated and put forth effort, be educated on the other culture, learn the other culture's rules, and be adaptable. The culture-general approach compares differences in the host and target cultures from an outside view. This can only be accomplished after the separation of self to view and know one's own culture first (Novinger, 2001).

Higher education administrators need to be aware of these differences and aim to be culturally competent. If an international student is experiencing difficulty, it is critical to remember that a successful solution may be quite different than that for an American student. An effective solution may not be available or appropriate for this individual from a country outside of the U.S. "Many of the problems that international students experience may actually stem from their attempts to adjust to university life using strategies that would be effective in their own country but ineffective in the United States" (Tompson & Tompson, 1996, p. 54). Administrators need to be aware of the differences in culture and seek knowledge regarding the different cultures represented in their international student population.

Summary

Prior research provides information about the factors considered when choosing a particular college (Hossler & Gallagher, 1987) and factors that influence the retention of college students (Tinto, 1993), especially those whose backgrounds are culturally different from the

majority. Drawing upon this body of knowledge, this study examines the factors that influence the college choice and retention of international students at U.S. colleges and universities.

CHAPTER THREE

Methods

The purpose of this study was to investigate factors influencing the choice and retention of international students at U.S. institutions of higher learning. Three research questions guided this analysis:

- a. What factors influence choice of the U.S. institution one attends among international students at four-year, large, public, Research I institutions?
- b. What factors influence student retention among international students attending four-year, large, public, Research I institutions in the U.S.?
- c. What is the relationship between choice and retention factors for international students attending four-year, large, public, Research I institutions in the U.S.?

This chapter explains the research design, the population surveyed, and the means by which the data were collected and analyzed.

Research Design

This quantitative study answered the research questions through the use of an online survey which included open-ended as well as Likert-scale questions. The online survey allowed for the greatest number of current international students to be contacted. The instrument was created by the investigator, containing factors found in the literature about influences on college choice and retention (Hossler & Gallagher, 1987; Tinto, 1987). The survey included demographic questions, specific Likert-scale questions regarding factors which influenced the students' decisions to attend and remain at their current institutions, and two open-ended

questions seeking further knowledge as to why the student chose to attend and remain at the institution.

Site and Population

This study was conducted at two large, four-year public Research I institutions located in the southeast region of the United States. Approximately 27,000 students are enrolled at Institution A, of which 21,000 are undergraduate students and 6,000 are graduate students. Of these, 1,000 are international students, including 100 undergraduate international students. Institution B enrolls 28,000 students, of which 24,000 are undergraduate students and 4,000 are graduate students. Of these, 2,000 are international students, including 400 international undergraduate students (K. Beisecker, personal communication, November 24, 2008).

Institution A offers 83 undergraduate majors in areas such as engineering, mathematics, and music. Among its various programs and services, the university offers a Center for International Education which is comprised of four departments: International Student Services, International Scholar Services, Programs Abroad, and an International House.

Institution B offers 60 undergraduate majors in disciplines similar to those of Institution A. Institution B hosts a variety of programs and services, including an International Center which provides support to international students through immigration advising as well as programming activities.

Participants included international students at two large, four-year public research institutions of higher learning in the United States. This population was selected in order to gain a deeper understanding of choice and retention at these particular institutions. Students included degree-seeking undergraduate students holding F-1 visas. F-1 visa holders were selected as this

is the primary visa for international students in the United States, and these students intend on graduating with a U.S. degree. While some J-1 students on government scholarships intend to attain a U.S. degree, many J-1 visa holders are studying in the U.S. on exchange for a short period of time. Analyzing only F-1 responses eliminates the possibility of exchange students and the possible differences in decision making for international students whose time in the U.S. is less than one year versus greater than one year.

Approximately 500 students comprise this population from the two institutions, and from this sample, all willing participants with the following criteria responded:

- a. enrolled at either institution in Spring 2009
- b. F-1 visa holder
- c. seeking a Bachelor's degree at the particular institutions surveyed
- d. agreed to participate in the study

Source of Data

Students responded to an online questionnaire consisting of 43 items (refer to Appendix A for this instrument). The instrument was created by the investigator, consisting of four sections and containing both Likert-scale and open-ended questions. In the first section, nine demographic questions concerned gender, visa type, academic level, transfer students, home country, first language, time spent in the U.S., time spent at the current institution, and visiting the U.S. prior to application for enrollment. The second section consisted of sixteen factors found in the literature on college choice. For example, respondents were asked, "Please rate the extent to which you considered the availability of financial aid in your choice to attend your current institution." Response options ranged from "1 (Not at all)" to "7 (Very much)."

The third section consisted of sixteen items designed to measure factors that enable student success. For example, respondents were asked, “Please rate the extent to which you believe personal motivation is critical to success in remaining in college.” Responses ranged from “1 (Not at all)” to “7 (Very much).” Additional factors that international students may consider were also questioned on a 7-point Likert scale. These items were found in the literature on international students and from the investigator’s personal interaction with this population over the past year. The fourth and final section contained two open-ended questions that asked for further comments regarding why the student chose to attend and is choosing to remain at his or her current institution.

A pilot test of the instrument was conducted in Fall 2008. A convenience sample was selected because it allowed testing of the survey on a group of students with whom the investigator had worked and who were responsive to encouragement to complete the pilot test. The participants were F-1 graduate students who had recently arrived at one of the institutions to study. Feedback and comments from the pilot study participants were used to enhance the survey and clarify wording.

Several tests were run on the pilot study results to measure the relationship among similar survey items. Inter-item correlations ranged from 0.26 to 0.84. Two experts on international students reviewed the survey and deemed its content valid.

Description of Participants

Fifty-four F-1 undergraduate, degree-seeking students responded to the survey. Males comprised 57.4%, while females represented 42.6%. Roughly half of the sample study at either institution, with 46.3% from Institution A and 53.7% from Institution B. Forty-two percent of the

participants were transfer students, and 61.1% had visited the United States before applying to their current institution. Fifty-four percent of the participants were from Asian countries, and 44.4% had been in the United States for 3 to 4 years. Further demographic information is shown in Table 1.

Data Collection

Permission to contact international students at Institution A was sought and obtained from the Assistant Director of International Student Services and the Institutional Review Board of the school. At Institution B, the Institutional Review Board and the Director of the International Center also gave approval of the study, and the Director agreed to contact the students on the researcher's behalf.

Upon IRB approval, individuals were invited to participate via an email received from the investigator at Institution A and through the International Center Director at Institution B with an internet link to the online survey (refer to Appendix B for this document). Monetary incentives were funded by the investigator for a random selection of three students who participated and completed the survey. The survey was administered online using web-based survey software. The questionnaire was completed at the consent of the international students, who were asked to give consent by agreeing to the consent statement as the first question of the online survey. The survey was also voluntary and the students could stop at any time with no repercussion. One week after the students received the initial invitation email, a reminder email was sent to the students at both institutions. The data were compiled and downloaded through the web-based survey software for analysis.

Table 1

Description of the Sample

<i>Characteristics</i>	<i>%</i>
Gender	
Male	57.4
Female	42.6
University	
Institution A	46.3
Institution B	53.7
Transfer status	
Transfer student	42.6
New student	57.4
Region of origin	
Africa	5.5
Americas	14.8
Asia	53.7
Australia and South Pacific Islands	3.7
Europe	13.0
Middle East	9.3
Native language	
English	13.0
Other than English	87.0
Visited U.S. before applying to current school	
Visited U.S.	61.1
Had not visited U.S.	38.9
Time spent in U.S.	
Less than 6 months	9.3
6 months – 1 year	16.7
1 – 2 years	13.0
3 – 4 years	44.4
4 – 6 years	16.7

Table 1, continued

Time spent at current institution

Less than 6 months	27.8
6 months – 1 year	20.4
1 – 2 years	18.5
3 – 4 years	31.5
5 – 6 years	1.9

Note. n = 54.

Data Analysis

First, the data from the questionnaire were analyzed using descriptive statistics. Frequencies and means were calculated for each of the factors determined by the literature to influence the choice of institution one attends. Frequencies and means were also calculated for each of the factors rated determining their influence on the student's choice to remain at the current institution. Correlations were run between the choice and retention topics to determine the relationship between the two.

The open-ended question answers were used to determine other factors that could influence choice and retention of international students through open coding. The responses were analyzed by reducing the data to individual units and then categorizing the units around the central themes presented and found in college choice and retention literature. College choice themes included academic, financial, social, and personal influences while retention themes included academic and social. An additional category of other was added to both the college choice themes and the retention concepts, allowing for extraneous variables not included in the stated themes. These results can lead to future research.

CHAPTER FOUR

Findings

The purpose of this study was to investigate factors influencing the choice and retention of international students at U.S. institutions of higher learning. Three research questions guided this analysis:

- a. What factors influence choice of the U.S. institution one attends among international students at four-year, large, public, Research I institutions?
- b. What factors influence student retention among international students attending four-year, large, public, Research I institutions in the U.S.?
- c. What is the relationship between choice and retention factors for international students attending four-year, large, public, Research I institutions in the U.S.?

This chapter presents the study's findings. Recall, quantitative response options ranged from "1 (Not at all)" to "7 (Very much)." When interpreting the study's results for analysis, 1 was considered "not at all" or "not important," 2 to 3 was considered "less important," 4 was "neutral," 5 to 6 was "somewhat important," and 7 was considered "very much" or "very important."

Factors Influencing College Choice

Descriptive statistics suggest that there are a few factors that are more influential than others in the decision to attend a certain institution in the United States among the students who responded to the survey. Table 2 provides the means and standard deviations of each choice variable and Table 3 displays the percent of respondents who selected each choice variable.

Table 2

Factors Influencing College Choice

<i>Factors (including item number)</i>	<i>m</i>	<i>sd</i>
16. Preparation for the future	5.96	1.43
1. Academic reputation/quality of school	5.59	1.46
2. Strength of academic program	5.56	1.38
7. Social atmosphere	4.58	1.82
9. Availability of sports and athletics	4.57	2.01
15. Just wanted to study in the U.S.	4.40	2.02
3. Famous/well-known faculty	4.39	1.79
5. Cost	4.24	2.18
8. Athletic reputation	4.23	2.12
10. Friends recommended the school	4.04	2.07
14. Size of the school	4.00	1.90
4. Academic program not available in home country	3.39	2.14
6. Availability of financial aid	3.04	2.31
13. Location of school in U.S.	2.81	1.92
11. Religious focus of the school	2.36	1.72
12. Proximity to home	2.19	1.74

Note. n = 54.

Table 3

Percentage of Responses on the Likert Scale of Factors Influencing College Choice

	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
Academic reputation/quality of school	1.9	3.7	3.7	9.3	18.5	31.5	31.5
Strength of academic program	1.9	1.9	7.4	7.4	13.0	46.3	22.2
Famous/well-known faculty	9.3	5.6	14.8	22.2	16.7	18.5	13.0
Academic program not available in my home country	27.8	16.7	9.3	16.7	7.4	9.3	13.0
Cost	14.8	14.8	7.4	18.5	5.6	16.7	22.2
Availability of financial aid	44.4	11.1	7.4	5.6	9.3	9.3	13.0
Social atmosphere	9.4	5.7	11.3	13.2	28.3	15.1	17.0
Athletic reputation	15.1	13.2	5.7	20.8	11.3	13.2	20.8
Availability of sports and athletics	13.2	5.7	9.4	15.1	15.1	22.6	18.9
Friends recommended the school	18.9	9.4	9.4	17.0	15.1	17.0	13.2
Religious focus of the school	49.1	15.1	11.3	9.4	7.5	5.7	1.9
Proximity to home	61.5	3.8	11.5	7.7	9.6	3.8	1.9
Location of school in U.S.	40.4	9.6	15.4	15.4	9.6	1.9	7.7
Size of the school	17.3	9.6	7.7	17.3	25.0	15.4	7.7
Just wanted to study in the U.S.	17.3	3.8	7.7	13.5	23.1	19.2	15.4
Preparation for the future	1.9	0.0	5.8	9.6	9.6	21.2	51.9

Note. n = 54.

“Preparation for the future” ($M = 5.96$, $SD = 1.43$), “academic reputation/quality of the school” ($M = 5.59$, $SD = 1.46$), and “strength of the academic program” ($M = 5.56$, $SD = 1.38$) were found to be most influential in one’s college choice. Fifty-one percent of participants identified “preparation for the future” as a factor that they considered “very much” in the decision, while 31.6% rated this factor as “somewhat important.” “Academic reputation/quality of school” was considered “very much” by 31.5%, while 50% rated this factor as “somewhat important.” “Strength of the academic program” was considered “very much” by 22.2% of the participants, with 59.3% rating it as “somewhat important.”

Factors that were not considered to a great extent in the college decision process by the participants included “proximity to home” ($M = 2.19$, $SD = 1.74$), the “religious focus of the school” ($M = 2.36$, $SD = 1.72$), “availability of financial aid” ($M = 3.04$, $SD = 2.31$), and “location of the school in the United States” ($M = 2.81$, $SD = 1.92$). Sixty-one percent did not consider proximity to home “at all” in the decision of where to attend college, while 15.3% rated this factor as “less important.” “Religious focus” was not considered to a great extent either, as 49.1% did not consider this factor “at all,” while 26.4% rated it as “less important.” Forty-four percent of respondents did not consider the “availability of financial aid” “at all” in the decision, and 18.51 % rated this as “less important.” Regarding “location of the school in the United States,” 40.4% did not consider this factor “at all,” and 25% rated this as “less important.”

Factors Influencing Retention

The factors participants reported as the most critical to success in remaining in college were “personal motivation” ($M = 6.10$, $SD = 1.07$), “good grades” ($M = 5.58$, $SD = 1.27$), and “good knowledge of the English language” ($M = 5.54$, $SD = 1.31$). Table 4 provides the means

Table 4

Factors Influencing Retention

<i>Factors (including item number)</i>	<i>m</i>	<i>sd</i>
2. Personal motivation	6.10	1.07
3. Good grades	5.58	1.27
4. Good knowledge of the English language	5.54	1.31
1. Strong faculty support/positive interactions with faculty	5.29	1.47
5. Familiarity with the American academic/class environment	5.27	1.35
13. Commitment to the institution	5.19	1.52
14. Family expectations	5.17	1.79
11. Familiarity with the American social environment	5.00	1.41
6. International advising staff	4.81	1.68
9. Having good friends from non-U.S. countries other than own	4.79	1.81
7. Having good American friends	4.63	1.67
8. Having good friends from home country	4.52	1.99
16. Availability of financial aid/scholarships	4.52	2.16
12. Belonging to a social community	4.48	1.83
10. Living on campus/near other students	4.19	1.96
15. Religious beliefs/faith	3.29	2.20

Note. n = 54.

and standard deviations of each retention variable and Table 5 displays the percent of the respondents who selected each retention variable. “Personal motivation” was identified as “very important” by 44.2%, while 52% rated it as “somewhat important,” totaling 96.2% of the participants. “Good grades” were considered “very important” to success in remaining in college by 28.8%, with 57.7% rating this factor as “somewhat important.” “Good knowledge of the English language” was believed to also be critical, with 32.7% rating it as “very important” and 46.1% rating it as “somewhat important.”

Participants in the study believed that the majority of the factors presented were critical to success in remaining in college to an extent. Factors that were believed to be the least critical to success in remaining in college included “religious beliefs/faith” ($M = 3.29$, $SD = 2.20$) “living on campus/near other students” ($M = 4.19$, $SD = 1.96$), and the “availability of financial aid/scholarships” ($M = 4.52$, $SD = 2.16$). Thirty-four percent did not believe that one’s “religious beliefs/faith” was critical “at all” to success, and 21.2% rated this factor as “less important.” Twenty-five percent rated “living on campus/near other students” as “less important,” while 11.5% did not believe this was critical “at all.” Regarding the “availability of financial aid/scholarships,” 15.4% did not believe this to be a critical factor “at all,” and 19.2% rated this factor as “less important.”

Relationship Between College Choice and Retention

Findings suggest that there is a weak to moderate positive correlation between the factors influencing one’s college choice and the factors believed to influence one’s retention in college. Table 6 presents a summary of the correlation analysis. All retention variables had at least one statistically significant ($p < .01$ or $p < .05$) positive correlation to a choice variable, while all choice

Table 5

Percentage of Responses on the Likert Scale of Factors Influencing Retention

	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
Strong faculty support/positive interactions with faculty members	1.9	5.8	1.9	11.5	34.6	19.2	25.0
Personal motivation	0.0	1.9	1.9	0.0	21.2	30.8	44.2
Good grades	1.9	0.0	3.8	7.7	34.6	23.1	28.8
Good knowledge of the English language	0.0	1.9	3.8	15.4	28.8	17.3	32.7
Familiarity with the American academic/class environment	0.0	1.9	11.5	11.5	28.8	25.0	21.2
International student advisors and staff	1.9	7.7	13.5	23.1	13.5	19.2	21.2
Having good American friends	5.8	3.8	13.5	23.1	23.1	13.5	17.3
Having good friends from your home country	9.6	9.6	13.5	13.5	15.4	17.3	21.2
Having good friends from non-U.S. countries other than your own	3.8	9.6	11.5	19.2	13.5	19.2	23.1
Living on campus/near other students	11.5	15.4	9.6	11.5	23.1	15.4	13.5
Familiarity with the American social environment	3.8	0.0	7.7	19.2	36.5	15.4	17.3
Belonging to a social community	9.6	5.8	15.4	13.5	21.2	21.2	13.5
Commitment to the institution	1.9	3.8	9.6	13.5	21.2	28.8	21.2
Family expectations	7.7	1.9	7.7	11.5	17.3	26.9	26.9
Religious faiths/beliefs	34.6	13.5	7.7	7.7	17.3	7.7	11.5
Availability of financial aid/scholarships	15.4	1.9	17.3	17.3	5.8	13.5	28.8

Note. n = 54.

Table 6

Correlations Between College Choice and Retention Variables

	<i>retention:</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<i>choice:</i>																	
Academic reputation/quality of school		.50**	.40**	.32*	.38**	.35*	.43**	.08	.18	.30*	.09	-.09	.04	.31*	.44**	.14	-.16
Strength of academic program		.49**	.43**	.21	.24	.19	.55**	.03	.06	.21	.03	-.09	.09	.40**	.43**	.16	-.19
Famous/well-known faculty		.40**	.34*	.41**	.28**	.29*	.40**	.29*	.30*	.21	.22	-.13	-.04	.21	.32*	.22	-.21
Academic program not available in my home country		.33*	.15	.12	.19	.20	.08	.08	.15	.16	-.11	-.08	-.20	-.00	-.09	-.00	.10
Cost		.25	.33*	.34*	.32*	.44**	.38**	.32*	.23	.48**	.09	.32*	.21	.36**	.39**	.05	.02
Availability of financial aid		.27	.00	.14	.23	.10	.01	.00	-.19	-.06	.04	.20	-.01	.26	.19	-.24	.37**
Social atmosphere		.30*	.34*	.12	.27*	.19	.34*	.13	.18	.43**	.20	.28*	.27	.35*	.30*	.02	-.01
Athletic reputation		.00	-.14	.11	.06	.27	.13	.29*	.22	.07	.10	.03	.20	.20	-.00	.23	-.03
Availability of sports and athletics		.04	-.10	.04	.07	.24	.18	.32*	.18	.19	.04	.16	.22	.17	.04	.13	.07
Friends recommended the school		.33*	.20	.06	.31*	.28*	.23	.28*	.21	.34*	.25	.34*	.53**	.31*	.36**	.15	.05
Religious focus of the school		.07	.10	.10	.08	.21	.23	.24	.25	.32*	.28*	.37**	.28**	.28*	.23	.58**	-.08
Proximity to home		.15	.06	-.10	-.01	.15	.11	.11	.14	.11	.22	.15	.17	.09	.09	.34*	-.12
Location of school in U.S.		.07	.23	.06	.02	.01	.26	.32*	.09	.32*	.03	.33*	.28*	.04	.20	.18	.03
Size of the school		-.17	-.17	-.15	-.10	-.13	.10	.02	.13	.08	-.04	-.04	.19	.12	-.01	.21	-.21
Just wanted to study in the U.S.		.04	-.18	-.03	.24	.19	.06	-.01	-.10	.16	-.10	.26	.25	.40**	.14	.11	.24
Preparation for the future		.37**	.27	.17	.26	.21	.32*	.22	.08	.16	-.10	.07	.09	.42**	.26	.18	.18

Note. 1=Strong faculty support/positive interactions with faculty members. 2=Personal motivation. 3=Good grades. 4=Good knowledge of the English language. 5=Familiarity with the American academic/class environment. 6=International student advisors and staff. 7=Having good American friends. 8=Having good friends from your home country. 9=Having good friends from non-U.S. countries other than your own. 10=Living on campus/near other students. 11=Familiarity with the American social environment. 12=Belonging to a social community. 13=Commitment to the institution (school spirit and loyalty). 14=Family expectations. 15=Religious faiths/beliefs. 16=Availability of financial aid/scholarships.

* $p < .05$, ** $p < .01$

variables, with the exception of size of the institution, had at least one significant positive correlation to a retention variable.

Participants who considered “academic reputation/quality of school” in choosing their undergraduate institution also believe that the following nine factors are critical to success in remaining in college, with a range of $r=.30$ to $r=.51$: “having good friends from non-U.S. countries other than their own” ($r=.30$, $p<.05$), “commitment to the institution” ($r=.31$, $p<.05$), “good grades” ($r=.32$, $p<.05$), “familiarity with the American academic/class environment” ($r=.35$, $p<.05$), “good knowledge of the English language” ($r=.38$, $p<.01$), “personal motivation” ($r=.40$, $p<.01$), “international student advisors and staff” ($r=.43$, $p<.01$), “family expectations” ($r=.44$, $p<.01$), and “strong faculty support/positive interactions with faculty members” ($r=.50$, $p<.01$).

Participants who considered the “strength of the academic program” in their choice of institution also believe that certain factors influence one’s retention. Moderate positive correlations with the following factors were found significant ($r=.40$ to $r=.55$): “commitment to the institution” ($r=.40$, $p<.01$), “family expectations” ($r=.43$, $p<.01$), “personal motivation” ($r=.43$, $p<.01$), “strong faculty support/positive interactions with family members” ($r=.49$, $p<.01$), and “international student advisors and staff” ($r=.55$, $p<.01$).

Participants who chose an institution considering “famous/well-known faculty” also believe that certain factors influence retention, as shown by weak correlations of the following variables ($r=.28$ to $r=.41$): “good knowledge of the English language” ($r=.28$, $p<.05$), “familiarity with the American academic/class environment” ($r=.29$, $p<.05$), “having good American friends” ($r=.29$, $p<.05$), “having good friends from the home country” ($r=.30$, $p<.05$), “family

expectations" ($r=.32, p<.05$), "personal motivation" ($r=.34, p<.05$), "strong faculty support/positive interactions with faculty members" ($r=.40, p<.01$), "international student advisors and staff" ($r=.40, p<.01$), and "good grades" ($r=.41, p<.01$).

Weak to moderate correlations were found among the consideration of "cost" in determining which school to attend and ten retention variables ($r=.32$ to $r=.48$): "having good American friends" ($r=.32, p<.05$), "familiarity with the American social environment" ($r=.32, p<.05$), "good knowledge of the English language" ($r=.32, p<.05$), "personal motivation" ($r=.33, p<.05$), "good grades" ($r=.34, p<.05$), "commitment to the institution" ($r=.36, p<.01$), "international student advisors and staff" ($r=.38, p<.01$), "family expectations" ($r=.39, p<.01$), "familiarity with the academic/class environment" ($r=.44, p<.01$), "having good friends from non-U.S. countries other than your own" ($r=.48, p<.01$).

Weak correlations were found between the influence of "social atmosphere" on one's college choice and eight retention variables ($r=.27$ to $r=.43$): "good knowledge of the English language" ($r=.27, p<.05$), "familiarity with the American social environment" ($r=.28, p<.05$), "family expectations" ($r=.30, p<.05$), "strong faculty support/positive interactions with faculty members" ($r=.30, p<.05$), "personal motivation" ($r=.34, p<.05$), "international student advisors and staff" ($r=.34, p<.05$), "commitment to the institution" ($r=.35, p<.05$), and "good friends from non-U.S. countries other than their own" ($r=.43, p<.01$).

Weak to moderate positive correlations were found between the "influence of friends recommending the school to attend" and nine retention variables ($r=.28$ to $r=.53$): "having good American friends" ($r=.28, p<.05$), "familiarity with the American academic/class environment" ($r=.28, p<.05$), "good knowledge of the English language" ($r=.31, p<.05$), "commitment to the

institution" ($r=.31, p<.05$), "strong faculty support/positive interactions with faculty members" ($r=.33, p<.05$), "having good friends from non-U.S. countries other than one's own" ($r=.34, p<.05$), "familiarity with the American social environment" ($r=.34, p<.05$), "family expectations" ($r=.36, p<.01$), and "belonging to a social community" ($r=.53, p<.01$).

Regarding the "religious focus of the school" in choosing an undergraduate institution, six retention variables were found to show weak to moderate positive correlation ($r=.28$ to $r=.58$): "living on campus/near other students" ($r=.28, p<.05$), "belonging to a social community" ($r=.28, p<.05$), "commitment to the institution" ($r=.28, p<.05$), "having good friends from non-U.S. countries other than one's own" ($r=.32, p<.05$), "familiarity with the American social environment" ($r=.37, p<.01$), and "religious beliefs/faith" ($r=.58, p<.01$).

Weak correlations were shown as statistically significant between the choice factor of the "location of the school in the U.S. (e.g. big city, mountain town, etc)" and four social retention factors ($r=.28$ to $r=.33$): "belonging to a social community" ($r=.28, p<.05$), "having good American friends" ($r=.32, p<.05$), "having good friends from non-U.S. countries other than one's own" ($r=.32, p<.05$), and "familiarity with the American social environment" ($r=.33, p<.05$).

Weak to moderate positive correlations were found between those who chose their school considering "preparation for the future" and three retention variables ($r=.32$ to $r=.42$): "international student advisors and staff" ($r=.32, p<.05$), "strong faculty support/positive interactions with faculty members" ($r=.37, p<.01$), and "commitment to the institution" ($r=.42, p<.01$).

Participants who chose their institution to an extent because their "academic program was not available in their home country" believe that "strong faculty support/positive interactions

with faculty members” is influential in retention, as a statistically significant, weak positive correlation was found ($r=.33$, $p<.05$).

Participants who considered “cost” to an extent when selecting their institution also believe that the “availability of financial aid” influences retention, though there is a weakly moderate correlation ($r=.37$, $p<.01$).

Weak, positive correlations were shown between two athletic considerations in college choice and the belief that “having good American friends” influences retention: the “athletic reputation of the school” ($r=.29$, $p<.05$) and the “availability of sports and athletics” ($r=.32$, $p<.05$).

“Proximity to home” as a choice factor and “religious beliefs/faith” as a factor influencing retention demonstrated a weak, positive correlation ($r=.34$, $p<.05$).

A moderately weak correlation was found between respondents who chose their institution “just because they wanted to study in the U.S.” and those who believe that “commitment to the institution” influences retention ($r=.40$, $p<.05$).

Qualitative Findings

Previous sections highlight findings from the quantitative analysis of survey data. This section focuses on the qualitative analysis of the open-ended questions.

Factors Influencing College Choice

Consistent with the survey findings, overarching themes of the factors which influenced the participants’ college choice included academic, social, and personal. The majority of responses showed that the strength of the institution or particular field of study was the main influence in determining college choice. Terms such as “good program,” “very reputed school,”

“top university,” “well-known,” “top notch,” and “most famous and strong qualified program in the U.S.A.,” provided the strong influence of academics on choice. One participant mentioned that “a lot of my friends are very sensitive about their school ranking and its popularity. So, the reputation of the school was the crucial part of choosing which school to attend.” In addition, another respondent claimed that by attending “college in U.S will give me more opportunities to get a good job later on.”

Social influences were also considered in students’ college choice. One participant reported, “I have a relative (aunt) living near to my university, which assured my parents to feel safe about me going to USA all by myself.” Another claimed that the institution was “recommended by high school principal in my home country.”

Personal influences also affected choice. While the participant did not elaborate, it was mentioned that the school chosen did not have the very best academic program in the nation, but that “I believed that [choice school] would provide more than [top ranked school] would do.”

Three participants did not give financial reasons for their college choice, but each responded that their current institution should provide more scholarship opportunities for international students.

Factors Influencing Retention

Overarching themes of the factors which influence the participant to remain at his or her institution include academic, social, financial, and religious. Findings generally reflect survey results, although some participants also stressed the importance of social factors that were not as apparent in the survey findings.

Academically, participants shared that the strong programs and opportunities for practical application influenced their retention. Responses included, “chances to practice my knowledge,” “make my skill better than before,” “[my program] is rated one of the best,” “good program,” and “my program is among the top ten in the nation.” One participant explained, “Even though I struggle with the American way of being, I do love the institution and all that I am learning, so I see it as a long term investment for when I reach the job market me being here right now.”

Social factors also influence the retention of some participants. One shared, “I don't want to adapt into another strange environment again. I want to concentrate on my academic life rather than to spend few months trying to get new friends and adjust my lifestyle.” Others enjoy the social opportunities and environment: “good campus, good location, low criminal rate, and cheap living cost,” “it’s a nice environment,” “my school has a variety of very good social clubs,” and the school is “close to my relatives.”

Financial factors influenced the retention of those who receive scholarship money or who believe that the school is not expensive for their parents. One student mentioned that he or she is remaining because “they provide me with a certain amount of scholarships.”

Regarding religion, one student shared that, “I’m a Christian so my native church (a church that provides Korean service) is nearby,” and that one of the school’s organizations included “KCCC (Korean Campus Crusade for Christ).”

Another student simply shared that he or she is remaining at the institution because “I am highly satisfied with this school.”

CHAPTER FIVE

Discussion and Conclusions

Recall, the purpose of this study was to investigate factors influencing the choice and retention of international students at U.S. institutions of higher learning. Three research questions guided this analysis:

- a. What factors influence choice of the U.S. institution one attends among international students at four-year, large, public, Research I institutions?
- b. What factors influence student retention among international students attending four-year, large, public, Research I institutions in the U.S.?
- c. What is the relationship between choice and retention factors for international students attending four-year, large, public, Research I institutions in the U.S.?

Findings indicate that international students at four-year, large, public, Research I institutions tend to consider preparation for the future, strength of the academic program, and academic reputation/quality of the school when choosing the undergraduate institution to attend. It is also evident that the students believe that personal motivation, good grades, and good knowledge of the English language are important in terms of retention. Finally, significant correlations were uncovered between academic choice factors and academic retention factors and social choice factors and social retention factors. This chapter explores the findings, relates the findings to theory, and discusses implications and limitations of the study.

College Choice

The participants overwhelmingly chose their undergraduate institution based on academic factors. Over half of the participants (51.7%) considered preparation for the future “very much”

in selecting their school, and the majority (82.7%) considered this preparation to a great extent. Institutions of higher education are marketed to prepare students for the future; this is a common goal of these institutions. Not only do colleges and universities prepare students, but living overseas allows students to have a more global perspective of the world, an invaluable experience in today's society. Students are prepared for the future in numerous ways, including attaining a degree for a particular employment position, learning practical skills for the workplace, gaining a sense of self, and interacting with others from a variety of backgrounds. One possible explanation for the great consideration of this factor is that the students desire the best career path possible; they see their undergraduate education as a means to this end. One student wrote, "college in U.S will give me more opportunities to get a good job later on."

A majority (81.5%) of the participants also considered the strength of the academic program to a great extent in selecting their undergraduate institution. The participants in this study clearly desired strong academic preparation in their decision to attend a certain school in the United States. Rankings reports of individual academic programs are easily accessible to the public and the students who responded most likely did research on individual institutions and programs before choosing to attend a certain college or university. In the open-ended response section, one student noted that his or her program was the "most famous and strong qualified program in the U.S.A." One possible explanation for this is related to preparation for the future: the students want to be as prepared as possible for the ideal career, through the knowledge gained as well as the degree attained.

Closely related to preparation for the future and the strength of the academic program, the academic reputation/quality of the school was considered as somewhat important for 81.5% of

the participants. Institutional rankings reports are also easily accessible, and the participants considered the desire to attend a university of strong standing and quality per the statistics and reports available. It is possible that the students did not want to spend time and money on a degree from an institution they considered mediocre; they desired the very best, whether for the social status that it could bring to each in their home countries or the job it could provide in the future. In many countries today, social levels are prominent in the culture; education, especially at a top university, can assist in changing one's position in society. One participant mentioned that "a lot of my friends are very sensitive about their school ranking and its popularity. So, the reputation of the school was the crucial part of choosing which school to attend." Not only can this factor be viewed from an academic angle, but the university ranking might have a social effect.

Among the students who responded to the study, strong academics in preparation for the future was considered to the greatest extent by the vast majority. International undergraduate students desire the very best education to prepare for the future.

Retention

While the majority of participants believed that personal motivation and academic factors are the most critical to success in remaining in college, qualitative findings suggest social influences on retention.

Almost all (96.2%) of the participants consider personal motivation to be a critical factor in remaining in college. One explanation for this is that international students must adapt to a number of cultural differences in order to complete their studies. Not only must the students adapt to the academic environment and expectations of their professors, but they also must adapt

to a new culture and abide by immigration regulations. One participant shared that “I struggle with the American way of being.” Many students do not have family in the United States, and the distant separation does not allow for a quick weekend trip home, to be motivated and encouraged by family and friends. In addition, some students do not want to “give up” if times become difficult, as this could possibly bring shame to the family and may result in difficulty in obtaining a visa in the future. The process for an international student to study at a U.S. institution is much lengthier than for an American student, and personal motivation can help push the international student to remain at the institution after all that has been invested.

Eighty-six percent of the participants said that good grades were critical in remaining in college. Many colleges and universities have academic standards which the student must follow; if one’s GPA falls below a certain level, the student could be placed on probation or be asked to leave the school. It is possible that international students are indeed aware of this issue, and believe that one must achieve good grades in order to remain in school.

Good knowledge of the English language is also considered critical in remaining in college, according to 78.8% of the participants. With the exception of foreign language and literature classes, U.S. institutions of higher education operate in the English language. International students must achieve certain scores on English proficiency examinations in order to attend a college or university in the United States, but students could still encounter difficulty in the U.S. classroom setting or in understanding various accents of professors and fellow students. Passing an English proficiency exam, while indicative of ability, is not the same as immersion in a language. For 87% of the participants, English is not the first language. It is

possible that good knowledge of the English language is not necessarily a reason to stay at an institution, but an imperative need in order to not be forced to leave.

Qualitatively, participants expressed academic and social factors as to the reasons behind remaining at their current institution. As demonstrated with good grades and good knowledge of the English language, academics are important to the respondents. Many responded that their academic program is a strong program, while others commented on the positive overall environment, such as the numerous social opportunities, safety, good location, and good cost of living. One participant explained that academics were important, but socialization also played a role in retention: “I don't want to adapt into another strange environment again. I want to concentrate on my academic life rather than to spend few months trying to get new friends and adjust my lifestyle.” Personal motivation and academic factors are critical in remaining in college, but social factors are considered as well.

Relationship Between Choice and Retention

Numerous factors considered in college choice positively correlate with many factors considered to be critical in retention, according to the participants in this study.

It is possible that students who considered academic factors to a great extent in selecting a college or university also believe that academic factors are critical to success in remaining at that institution. Choice factors of academic reputation/quality of school and famous well-known faculty each display a weak to moderate positive correlation with the retention factors of strong faculty support/positive interactions with faculty members, good grades, good knowledge of the English language, and familiarity with the American academic/class environment, in addition to personal motivation, international student advisors and staff, and family expectations. These

correlations lead to the conclusion that among the participants of this study, if one places importance on academics in college choice, importance will also be placed on academics in retention.

A weakly moderate to moderate positive correlation was found between students whose friends recommended the school and a number of social factors that influence retention: having good American friends, having good friends from non-U.S. countries other than their own, familiarity with the American social environment, belonging to a social community, commitment to the institution, as well as family expectations. It is possible that students who have friends who recommended their current institution were also attending the school or knew of a social support network at the school and introduced the participant to this group. The participant might not have placed as much importance on socialization initially, but has found that socialization is indeed important. On the reverse side, the participant may initially have considered socialization to be extremely important, and is attending his or her institution because a friend recommended it, possibly affirming that the participant would have a desired support group already in place.

While the college choice variable of preparation for the future was considered very much by 51.7% of the participants and considered as somewhat important by 82.7%, it is weakly related to only three retention variables: strong faculty support/positive interactions with faculty members, international student advisors and staff, and commitment to the institution. However, preparation for one's future is directed by faculty members and international student advisors. Students who desire to be prepared for the future are possibly looking to those who specialize in the areas of academics and immigration, in order to make the best decisions possible for the

future. One possible explanation for the relationship with commitment to the institution is the alumni networking focus in finding a good job that is strong at many institutions.

Weak to moderate positive relationships exist between college choice factors and retention factors of the study's respondents. Students who considered academic factors in selecting a college tend to believe that academic factors are critical to retention, while social college choice and retention factors are also positively related.

Relationship with Existing Theory

Findings from the present study reflect those reported by scholars in the fields of college choice and retention. College choice findings support aspects of Hossler and Gallagher's (1997) three-stage model of college choice, as well as research by Martin and Dixon (1991) and Reynolds (2007). Retention findings reflect those reported by Pascarella and Terenzini (2005), Kok-Soo (2008), Tinto (1987), and Astin (1975).

College choice. Martin and Dixon (1991) and Reynolds (2007) found that selecting a college that has a strong major in the student's field of interest, excellent teachers, preparation for a career, and accessible professors is important. This study extends that line of research and shows that the same is true for undergraduate international students at U.S. institutions. The majority of participants reported that preparation for the future, academic reputation/quality of school, and strength of academic program were considered to the greatest extent in their school selection.

Hossler and Gallagher (1997) reported that perception of academic quality, cost, and availability of financial aid are influential in matriculation. This study echoes that perception that academic quality is influential. However, among this study's participants, cost and financial aid

do not appear to be a large factor, but only a moderate one, if considered at all. Forty-four percent of participants did not consider financial aid availability at all in their decision, and 55.6% did not consider cost to a great extent. An explanation for this could possibly be that the international students who study in the United States have the financial means to do so and are not concerned with cost, while there may be students in other countries who wish to study in the United States, but can not afford to do so. Thus, they are not included in the population of students surveyed.

This study also supports the scant research on international student college choice. Redden (2007) reported that the strength of the academic program, strong reputation of the institution, and career preparation are influential in international student college choice. These three factors were found to influence the participants of this study to the greatest extent.

Retention. Pascarella and Terenzini (2005) claim that grades are a strong predictor of persistence in college. This study found that this holds true among international students, as 86.5% of the participants also believe that grades are critical to success in remaining in college. This study also found that good knowledge of the English language is considered critical to retention, which is related to achieving good grades, according to Kok-Soo (2008).

This study found that almost all of the participants considered personal motivation to be critical in remaining in college, which expands the work of Tinto (1987) to the international student population. Tinto (1987) reported that individual goals and commitments influence students' response to the stress of transition to college. "Many students will stick it out even in the most trying conditions, while others will withdraw even under minimal stress" (Tinto, 1987, p.49). As international students face different obstacles than American students, the participants

of this study appear to reflect Tinto's finding, as many consider personal motivation to be critical to retention.

Astin (1975) found that social involvement and integration are extremely important to retention. The qualitative findings of this study expand on his work to international students, suggesting that social factors influence retention of international students to an extent.

Hofstede's (1991) cultural patterns of individualism-collectivism, power distance, and uncertainty avoidance are important to take into consideration, even though the findings of this study do not explicitly reveal these patterns as influencing retention. This study found that good grades are influential in retention. While good grades are achieved due to numerous factors (e.g. study skills, intelligence, etc.), a student must also be able to adapt to the U.S. individualistic classroom, interact appropriately with professors, and overcome possible uncertainty regarding assignments in order to succeed. In addition, it is possible that personal motivation was considered to such a great extent because cultural differences needed to be overcome in order to succeed. While these factors were not explicitly uncovered in the findings, they may still influence the results to a certain degree.

Implications

The findings of this study provide implications for policy, practice, and future research. In this study, participants considered good knowledge of the English language to be critical in retention. An English proficiency examination is typically required of non-native English speakers before acceptance to a U.S. college or university, but some students find that testing in English is very different from immersion in English. Some students, upon entrance to the university, must transfer to an intensive English language program, in order to increase their

ability in the language. Institutions that are interested in increasing the retention of international students should consider offering intensive language programs to international students before application to the university or as an option for students to increase language skills prior to enrollment. They might also provide additional supports to students such as English language workshops, tutors, and even observation opportunities of English conversational settings.

In the present study, international students chose their undergraduate institution based on institutional reputation and quality, academic program strength, and preparation for the future. This has implications for international student recruiters, who might consider promoting the variety of academic programs offered as well as providing information regarding school and program rankings in the United States. The recruiters could consider focusing on academics to a greater extent than the social aspects. In addition, recruiters could partner with Career Services and Alumni Affairs in promoting networking and internship opportunities available through the school, demonstrating opportunities for future success.

This study also has implications for professors and international student advisors. Participants believe that good grades and good knowledge of the English language are critical to success in remaining in college. If not practiced already, professors should be aware that different English accents and a fast pace of speech are not easily understood by non-native English speakers. Professors can pay special attention to speaking clearly to students, and show understanding, to a reasonable extent, if an international student is having a small amount of difficulty at the beginning of the semester. International student advisors can use these findings to consider promoting resources available on campus to assist in writing, study skills, or tutoring possibilities. If such resources are not present on one's campus, the international education office

or university administrators could consider developing a support or success center for students. Clearly other international students may have differing views on college choice and retention factors, but according to the participants of this study, recruiters, professors, and international student advisors should consider the implications of these findings.

The present study provides promising directions for future research. This study identified the factors influencing college choice and retention of international students on F-1 visas at two large public institutions. A future study might investigate the differences in factors influencing college choice and retention of students from different regions of the world. The cultures of different regions of the world place importance on a variety of factors that could potentially influence choice and retention, such as saving face, internal locus of control, and collectivist cultures. Such a study would expand on information about recruiting in different areas of the world and resources that need to be available for students from certain backgrounds.

Another future study could examine the differences in factors influencing college choice and retention of students on various types of visas. There could be different factors present which influence students on exchange, students sponsored by their home government, students who are seeking a U.S. degree, students who are working in the U.S., and students who are in refugee status. Knowledge of visa influences on choice and retention would also aid in recruiting certain students and the awareness of needs in helping the student persist.

A third study could investigate the differences in factors influencing college choice at different types of institutions. This study focused on students enrolled at large, public, research I institutions. International students may or may not consider differences among public and private, large and small, religious and secular, community college and research I institutions

when choosing which college to attend. Results from such a study would expand on the information available in recruiting students to attend such institutions.

Another study could explore the differences in factors influencing college choice and retention of undergraduate and graduate students. Graduate students are typically interested in specific research topics and have a greater possibility of financial aid assistance at some schools, whereas this study found that undergraduate students are not concerned with financial support and are interested in strong academic programs. These factors could influence both college choice and retention differently. The results from this study would increase the data available regarding international students as well as choice and retention.

Each of these possible future studies will expand existing knowledge on international student choice and retention.

Limitations

A few limitations of this study may have influenced the findings discussed. While statistical significance was found for numerous correlations, the sample size of the population was only 54. Five hundred students were contacted and financial incentives were provided, yet the number of undergraduate participants on F-1 visas was lower than desired. As a result, these 54 students may or may not have representative views of the populations of international students at the two institutions studied. It is also possible that only those students with strong feelings about their college choice decisions or reasons to remain at the institution responded.

Over half of this study's participants are of Asian citizenship. While Asian countries send more students to study in the United States than other regions, the findings of this study may not

accurately represent college choice and retention factors of students from other areas of the world.

Applying college choice and retention theory wholesale may limit the results of the study. It is possible that using theory developed in a non-Western country or drawing together multiple theories would have expanded the ability to investigate the topic. However, these are widely used, well-researched, and well-documented theories, so they also seemed reasonable to use as well.

Another limitation is that the researcher works with international students at Institution A. While some of the participants may not be familiar with the researcher, others may have felt compelled to participate in the study as a result of the professional relationship. This may have been an advantage in the study's response rate, but the possibility exists that some responses could be skewed.

The college choice variable of preparation for the future was found to be considered to the greatest extent by the participants. However, it is uncertain as to whether this preparation is in a specific area or covers a broad spectrum. For example, students may have responded similarly if they considered preparation through academic knowledge and practical skills, finding a particular job, gaining entrance into the United States to remain forever, or to learn life skills, among other possibilities. While preparation for the future was found to be of importance, the exact area of importance was not specified. It could possibly be presumed that this preparation regards academic skills leading to a job, as ascertained from other responses regarding academic strength and reputation of the school.

Despite these limitations, the study yields important information about college choice and retention of international students. As the world appears to become increasingly smaller and forces of globalization shape the general complexion of higher education, information like that presented here will become increasingly important to higher education and student affairs.

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APPENDICES

Appendix A

Thank you for your participation. Participation in this research study is strictly voluntary, and you may refuse to answer any question at any time with no penalty. Your responses are confidential.

If you give consent to participate, please enter your NetID/PID or email address below. This will not correspond with your responses, but will be used to randomly select the prize winners.

What is your gender?

- ☐ Male
- ☐ Female

What type of visa do you hold?

- ☐ F-1
- ☐ J-1
- ☐ Other

What is your current academic level?

- ☐ Undergraduate (degree-seeking)
- ☐ Exchange or ISEP (non-degree-seeking)
- ☐ Master's
- ☐ Doctoral
- ☐ Post-Doctoral
- ☐ Other

What school do you attend?

- ☐ The University of Tennessee
- ☐ Virginia Polytechnic Institute and State University
- ☐ Other

Regarding the current degree you are working on, did you start your classes at another institution before transferring to your current school? (In other words, are you a transfer student for academic purposes?)

- ☐ Yes
- ☐ No
- ☐ I am not seeking a U.S. degree

What is your home country?

What is your first language?

How long have you been in the United States? (total number of years)

- ☐ Less than 6 months
- ☐ 6 months - 1 year
- ☐ 1-2 years
- ☐ 3-4 years
- ☐ 4-6 years
- ☐ Over 6 years

How long have you been studying at your current institution?

- ☐ Less than 6 months
- ☐ 6 months - 1 year
- ☐ 1 - 2 years
- ☐ 3 - 4 years
- ☐ 5 - 6 years
- ☐ Over 6 years

Had you visited the United States before applying to study at your current school?

- ☐ Yes
- ☐ No

Please rate the extent to which you considered the following in your choice to attend your current institution.

	1 - Not at all	2	3	4	5	6	7 - Very much
Academic reputation/quality of school	☐	☐	☐	☐	☐	☐	☐
Strength of academic program	☐	☐	☐	☐	☐	☐	☐
Famous/well-known faculty	☐	☐	☐	☐	☐	☐	☐
Academic program not available in my home country	☐	☐	☐	☐	☐	☐	☐
Cost	☐	☐	☐	☐	☐	☐	☐
Availability of financial aid	☐	☐	☐	☐	☐	☐	☐

Please rate the extent to which you considered the following in your choice to attend your current institution.

1 - Not at all	2	3	4	5	6	7 - Very much
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[illegible]

Please rate the extent to which you considered the following in your choice to attend your current institution.

[illegible]

Please rate the extent to which you believe each of the following is critical to success in remaining in college.

[illegible]

International student
advisors and staff

Please rate the extent to which you believe each of the following is critical to success in remaining in college.

[illegible]

Please rate the extent to which you believe each of the following is critical to success in remaining in college.

[illegible]

Please feel free to share any additional comments on your decision to attend your current institution.

Please feel free to share any additional comments on why you are staying at your current institution.

Appendix B

Dear International Student,

I invite you to participate in a research study that I am conducting on the university choice and retention of international students. This research involves a short online questionnaire that will take approximately 5 to 10 minutes to complete. Participation in this research study is strictly voluntary, and you may refuse to answer any question at any time without penalty. Your responses will be held in the strictest of confidence.

Students who complete the survey will be entered into a lottery for cash prizes: one award of \$50 and two awards of \$25 will be given at random. The prize drawing will take place in early February.

If you consent to participate in this survey, please click on this link below:

<http://survey.utk.edu/mrIWeb/mrIWeb.dll?I.Project=FINALTHESIS>

If you cannot click on the link, copy and paste the URL into your Internet browser address bar and hit "Enter." A copy of the informed consent is shown on the first page of the survey.

I appreciate your time and willingness to participate. Thank you for your assistance! If you have any questions or concerns, please feel free to contact me.

Elizabeth Washam
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Center for International Education
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VITA

Elizabeth A. Washam was born in Newport News, Virginia. She attended Wake Forest University in Winston-Salem, North Carolina, where she received her Bachelor of Arts degree in Communication and French. During her time as an undergraduate, she studied as an international student at the Université de Bourgogne in Dijon, France. Upon graduation, she lived on the island of Corsica for three years, and returned to the United States to teach high school French. She then continued her own education in the College Student Personnel program at the University of Tennessee, Knoxville. She intends to pursue a career in international student advising and education abroad.