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Value of U.S. higher education among students from China and Russia

Inna Kuznetsova
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Value of U.S. higher education among students from China and Russia

by

Inna Valeryevna Kuznetsova

A dissertation submitted to the graduate faculty

in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Major: Education

Program of Study Committee:
Linda Serra Hagedorn, Co-major Professor
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The student author, whose presentation of the scholarship herein was approved by the program of study committee, is solely responsible for the content of this dissertation. The Graduate College will ensure this dissertation is globally accessible and will not permit alterations after a degree is conferred.

Iowa State University

Ames, Iowa

2018

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ABSTRACT

Chinese students are currently the largest group of international students pursuing higher education in the U.S. The number of Chinese students has been steadily increasing in the last decade, but many researchers warn that international student mobility should not be taken for granted. Other countries such as the U.K., Australia, New Zealand, and Russia have established themselves as strong competitors in the unstable international higher education market. While many Russian students pursue higher education abroad, the number of Russian international students in U.S. higher education institutions is low. Given the multiple political, economical, and educational similarities between Russia and China, why is the discrepancy in the numbers of students from these countries coming to study in the U.S. so pronounced? How do Chinese and Russian students perceive the value of U.S. higher education while living in their native countries? How does perceived value affect their desire to study in the U.S.? Seeking answers to the above questions guided this study. The total sample of this study included 225 responses: 119 from Russia and 106 from China. This study used a multiple-choice and open-ended questions survey to seek answers to the questions related to the value of U.S. higher education in accordance to Expectancy-Value Theory. The answers to the survey were analyzed using the Theory of Planned Behavior by Ajzen (1985). The findings revealed a significant difference in the desire to study in the U.S. between Chinese and Russian students. According to the survey given the opportunity to study in the U.S., 87.9% of Chinese participants indicated that they would take advantage of the opportunity, while only 37% of Russian participants would have taken the opportunity. Moreover, according to the independent t-test, Chinese students place a significantly higher value on U.S. higher education in terms of enjoyment and interest (Intrinsic value) and
prestige (Prestige value). Russian students have confirmed that the current political climate between the U.S. and Russia concerns the students and plays a major role in the students’ lack of desire not to study in the U.S. In general, Chinese students have shared positive perceptions about U.S. higher education while Russian students were less excited to study in the U.S. According to Ajzen’s Theory of Planned Behavior, if behavior is perceived as positive and beneficial a person or persons are more likely to engage in it. The study concludes that Chinese students see U.S. higher education as valuable, positive, and prestigious. The Chinese students wish to pursue their academic dreams on American soil. In contrast Russian students believe U.S. higher education is inferior to European education and offers very little benefits apart from mastering English skills and thus they do not want to enroll in U.S higher education colleges and universities.
CHAPTER 1. THE PROBLEM AND ITS UNDERLYING FRAMEWORK

This chapter provides an introduction, a statement of the problem, the background of the problem, the purpose of the study, the significance of the study, the theoretical framework, research questions, the nature of the study, assumptions, limitations and delimitations. This chapter will focus on the lack of research in the area of Chinese and Russian international students’ perceptions about U.S. higher education and the importance of studying these particular groups. Further, this chapter will especially focus on the students perceived value of college life in America and how it affects their desire to study on U.S. soil.

Introduction

Most U.S. higher education institutions benefit from having international students on campus, and administrators of the institutions are interested in expanding international recruitment. International students provide financial support to U.S. colleges and universities among many other benefits including cultural exchanges, international friendships, and an overall boost to the national economy. During the 2015-2016 school year the overall economic contribution of international students to the United States was 32.8 billion dollars. This collaboration created more than 400,000 jobs according to the Association of International Educators (Strauss, 2017).

International students are a crucial functional component of U.S. higher education institutions. In the highly competitive world market for international students, U.S. colleges cannot assume the high demand for American higher education will increase or remain constant in the future. It would be in the best interest of U.S. higher education institutions to find ways to attract and retain more international students. Michael Crow, the president of Arizona State University, stated, “We need international students” (Bendrix, 2017, p.5).
Many institutions depend heavily on international students as a funding source for their graduate and undergraduate programs (Falk, 2017). A loss of international students will be detrimental to higher education institutions in terms of substantial financial losses. Shortages of students in multiple educational programs will follow if international students cease to attend American colleges and universities. Many university leaders are concerned about a possible drop in international student enrollment and its broad effect on U.S. higher education institutions. This situation invites the following questions: (1) Do higher education institutions have a clear idea of what attracts international students to pursue degrees in American universities and colleges in the first place? (2) How do international students make the choice to come to the U.S. for their academic needs? (3) Why do some countries send more students to the U.S. than others?

U.S. college applications from foreign students in 2017 appear to have slowed in spite of a peak in 2016, with thirty-nine percent of responding universities reporting decreasing number of international applications (Alpert, 2017). In 2016 1.2 million international students attended American colleges and universities; however in 2017 there was a four percent decrease in international student enrollment in U.S. colleges (Strauss, 2017). In 2017 China remained the primary outsourcing country for international students in the U.S., leaving behind India and South Korea. Since 2006 China has been a steady leader in sending students to the U.S. to attain academic degrees. Understanding these attributes begs the two-part question: Why do Chinese students come to the U.S., and can U.S. higher education institutions further count on their high numbers in our universities and colleges? Further, why does China send many students to the U.S. while Russia, which shares many geo-political similarities with China, does not? All of these important questions should be answered in
order to understand the Chinese and Russian international student decision-making factors involved in selecting an overseas university. Understanding the perceived value of an U.S. higher education among these students will assist universities and colleges in attracting and retaining more international students from Russia and China.

Statement of the Problem

International students are important components of the U.S. higher education system. Students from different countries pursuing American higher education degrees generate a variety of benefits to the institutions where they enroll, such as financial resources, cultural contributions, and the establishment of closer ties between nations (Zhang, 2011). International students facilitate international friendships, which are crucial in a time of increasing globalization and contribute to the fields of medicine, science, math, humanities, and technology in a major way. Americans who engage with international students while on campus are more likely to become culture appreciative, value foreign art and literature, place current problems in historical perspectives, and read or speak a foreign language. These Americans will have a chance to develop multi-cultural perspective and reflect on their own political viewpoints, religious viewpoints, and their beliefs about other races or ethnicities (Luo & Jamieson-Drake, 2013). One of the major tangible benefits of international students is the monetary resource. International students pour funds into the educational institution where they enroll. International students paying higher tuition rates bring substantial financial benefits to American colleges and universities. Besides contributing to academic, cultural, and financial aspects of the institution itself, international students also boost local and national economies (Akanwa, 2015).
In 2016 alone, 1,043,839 international students enrolled in U.S. higher education while contributing more than 13 billion dollars to the U.S. national economy (Falk, 2017); Chinese international students alone contributed 10 billion dollars to the U.S. economy (Bendrix, 2017).

Many countries send students to obtain higher education in the U.S., yet, the number of students per country varies greatly. For instance, China and Russia possess multiple geopolitical and economic similarities. Conversely China and Russia exhibit a striking difference in the number of students enrolled in American colleges and universities. While both countries currently exhibit an unstable political relationship with U.S., China is the top exporter of international students to the U.S. while Russia barely sends any. Note: both countries encourage their students to pursue academic opportunities outside their countries’ borders (Mills, 2015). Why is there such a difference in the number of students between the countries? Will or can the situation change?

It is important to understand how students make decisions to study in the U.S. in order to retain high numbers of Chinese international students, and possibly increase the number of Russian international students. This can be achieved by investigating the roots of the students’ decision-making processes. A better understanding of the initial step in those students’ academic journey can occur by examining the perceived value of U.S. higher education from the position of a country that sends many students, and the position of a country that sends a very limited number of students. Subsequently comparing the value and perceptual differences will assist this understanding.
The problem with extant research is that there is no clear evidence of how international students make decisions to study in the U.S. in the first place. Research on international students has predominantly focused on the adaptation to a new culture (e.g., Bierwiaczonke & Waldrzus, 2016; Hendrickson, Rosen & Aune, 2011), focused on academic and social challenges (e.g., Cameron, Roxburgh, Taylor, & Lauder, 2010; Stein & Oliveira de Andreotti, 2015), international marketing of higher education (e.g., Akanwa, 2015; Kolster, 2013), and recruitment practices (Zhang, 2011). There remains a lack of emphasis on perceptions about U.S. college life held by international students and how they picture possible college life in the U.S. despite the variety of international student studies (e.g., Bourke, 2013; Hagedorn & Hu, 2014; Kosheleva, Samofalova, Holtman, & Kopotilova, 2015; Ren, Hagedorn, & McGill, 2011; Zhang 2011). Moreover, there appears to be an absence of research that has investigated the perceived value of U.S. higher education held by Chinese and Russian undergraduate students prior to their arrival in America. Absent further is what contributes to their desire to pursue a degree in the U.S.

**Background of the Problem**

**Overview of the International Student Market**

The proclivity of students to pursue higher education internationally has advanced in recent years (Institute of International Education, (IIE), 2015), jolting higher education programs in both sending and receiving countries. Some researchers predict the number of international students might rise globally to approximately seven million by the year 2020 (Altbach, 2010), constituting a 600% increase (IIE, 2015) from 2016. The U.S. higher education system has historically attracted approximately one-third of all international students globally (Hagedorn & Lee, 2005), but top higher education officials are concerned the U.S. will lose the lead (Falk, 2017). Brimmer, the executive director of the National
Center of International Educators, confirms, “At the moment the United States is the leading destination for international students, but we are losing market share” (Westervelt, 2017, p.2). In the competitive educational world market there are increasing numbers of options for international study, and many students now recognize they have choices. Some students opt to go to Australia, Canada, or countries that offer higher educational programs. If international students do not come to the U.S. in 2018, higher education institutions will probably lose several subsequent years of funding from the same student. Normally obtaining a Bachelor degree might take four to five years. Further university transfers and receiving study visas are complicated processes especially for international students. If international students select Canada as their academic destination, they are likely to remain in Canada throughout the duration of their study. An academic decision made by an international student in their home country can have long-term consequences for that student, for the classmates who would have worked with that international student, and for colleges and universities across the United States.

**How Many Chinese International Students are in the U.S.?**

Colleges in the United States attracted 304,040 Chinese international students, 31 percent of the 974,926 international students enrolled during the academic year 2014-2015 according to the Open Doors Report (IIE, 2015). In 2015 there were 523,700 Chinese students studying abroad (ICEF Monitor, 2016), thus making U.S. higher education institutions the top receiving institutions of Chinese international students worldwide. In 2016 China again took the lead with 328,547 Chinese students receiving an education in America. In 2017 a quarter of U.S. universities saw a drop in undergraduate applications from China, while 32 percent of graduate programs in higher education institutions saw a decline in Chinese graduate applications (Bendrix, 2017).
Chinese students remain on the top of the U.S charts for the International student market with 260,914 Chinese nationals in U.S. higher education institutions. Chinese students also selected other academic locations, sending 90,245 students to study in Australia, 89,788 students to Japan, 86,204 students to the U.K., 42,011 students to Canada, and 38,109 students to the Republic of Korea (Colson, 2017).

China has been the top supplier of international college students since 2004 (Choudaha, Chang & Kono, 2013). Chinese students are currently the largest group of international students in the U.S., followed by 132,888 Indian students (IIE, 2016), and 63,010 South Korean students (IIE, 2016). The shifting numbers of Chinese international students are attracting the attention of higher education administrators and researchers (Bendrix, 2017; Zhang, Sun, & Hagedorn, 2013).

The following questions are of interest: What motivates Chinese students to pursue or not pursue their academic goals in the U.S.? How do Chinese students perceive the value of their U.S. higher education experience? How do their perceptions affect their desire to study in the U.S.? What factors influence their decisions?

**Where are Russian International Students?**

According to a Moscow city government report, out of approximately 70,000 Russian students who study abroad, roughly 35,000 chose Central and Eastern Europe (Vorotnikov, 2017), while only 5,444 pursued higher education degrees in the U.S. (IIE, 2016). In fact, there was a 2.1 percent decline in Russian international students in the U.S. during the 2016-2017 academic year. While experts confirm that the number of Russian students pursuing higher education outside of Russian borders is growing, there is a slight decline in Russian students on U.S. soil (Vorotnikov, 2017).
Political analysts state multiple geo-political, economic, and cultural similarities between Russia and China, both of which are large autonomous countries with strong state traditions (Rutland, 2009). Both countries adopted communist regimes in the 20th century, have similar health and educational systems, and are rooted in strong traditions. Even though China’s population of approximately 1.4 billion is much larger than the population of Russia (approximately 144 million), Russia is still considered a country with a large population (Rutland, 2009). Neither Russia nor China are political allies with the U.S. (Rutland, 2009), yet China sends many students to the U.S. to receive higher education (40% of all the students who study abroad). While Russia sends only a small number of students (less than 5% of students who study abroad). These numbers beg the question of why there are so few Russian students earning degrees in the U.S. What are the factors, if any, that prevent them from pursuing an education in the U.S.?

The present study is very timely, as Russian President Vladimir Putin in March 2017 signed a decree to fund Russian students abroad for the purpose of strengthening the human resource capacity of the country. The Soviet Union’s collapse significantly weakened the Russian education system (Vorotnikov, 2017), and in order to correct a lack of specialists in crucial professions such as engineers, doctors, and scientists, the decree was designed to motivate Russians to obtain international graduate degrees.

The new initiative will secure 5 billion dollars to spend on the educational needs of Russian students over the next 10 years for overseas study. This could fund academic journeys for more than 100,000 Russian students to leading foreign universities (International Education Networking Conference, 2017).
Gap in the Literature

Few studies have specifically investigated Chinese undergraduate students in a Chinese research environment, or Russian students in a Russian research environment; hence, many related questions remain unanswered. International students are important for U.S. higher education institutions’ financial and cultural success. Many researchers have called attention to a general lack of research in the areas of international students. There is an urgent need to research specific groups of international students such as Chinese and Russians (Hendrickson, Rosen, & Aune, 2011). Many studies have focused on international students and how they have adapted to the U.S. higher education environment. As well studies have focused on international students’ successes and obstacles while studying in America. There are only a few studies that have focused on Chinese student perceptions of U.S. higher education (Ritter, 2016; Urban & Palmer, 2016). There are virtually no studies that have focused on Russian international students in the U.S. Further, there are virtually no studies that have focused on Russian international student’s perceived values of U.S. higher education, nor how these values might have affected their desire to study in the U.S. Very few studies have focused on Chinese and Russian students’ perceptions of U.S. higher education and college life belief systems in the U.S.

Why Study the Perceived Value of U.S. Higher Education?

Perceptions are as important as they are crucial in the formation of belief systems and expectations (Bargh, 2016). Perception of value is an important component in understanding human desire to engage in a certain behavior. The role of human perception in determining the value of behavior is best described by the Theory of Planned Behavior (T.P.B.) (Ajzen, 1985), which evolved from the Theory of Reasoned Action (Ajzen & Fishbein, 1975). The T.P.B. identifies a polarity of a perceived value as the best predictor of behavior. If the value
of the behavior is perceived as positive, an individual is more likely to engage in the behavior. Conversely, if the value of the behavior is perceived as negative, the individual will be more reluctant to pursue the behavior.

Perception can be linked to a person’s perceived ability to conquer possible barriers, conquer challenges, and thus can manifest itself in the ability to perform a behavior successfully. The T.P.B. states that when individuals perceive an activity as enjoyable with good benefits, have the support, and have the encouragement of others individuals feel they themselves possess the ability to meet task demands. Consequently, stronger intentions will result and the individual will be more likely to engage in the activity. Thus, perceptions of value are key components of a belief system and the desire to engage in certain behaviors.

**Purpose of the Study**

Competition in the international student market is intense among western nations. Higher education institutions in the U.S. should not take the current high numbers of international students for granted. Australia, the U.K., Canada, and New Zealand have made great efforts to attract more international students to their higher education programs (Kolster, 2013). To keep the U.S. higher education programs attractive for Chinese international students (the largest group of international students in the U.S.) and possibly Russian students, it is necessary for U.S. higher education institutions to collect more information about the perceived value of U.S. higher education among Chinese and Russian students, and their desire to pursue a higher education degree in the U.S.

The purpose of this study is to use the Theory of Planned Behavior (T.P.B.) framework (Ajzen, 1985) to determine how the perceptions of value of U.S. higher education impact Chinese and Russian students’ desire to pursue a degree on American soil in order to understand the difference in numbers of Chinese and Russian students in American
universities. This study will contribute to the literature relevant to Chinese and Russian student perceptions of the value of U.S. higher education. This study examines these students’ beliefs about American college life before coming to the U.S., in connection to their desire to study in America. The study’s intent is to determine multiple factors that constitute the perceived value of a U.S. higher education (independent variable) among Russian and Chinese students, and examine their perceptions of college life in America (independent variable) in connection to their desire or lack thereof (dependent variable) to study in the U.S., as a means of understanding the difference in numbers of these two groups. The study engaged 119 Russian students in Russia and 106 Chinese students in China who have not previously studied in the U.S.

**Significance of the Study**

This study helps close the gap in the literature regarding international students Russian and Chinese students in particular, because of a paucity of research on the topic. U.S. higher education institutions need Chinese students, and since the relationship between the U.S. and Russia has been tense for an extended period (Juncker, 2017), an increase in Russian international students in the U.S. could foster a rise in positive relationships between the two countries (Heyn, 2013).

This study is important for international student admission offices and professionals directly in charge of Chinese and Russian international student recruitment. Understanding Chinese and Russian student perceptions about college experiences might help international student recruiters attract more Chinese and Russian international students. Further understanding might help university faculty and staff retain Chinese students. Examining the perceived value of a U.S. higher education among these two groups will outline factors influencing the perceived value of Chinese and Russian students: the ways these factors
influence their decision-making processes to obtain a degree from an American college or university, and their general perceptions about college life in America. Understanding the perceived value of a U.S. education among Russian and Chinese student groups and the factors impacting perceived value might be helpful for admission office recruitment guides and for addressing positive and negative student perceptions.

**Theoretical Framework**

This study adopted the framework of the Theory of Planned Behavior (T.P.B.) by Ajzen (1985) that links beliefs and behavior. Reasoned action predicts that behavioral direction is created or caused by two factors: our attitudes and our subjective norms. An attitude is a person’s opinion about whether a behavior is positive or negative while a subjective norm is a perception.

I explored Chinese and Russian students’ perceived values of U.S. higher education in connection to their desire to study in the U.S. before they make the decision to come. Value of education consists of various social, economic, and career advancement factors (Eccles & Wigfield, 2002). While perceived value defines how humans see situations. As well, the perceived value determines how humans behave toward situations or objects (Allport, 1987). These intentions partly, but not entirely reflect the personal attitudes of individuals: the extent to which individuals perceive an act as desirable or unfavorable. Despite multiple similarities between Russia and China in terms of their political regime, economy, high literacy level, and military power, their respective attractions to the U.S. are very different. It is highly important to understand what creates such a discrepancy in the number of students who find the U.S. a desirable place to study.

Ajzen's Theory of Planned Behavior is crucial for this study because it explains the importance of perceived value of behavior and how it influences personal desire to
participate in this behavior and behavior in a given situation. For instance, if the perceived value of a U.S. higher education is low, the perceived value will negatively impact personal experience in the given situation. If Chinese or Russian students do not perceive U.S. higher education as valuable, they might not want to embark on the journey to the U.S.

It is important for researchers to understand which factors are attributed to high or low value of U.S. higher education in order to address them and increase the number of Chinese and Russian international students.

This study will utilize the Expectancy-Value Theory in education (Eccles & Wigfield, 2002) in order to understand the value of U.S. higher education. According to this theory, value as a means of motivation to perform a task is divided into four categories: Attainment value (importance or prestige), Intrinsic value (enjoyment or interest), Utility value (relevance), and Cost value (finance, loss of time, overly-high effort demands, loss of valued alternatives, or negative psychological experiences such as stress). In general, Eccles recommends investigating various factors that determine the value of education such as, individual perceptions and social beliefs, general goals, financial stress, and future gains. Expectancy-Value Theory constructs can influence a change in motivational beliefs to pursue U.S. higher education (Eccles & Wigfield, 2002). Value-focused orientations for students in Russian and China could increase their interest in pursuing higher education programs in the U.S.

The only way to understand the perceived value Chinese and Russian students hold in regards to U.S. higher education is to examine their perceptions before students come to America. Understanding Chinese and Russian students’ perceptions is important for the successful retention and recruitment of these students in U.S. higher education institutions.
An international student recruiter might be able to address some perceptions before students arrive. Understanding the connection between perceived value of U.S. higher education and students’ desire to obtain an American degree is crucial in understanding the decision-making process of Russian and Chinese international students.

**Research Questions**

The following research questions guided this study:

**RQ1:** 1a. Among the survey participants, what are the demographic characteristics of the students from China and Russia, respectively, in terms of gender, age, paying tuition for their education, and source of their knowledge about U.S. higher education?

1b. Given the opportunity to study in the U.S., would students from Russia and China accept it and which programs would they prefer, what would this opportunity depend on, and what are the major obstacles that prevent Russian and Chinese students from studying in the U.S.?

**RQ2:** 2a. Among the survey participants, what inter-relationships exist regarding the intrinsic value of U.S. higher education?

2b. Among the survey participants, what inter-relationships exist regarding the cross-culture value of U.S. higher education?

2c. Among the survey participants, what inter-relationships exist regarding the prestige value of U.S. higher education?

**RQ3:** 3a. Are there any significant differences among survey participants in the Perceived Value of U.S. higher education in terms of intrinsic value, cross-culture value, and prestige value, based on their home country of China and Russia?
3b. Are there any significant differences among survey participants in the Perceived Ability to afford U.S. higher education, importance of political climate between the U.S. and home country, and a lack of English skills, based on their home country of China and Russia?

RQ4: What are the general, positive, and negative perceptions of U.S. higher education among Chinese and Russian participants?

**Nature of the Study**

This study is quantitative. The design is a descriptive survey consisting of fifteen questions representing various types: multiple choice, rating scale 1-5, and open-ended questions. Questions about the value of U.S. higher education were designed to reflect perceived value in accordance with the Expectancy-Value Theory in education (Eccles & Wigfield, 2002). The questions were linked to the four categories of value: Attainment value, Intrinsic value, Cost value, and Utility value. Intrinsic value is reflected by the questions concerning positive perceptions about U.S. higher education and general excitement about studying in the U.S. Attainment value is connected to the questions about the importance of political climate, imagining themselves as international students in the U.S. Responses to the open-ended questions in the survey provided this information. Cost value is reflected by the questions about the cost of U.S. higher education and connected to the culture shock and adjustment to a new environment. As a result this value is named Cost-Culture value to reflect the notion of cultural sacrifices and inconveniences an international student might experience in the U.S. Utility value is renamed into Prestige value due to the fact that many Chinese students consider U.S. higher education not only useful but also very prestigious (Kuznetsova, 2017).

Questions about perceptions were based on an earlier study that investigated perceptions of college life in America (Kuznetsova, 2017). Question design was based on the
literature and in consultation with experts in the field of international education. This study opted out of face-to-face interviews because traditionally, interviews in Russia and China are rooted in general distrust and suspicion when talking to people without a guarantee of anonymity. The purpose was to ensure that participants were comfortable and honest in the research setting. Therefore, data acquisition included anonymous surveys with a paper and pencil option or an online survey software option via a web link. The survey was written in English to attract participants with intermediate to advanced English communication skills. A low or no proficiency in the English language would indicate a significant reason not to pursue higher education in the U.S. for many international students (Kolster, 2013). Further concern existed that if the surveys were in a native language the surveys would receive responses from students not wishing to pursue higher education in the U.S. because of their poor English skills. Participants who had adequate skills to pursue a degree in the U.S. are preferred for this study. The 106 participants in China came from universities in Central China and in Northeast China. The 119 participants in Russia represented various universities in Moscow, Saint Petersburg, and Kazan. All Russian participants completed the surveys via a Qualtrics link. All participants resided in their home countries.

This study primarily employed a quantitative approach to answer research questions. The major methods used in the quantitative analyses were descriptive statistics, reliability analysis, and independent sample t-tests. Text analysis analyzed questions about general perceptions using the open-ended answers in the survey. Open-ended surveys were used to collect data, were coded by themes, and were reported in the findings. Text analysis is indispensable for analyzing socio-cognitive and perceptual constructs that are difficult to study via traditional quantitative archival methods (Duriau, Reger, & Pfarrer, 2007).
Assumptions

For purposes of this study it was assumed that participants responded honestly to the questionnaire. Involvement in the study was entirely voluntary and participants could have withdrawn from the study at any point with no ramifications. The participants received a consent form containing thorough information about the study.

When filling the survey via a Qualtrics link, participants had to read through the consent form first and then click “agree” in order to participate in the study. Anonymity and confidentiality were preserved, as no student names nor educational institutions were requested or listed on the surveys.

Delimitations and Limitations

The study had certain limitations. One of the difficulties that challenged the value of the data was participants’ non-native English proficiency. As an ESL/EFL teacher, I adjusted questions using more elementary English language wording and structure. The study was limited to individuals who agreed to participate. The validity of the study is limited to the reliability of the instruments used. The study was confined to a survey of 225 participants and focused on Chinese and Russian student perceptions about college life in America as it related to their desire to study in the U.S.

The study is limited to two universities in China in the cities of Harbin and Zhengzhou. Even though the two universities represent only two higher education institutions in China, they educate students from all over the country. Students in Russia are limited to higher education institutions in three major cities: Moscow, Saint Petersburg, and Kazan. Students can be reached via a link on an educational group consisting of approximately 25,000 students on social media, VKontakte, which is similar in nature to Facebook.
Definition of Key Terms

An understanding of the following key terms is crucial for the study and are defined below:

**Globalization:** practices and procedures in higher education institutions that are effective on an international level, including a global market place for student, faculty, and higher education institution personnel (Tougas, Desruisseaux, Desrochers, St-Pierre, Perrino, & de la Sablonnière, 2004).

**College Life in America:** social and academic experiences of international students in U.S. colleges.

**English Proficiency:** ability to speak, read, write, and understand English.

**ESL Teacher:** educator who teaches English as a second language.

**Chinese University 1:** university in Northeast, China that consists of four campuses, covering 2,100,000 m², with a total infrastructure area of 950,000 m². The total number of teaching staff is 2,960. The total number of students has reached 34,000, along with more than 100 international students (official website).

**Chinese University 2:** university located in central China with over 20,711 on-campus students during school hours (official website).

**International Student:** student who comes to the U.S. on a visa specifically for educational purposes and is registered at an accredited institution (Tougas, Desruisseaux, Desrochers, St-Pierre, Perrino, & de la Sablonnière, 2004).

**Perception:** process where people take in sensory information from their environment and use that information to interact with the environment (Williams & Hudson, 2012).
Organization of the Study

Chapter 1 of the study presents the introduction, background of the problem, statement of the problem, purpose of the study, questions to be answered, significance of the study, a brief description of methodology, assumptions, limitations, delimitations, and definitions of terms.

Chapter 2 is a review of relevant literature. It addresses the following topics regarding international students: history and trends, research on international students, Chinese international students in U.S. higher education, Russian international students in U.S. higher education, value of education, why perceptions are important, benefits of international students, and conclusions.

Chapter 3 presents the methodology used in the study including research design, population, and sampling procedure. Instruments, their selection, information on validity and reliability are also presented. Each of these sections concludes with a rationale including strengths and limitations of design elements. The chapter also describes the procedure employed for data collection and the data analysis plan.

Chapter 4 presents the results of the study.

Chapter 5 discusses and analyzes the results, culminating in conclusions and recommendations.
CHAPTER 2. REVIEW OF LITERATURE

Overview

The outlook for international higher education programs has drastically changed over a relatively short period of time. The dynamics of that change is reflected in academic research. This chapter provides a perspective of international student history in U.S. higher education institutions, a review of empirical findings related to the issues important for international education, an overview of issues in Russian and Chinese education, the presence and research about Chinese and Russian students in the U.S., and the benefits brought to U.S. higher education institutions and the national economy by international students. The chapter will focus on the importance of addressing a gap in the literature in the area of international students, and Chinese and Russian students in particular, leading to the need to examine Chinese and Russian student perceived values of U.S. higher education, as well as their relationship to decision-making practices of studying in U.S. higher education institutions.

International Students in the U.S.: History and Trends

American higher education has attracted international students in high numbers since the first establishment of colonial institutions on U.S. soil (Hull, 1978). The U.S. share of the worldwide international student community has been generally variable, diminishing to 23 percent in 2000 (after 9/11), then reaching its peak in 2016 and taking another dip in 2017, the total number of international students attending U.S colleges and universities has shown a pattern of increase. In 2013 the United States hosted more of the world’s 4.1 million international students than any other country (IIE, 2016). The next two educational destinations, the United Kingdom and Australia, enrolled 10 and 6 percent, respectively.
(Migration Policy Institute [MRI], 2016). International student enrollment in U.S. colleges and universities increased 10 percent between academic year (AY) 2013-2014 and AY 2014-2015, the highest growth rate in 35 years and reaching a record high of 975,000 students (MRI, 2016). AY 2016 holds the record for international student enrollment in U.S. higher education institutions. Yet at the time of this writing (AY 2017-2018) there is a four percent drop in international students, and many U.S. higher education officials are concerned that the decline in international student admissions will continue (Strauss, 2017).

International education has been an important part of the U.S. higher education program itself because of the many benefits that international students provide (Zhang, 2011). While international students were in attendance in the 18th century, mass attendance of international students began in the 1950s (Kiell, 1951). Sourcing countries have changed through the years. International students come for training and education in a variety of majors, minors, specializations and other educational programs (Seal, 1998). Although U.S. higher education institutions have been leading the international student market, other countries such as Australia, New Zealand, and the U.K. have become strong competitors for international students around the world (Hagedorn & Hu, 2014).

**Research on International Students**

A variety of research studies have been conducted relative to international students since the 1950s, and this literature has continued to expand due to the soaring numbers of international students studying in higher education institutions in the U.S. While multiple studies have focused on international students, the research in this area lacks a common direction for unclear reasons (Hendrickson, Rosen, & Aune, 2011). Table 1 shows trends in research conducted on international students from 1960 to 2016.
Table 1 General Focus of Research on International Student Matters

<table>
<thead>
<tr>
<th>Time Period</th>
<th>General Focus of Research on International Student Matters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960-1975</td>
<td>Struggles of International students in the U.S. (e.g. discrimination)</td>
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<tr>
<td></td>
<td>Goffman, (1967); Gullahorn &amp; Gullahorn (1963); Kiell (1951); Sellitz &amp; Cook (1962)</td>
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<tr>
<td>1976-1985</td>
<td>Social support, social connections, intercultural adjustment and learning</td>
</tr>
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<td></td>
<td>Abdalla &amp; Gibson (1984); Hull (1978); Ruben &amp; Kealey, (1979)</td>
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<tr>
<td>1986-2000</td>
<td>International student retention</td>
</tr>
<tr>
<td></td>
<td>Akers (1996); Schram &amp; Lauver (1988); Ward &amp; Kennedy (1993)</td>
</tr>
<tr>
<td>2001-2005</td>
<td>International student needs and experiences</td>
</tr>
<tr>
<td></td>
<td>Arambewela, Hall, &amp; Zuhair (2005); Chirkov &amp; Ryan (2001); Sherry, Bhat, Beaver &amp; Ling (2004)</td>
</tr>
<tr>
<td>2006-2010</td>
<td>International student identity formation, social interaction practices, specific areas of adaptation (learning, cross-cultural, curricular, etc.)</td>
</tr>
<tr>
<td>2011-2017</td>
<td>English proficiency, perceptions of race and gender, friendship formation, specific areas of adaptation (learning, cross-cultural, curricular, etc.) of international students based on country of origin (South Korean students’ adaptation), educational agents.</td>
</tr>
<tr>
<td></td>
<td>Kosheleva et al. (2015); Sun &amp; Richardson (2011); Hagedorn &amp; Hu (2014); Lee &amp; Ciftci (2014); Leong (2015); Liu, Elston, &amp; Zhou (2013); Valdez, (2015); Ritter (2016); Urban &amp; Palmer (2016); Zhang, Sun &amp; Hagedorn (2013)</td>
</tr>
</tbody>
</table>

Some early studies of international students sought to explore the obstacles international students face in the context of U.S. higher education institutions such as discrimination, language barriers, and cultural differences (Selitz & Cook, 1962; Gullahorn & Gullahorn, 1963). The primary focus of such research was to examine the effects that emerge from variables such as environment, language proficiency, and understanding of the host culture, effects that determine how comfortable international students become within their new learning environment (Abdalla & Gibson, 1984; Hull, 1978). Psychological adjustment was the coping framework when dealing with stress, while socio-cultural adaptation was best described as social skills or a culture learning paradigm (Ward &
Kennedy, 1993). Changes in research focus could be best attributed to issues that arose from the growing international student population.

From the mid-1970’s to the beginning of the 21st century, a considerable volume of research on international students receiving an education in U.S. higher education institutions focused on the role of social interaction with host nationals such as friendships, romantic relationships, and connections (Ruben & Kealey, 1979), socio-cultural adaptation to the host country’s environment, and the psychological adjustment of international students (Schram & Lauver, 1988). Social interaction included acts people performed toward each other and the responses they gave in return (Goffman, 1967; Kiell, 1951). Other studies examined international students' academic success and retention in connection to their familiarity with diverse U.S. higher education settings (Ying, 2003).

The startling expansion of international programs in U.S. higher education and the high numbers of students from other countries shifted the focus of general research from exploring the impediments international students experience in higher education institutions (Choudaha, Chang, & Kono, 2013). International students were seen as highly beneficial for U.S. higher education institutions both financially and culturally (Bourke, 2013). Institutions were eager to explore if student needs were met and if students were generally satisfied (Zhang, 2011). The problems international students faced on U.S. college campuses included difficulty adapting to the new educational and cultural setting, hence institutions sanctioned research to gain more knowledge about these problems (Evans, Carlin, & Potts, 2009; Chavajay, & Skowronek, 2008). Originally, researchers focused on interviewing faculty and administrators about international students, but this approach did not solve the problems because researchers did not seek or receive firsthand information (Kolster, 2013). Scholars
subsequently began to feature the discord between international students’ actual experiences, perceptions, needs, and higher education staff and faculty perceptions of actual international student experiences and needs (Hendrickson, Rosen, & Aune, 2011).

At the beginning of the 21st century several studies concentrated on international student identity formation and social interaction practices (Schmitt, Spears, & Branscombe, 2003; Trice, 2004). More recent studies have focused on multiple topics such as international student perceptions of race, gender, value of education, friendship formation, their English proficiency, and other important issues (e.g., Leong, 2015; Ritter, 2016; Urban & Palmer, 2016). Compared to previous studies, recent studies have focused on specific adaptation features in general such as language proficiency, micro aggressions, and identity.

The differentiation of international students (e.g. Asian students, Latin American students, etc.) within only the past decade began to attract the attention of higher education researchers (Arambewela, Hall, & Zuhair, 2005). Andrade and Evans (2009) stressed the importance of differentiating international students based on their sourcing country, as every country varies in culture, language, perceptions, and economic situation. Researchers suggested it was crucial to take these differences into consideration when understanding the needs of international students (Evans, Carlin, & Potts, 2009; Kolster, 2013, Trahar, 2011). Trahar recommended specifying international students’ country of origin to explore the issues related to each particular group of international students (2011) such as examining Chinese and Russian student perceptions of college life in the U.S. and their decision-making processes. According to Trahar (2011), international students often appear as a homogeneous group. Scholars (Evans, Carlin, & Potts, 2009; Trahar, 2011) recommended not using international students as a homogeneous group but rather dividing them into subgroups based
on their country of origin: Korean international students, Malaysian international students, Russian international students, Chinese international students, and so on.

While many extant studies suggest additional research in the area of international students, the present study draws primarily from two research study recommendations. Kolster (2013) investigated the academic attractiveness of countries for international students and suggested looking at subjective data such as international student perceptions as a way to better measure why a country is a popular choice for international students. Kolster (2013) further argued that global competition for students will likely intensify in the future; international student mobility tendencies are not set in stone. Countries presently attracting high numbers of international students should not take those numbers for granted. The dynamics of international enrollees could easily change as other countries see the significant financial and cultural benefits of having international students on their college campuses. Ongoing attempts to recruit and attract students are crucial, as are “high-quality education programs and support mechanisms for international students, since student choices for study destinations are based on the perceived added value of studying abroad in a particular country / at a specific institution” (Kolster 2013, p.5).

Another study by Zhang, Sun and Hagedorn (2013) examined factors impacting the intention of Chinese female students to study overseas, and recommended qualitative study for future research. The study also had a goal of determining how these factors impacted female student decision-making processes. Data were collected from 96 female undergraduates enrolled in a four-year public university in North Central China during the fall of 2010 using a survey questionnaire. The results indicated that student satisfaction with campus experience, English proficiency, and only-child status had significant and direct
effects on their intention to study overseas (Zhang, Sun, & Hagedorn, 2013). The study focused solely on Chinese female students who had already made decisions to study in the U.S. The present study will examine perceived value of students of both genders who have not made a decision to study in the U.S.

**Similarities between Russia and China**

Russia and China are large autonomous countries with strong ties to a communist regime, which has taken different shapes in the two nations (Frieze, Hansen, & Boneva, 2006). Under communist rule, Russian and Chinese economies have many common features that have created many commonalities (Grigoriev, 2017; Petukhova, 2015; Rutland, 2009). Communism rendered both countries with the legacy of a strong central state and weak civil society tradition (Shishkin, 2013). The state acted as a border patrol for communication and collaboration with the other countries considered and portrayed as hostile and threatening (Rutland, 2009). Both countries had military defeats in the 19th and 20th centuries with substantial loss of land, and both experienced victory in World War II, although with great human loss.

Both Russia and China have distinct cultures, tracing their roots and maintaining identities outside of the European culture, yet considering themselves backward compared to the West (Rutland, 2009, p. 8). Both countries’ leaders have strived to modernize their economies, educational systems, and many other areas of importance. China and Russia are natural business partners and possess many political and economic similarities in addition to being neighbors and sharing an extensive border.
They have similar ratings in adult literacy, child and infant mortality, foreign direct investment, below poverty population, school life expectancy, and many other defining world development indicators (World Development Indicators, 2017).

Like China, Russia has a traditional respect for education, which is and was strongly emphasized by ruling Communist parties. In the 1960s, Soviet education focused strongly on math and science, often neglecting the human sciences (Vorotnikov, 2017). China adopted the Soviet educational model with significant financial and guiding assistance from the U.S.S.R. in the 1950s. Yet, in the 1990s, China made multiple reforms including a push for collaborations between Chinese universities and the rest of the world. Russia was slow to adopt academic innovations (Earle, 2012).

Both countries have significantly increased their academic presence abroad, sending many students to study in various countries including the U.S., Canada, Australia, Europe, and the U.K. Interestingly, many Chinese students study in Russia and many Russian students study in China. However, the primary destination for Chinese students is the U.S., while Russian students choose European countries (Vorotnikov, 2017). Despite many similarities, the difference in numbers of international students from Russia and China studying in the U.S. is striking.

Both countries value higher education from public universities more than private colleges (Li, 2016). Public universities are considered prestigious and competitive to enroll, compared to private colleges where students must pay to study. The national exam Guakao in China determines whether a student can get into a public university with a higher score or must pay tuition in a private college with a lower score (Li, 2016).
Similar to China, the national exam EGE in Russia determines if a student can get free tuition at a public university or must pay for it, or has to enroll in a private college.

**Current Politics**

The cold war, which was a state of geopolitical tension between the Eastern Bloc represented by the Soviet Union (Russia) and Western Bloc represented by the U.S., was one of the conflicts that affected U.S.-Russian relationships. The relationship between Russia and the U.S. has been strained and the current 2017-2018 relationship between the U.S. and Russia is at an all-time low according to multiple political experts (Clover, 2018; DeYoung, 2018; Gaoutte, 2017). In fact, rhetorical attacks, stalled diplomacy, and military escalation increasingly characterize the U.S.-Russia relationship (DeYoung, 2018). It may still be far from the depths of the Cold War, but Putin’s speech in February 2018 outlined new weapons to overcome U.S. defenses, lowering the already chilly temperature of the relationship by several degrees (Clover, 2018). In December 2017, the Trump administration named Russia a "rival power," and provided military support to countries such as the Ukraine, which has a tense relationship with Russia (Gaoutte, 2017). In 2017, Russia was accused of meddling in U.S. relations by the U.S. media, and the news in Russia highlighted the hostility of the U.S. government towards Russia and its people (Vorotnikov, 2017).

A similar situation is happening to the U.S.-China relationship. It appears that the two countries are at a turning point, and not for the better (Lo, 2018). U.S. President Donald Trump called China a rival power stating that the Chinese government has been attempting to undermine U.S. influence in the world. As a consequence of both the president’s frequently changing views and the variance in perspectives among his senior advisors, Washington does not appear to possess clarity on what type of relationship it seeks to build with China (Kramer, 2017). Many political analysts are concerned that U.S. and China are entering a
period when disagreements between the governments of China and the United States threaten to breed hostility between their citizens (Lynch, 2018). Yet at the moment United States is still viewed positively and as an example of high quality of life by many Chinese nationals (Kramer, 2017).

**Chinese Students in U.S. Higher Education Institutions**

China’s increased economic stability and financial growth has availed opportunity for many Chinese nationals to plan for higher education abroad (Hagedorn & Hu, 2014). After the establishment of the People’s Republic of China in 1949, an interest among students to study overseas sparked an educational migration, which in turn, helped strengthen the country upon their return. Chinese students comprise the most rapidly growing international cohort of students attending many Western higher education institutions, and it is important to understand more about this group of students (Li, Remedios, & Clarke, 2014).

Chinese students studying abroad is viewed in China as progressive. Their desire to study in the U.S. occurred after the national open-door policy. This policy reflected China’s strategy to boost the country’s development by allowing its students to gain advanced knowledge and technology skills from foreign countries (Zhang, 2011). Since 1990, China has been promoting the modernization of reforms involving higher education by modernizing the curriculum, encouraging inter-institutional collaboration, and carrying out research between countries.

Recently, studies specifically targeting Chinese students have appeared in publications. All writers stress the importance of focusing research on this particular group of students because of high populations in U.S. higher education institutions, lack of research, and perceived cultural differences among students (Cao, Wang, & Gao, 2010; Kosheleva et al., 2015; Lee & Ciftci, 2014; Sun & Richardson, 2011).
A few researchers worldwide are focusing research on Chinese international student populations in Russia and the U.K. A study by Kosheleva et al. (2015) examined key behavioral trends of Chinese students in the process of making an educational migration to Russia and is based on several sociological studies. The studies’ findings confirmed that Chinese students preferred to study in the U.S. and four other countries. That list did not include Russia. This study also reported that Chinese students avoid Russia for reasons such as climate, racism, difficulty learning the Russian language, and overall quality of education. The study concluded that international mobility research was worthy due to changing international student trends. A few studies concentrated on international student experiences. A study by Sun and Richardson (2011) focused on the effects of culture on Chinese international student study habits in British business schools. The study compared 134 British students to 207 Chinese international students and reported there were major differences in learning styles and a lack of strategic study approaches among Chinese students.

There are studies of Chinese students that predominantly focus on Chinese student experiences at U.S. higher education campuses, including factors such as discrimination, macro aggressions, mental health, suicide, and perceptions of race, gender equity, and homosexuality. For instance, a study by Cao et al. (2010) investigated Chinese university student perceptions and beliefs about homosexuality, their attitudes towards homosexuality, and the relationship between the two. The study found a strong correlation between positive perceptions about homosexuality and positive attitudes toward homosexuality. Lee and Ciftci (2014) examined the influence of multicultural personality, assertiveness, social support, and academic self-efficacy of Asian (primarily Chinese) international students’ socio-cultural
adjustment in the U.S. The results indicated that Asian international student multicultural competency was associated with socio-cultural adaptation, and was mediated by academic self-efficacy. While contributing to research on Asian and Chinese international students, these studies had very little to do with studying the perceptions students held before coming to the U.S. to study, including their perceived value of an U.S. education and how it affected their decision-making process to study in America.

Few studies highlight Chinese students who choose a higher education pathway abroad. Research by Hagedorn and Hu (2014) provided an overview of pathways to U.S. higher education, including the use of education agents, international collaborative degree programs, and international summer schools. A study by Zhang et al. (2013) investigated factors that impacted Chinese female student intentions to study overseas. The results of this study confirmed that student satisfaction with campus experience, English proficiency, and only-child status had a significantly direct effect on their decision to study abroad. Jiang (2012) investigated Chinese undergraduate student socio-demographic characteristics, decision-making to study in the U.S., adaptation experience, and attitudes towards studying in the U.S. It was found that Chinese undergraduate students who looked forward to having a different life experience, having better job opportunities after graduation, and getting a better education had more positive attitudes than those without those expectations. The study demonstrated that their attitudes helped them achieve their educational goals.

**Russian Students in U.S. Higher Education Institutions**

There is a significant gap in the literature regarding Russian students in U.S. higher education. A thorough search of the literature confirmed there are very few studies that focus on Russian international students in the U.S., or Russian students in general. Most studies have focused on the difficulties Russian students experience with English language
acquisition (Akers, 1996; Loukianenko, 2004), while very few studies mention Russian students in reference to adaptation obstacles on U.S. campuses (Chirkov & Ryan, 2001). The existing studies discuss challenges in understanding English idiomatic expressions for Russian natives, and obstacles in navigating cultural norms on U.S. campuses.

There are no studies that explore Russian student decision-making processes for studying in the U.S. or how they perceive the value of U.S. higher education. There is an urgent need for this type of research according to Bokareva (2017). The number of Russian students studying abroad has been drastically increasing. Russian students are studying abroad, but not in the U.S., and it is unclear why they prefer other countries.

Russian students see education not only as a medium for increasing and developing knowledge, but also for self-growth (Prem, 2016, p.15). Communism motivates Russian students to become more knowledgeable as individuals than to strive for a highly paid career following university graduation (Elliot & Tudge, 2011). Many Russian students choose to study abroad and will continue to study abroad in the future. Currently 70,000 Russian students are studying outside of Russia with less than five percent of this population attending universities and colleges in the U.S. The literature does not discuss what Russians think of U.S. higher education.

**Why Perceptions Are Important**

There are virtually no studies that have investigated Chinese or Russian student perceptions about college life in America. There is also a clear absence of studies about how these perceptions might influence their desire to study in the U.S. Perception is defined as human recognition and interpretation of sensory information (Williams & Hudson, 2012). Perception is a process where individuals take in sensory information from their
environment, allow it to become meaningful, and use that information to interact with their
environment (Ajzen, 1985; Williams & Hudson, 2012).

Perceptions are crucial for understanding human behavior because every individual
perceives the world and approaches situations in a unique way. With the help of perception,
the needs of various people can be determined because a person’s perception is influenced by
his or her needs. The world as it is perceived is the world that is important for understanding
human behavior (Chavajay & Skowronek, 2008). The first step in understanding a belief
system and a desire to participate in an activity is awareness of an individual’s perceptions
(Ajzen, 1985).

The importance of learning how perception and intention correspond to each other is
tremendous. People’s intention to perform a behavior is determined by their attitude and their
perceptions of the behavior (Ajzen, 1985). Because behavior is based on people’s perception
of reality, not on reality itself, the world perceived is the world that is behaviorally important
(Ajzen, 1985). The perception process means individuals usually interpret other people and
situations differently. Individuals routinely hold different views of reality, which in turn
strongly influence their attitudes and actions (Bratton, Callinan, Forshaw, & Sawchuk, 2007,
p. 212). Most decisions, trivial to significant, are made solely on the perceiver’s judgment,
rather than by a defined prescriptive model (Ajzen, 1985). Therefore, perceptions of college
life in the U.S become a crucial basis in the desire of international students to study in the
U.S., and of Chinese students in particular.

**Value of U.S. Higher Education**

Values are the motive power behind purposeful action. Value specifies a relationship
between a person and a goal (Williams & Hudson, 2012). The value of education can conjure
individual concepts such as financial benefit, professional opportunities, or various social
benefits. Some studies indicate that international students primarily select the United States for an academic destination as an opportunity to increase employment opportunities (Petukhova, 2015). In fact, an increasing number of international students decide on where to study abroad based not only on the academic reputation of the institution, but also on their prospects of finding employment in their field of study after graduation.

For example, like designer retail higher education institutions have brands. The brand or lack of it depends on a perceived value of an institution in terms of benefits that students gain from obtaining it. Interestingly, sometimes countries become educational brands, like the U.S. (Fan-Sing, 2010). Many international students seek an opportunity to study in the U.S., but perhaps they have not settled on a particular U.S. university (Dreher & Poutvaara, 2011).

On the contrary, American students do not flock to foreign universities to pursue academic goals. According to the Migration Policy Institute in 2017, only one percent of American students pursue degrees abroad, while fewer than fourteen percent of students are involved in any type of study abroad program (Migration Policy Institute [MRI], 2017). Among study abroad destinations, Europe is the top choice for most American students. Some studies conclude that the perceived value of a degree from a foreign university is fairly low among U.S. students (Hanover research, 2014).

The perceived value of international higher education is changing. Researchers warn that a current leadership position in attracting international students is not a guarantee for the future. For instance, with the boost in the Chinese economy, China has been aggressively recruiting foreign students to study in leading Chinese universities (Prem, 2016). Many students go to China as international students from Russia and other Asian countries. The
perceived value of higher education in a given country is a significant factor that will influence the decision-making process for international students in selecting a destination for an academic journey. It is important to determine the perceived value of U.S. higher education as a platform on which to base recruitment efforts.

**Benefits of International Students**

The world is facing increased globalization, especially in the education market. International student mobility is a new trend worldwide, with over 2.5 million students receiving higher education outside of their home countries. This phenomenon is expected to continue, with more students venturing out of their home countries to pursue international educational dreams. Most U.S. citizens believe it is essential to prepare for a global society (Zhang, 2011). International students deliver multiple benefits to U.S. campuses and communities in terms of cultural education, financial contribution, and intellectual talent (IIE, 2016). Internationalization brings a changing environment to the world as well as to the college classroom (Frieze, Hansen, & Boneva, 2006), and is a reality for the United States and many other countries. International students are an important segment of this phenomenon.

**Impact on Domestic Students**

International students have a positive impact on domestic students in a classroom. They allow American students to experience different cultures firsthand without venturing to a foreign country. Students from the U.S. have a unique opportunity to engage in meaningful interactions with their international peers that could further foster friendly relationships. Domestic peers of international students are offered opportunities to understand cultural diversity, and to develop an appreciation for various cultural backgrounds (Zhang, 2011). Domestic students will likely develop increased cultural awareness if they have international
students participating alongside them in class (Ward, 2001). Without traveling, American students can experience the world while attending college and learn about various perspectives, opinions, lifestyles, cultures, and languages (Grigoriev, 2017). This exposure also has practical value for developing skills critical to the globalized workforce (McKenna, 2015).

Curricular Impact on Higher Education Institutions

Today, the role of international students continues to be the leading force for the internationalization of higher education (Stein & Oliveira de Andreotti, 2015). International student contributions to academic research are immense, especially in the areas of medicine, technology, and science. International students are primarily interested in studying engineering, computer science, mathematics, and life sciences (IIE, 2016). Circumstantially, these fields of study are not currently attracting a sufficient number of domestic students, and high numbers of international students interested in these areas allow these crucial programs to continue existing or expanding (Zhang, 2011).

Financial Impact on Higher Education Institutions

International students are generally framed in higher educational policy as a financial gain (Stein & Oliveira de Andreotti, 2015) because of the resources they invest to obtain their degrees. In public institutions, international student tuition fees are generally higher than tuition fees for domestic students in similar programs (IIE, 2016). Nearly 70 percent of international students depend on their family and their sourcing country for funding their higher education in the U.S. (IIE, 2017). Between 2008 and 2017, international students have allowed U.S. higher education institutions to stay afloat through elevated international student tuition costs and the absence of financial assistance from U.S. colleges (Fish, 2018). The new NAFSA data reports that international students contributed 32 billion dollars to U.S.
universities and colleges and supported more than 400,000 jobs. International students are a crucial part of financing U.S. higher education (NAFSA, 2017).

**Impact on Communities**

International students also positively impact the local economy of communities in which they reside in addition to their cultural and academic contributions. They pay room and board, shop at local stores, support local arts, support events, and engage with people from the local community. International students have an overall positive impact on U.S. society and the economy, financially and culturally. International students travel the U.S. and are able to bring international perspectives to more people than typical U.S. students on U.S. campuses (McKenna, 2015).

**Impact on Politics**

Studying abroad fosters an understanding of the host country, an understanding of culture. These studies abroad foster lifelong friendships and relationships (Frieze, Hansen, & Boneva, 2006). International students typically report they have been positively impacted by residing in a different country and that they have positive perceptions of the country in general. International students later share these positive perceptions with their home country (Grigoriev, 2007). Russian students who obtain higher education degrees in the U.S. and subsequently assume leadership positions in their home country will likely carry fond memories about their experiences in the U.S. which, in turn, might relieve some tensions between the U.S. and Russia.

**Conclusions**

International students are beneficial if not crucial to U.S. higher education institutions. The international students help domestic students understand cultures, largely support certain academic programs, finance their education, and positively impact the
national economy. International students bring talent, culture, and financial resources to the U.S. Despite a lengthy leadership position with growing numbers of international students, the U.S. is currently facing tough competition from countries such as Canada, New Zealand, and the U.K. on an aggressively expanding international education market.

The number of international students increased between 2000 and 2017, and then dropped four percent, which is a major concern for many higher education institution officials. Universities and colleges across the U.S. will be severely financially impacted if they lose large numbers of Chinese students, who come to the U.S. for their academic needs. Without Chinese international students, local economies and the national economy may suffer. Correspondingly there is a lack of research that examines the decision-making process of international students when selecting non-domestic academic institutions. Despite the multiple similarities between Russia and China, Chinese students are the largest group of international students currently in the U.S., while Russian students constitute only a small portion of the international student body. There is no research that helps explain the differences in these numbers.
CHAPTER 3. RESEARCH METHODOLOGY

As described in Chapter 1, the purpose of this study is to discover how the perceived value of an U.S. education affects the decision-making process of Russian and Chinese students to study in the U.S. Furthering this purpose is to determine the reason for such a significant difference reflected in the number of these students in U.S. higher education institutions. Utilizing theoretical constructs of the reviewed literature, this study focuses on Chinese and Russian students’ perceptions of the value of U.S. higher education in connection to their decision to study in the U.S. Secondly, what are their positive and negative perceptions about college life in America? This chapter describes the methods and procedures used including research design, research questions, researcher positionality statement, and sample population. In addition, the conceptual framework, instrumentation, and data collection are presented. Finally, the chapter discusses the data analysis of this study.

Research Questions

The following research questions guided this study:

RQ1: 1a. Among the survey participants what are the demographic characteristics of the students from China and Russia, respectively, in terms of gender, age, paying the tuition for their education, and source of their knowledge about U.S. higher education?

1b. Given the opportunity to study in the U.S., would students from Russia and China accept it and which programs would they prefer, what would this opportunity depend on, and what are the major obstacles that prevent Russian and Chinese students from studying in the U.S.?
RQ2: 2a. Among the survey participants, what inter-relationships exist regarding the intrinsic value of U.S. higher education?

2b. Among the survey participants, what inter-relationships exist regarding the cost-culture value of U.S. higher education?

2c. Among the survey participants, what inter-relationships exist regarding the prestige value of U.S. higher education?

RQ3: 3a. Are there any significant differences among survey participants in the Perceived Value of U.S. higher education in terms of intrinsic value, cross-culture value, and prestige value, based on their home country of China and Russia.

3b. Are there any significant differences among survey participants in Perceived ability to afford U.S. higher education, importance of political climate between the U.S. and home country, and a lack of English skills, based on their home country of China and Russia?

RQ4: What are the general, positive, and negative perceptions of U.S. higher education among Chinese and Russian participants?

Researcher Positionality Statement

I identify as a white, middle class, educated woman who grew up in Saint Petersburg, Russia. I received a bachelor’s degree (B.A.) in English (major), Early Childhood Education (major), and Psychology (minor) from Herzen State Pedagogical University of Russia in 2003. I was an international student on an American F1 visa who received an invitation to enroll in Master’s degree program (M.A.) in Elementary Education at the University of Northern Iowa (U.N.I.), which I completed in 2004. I returned to Saint Petersburg and completed my MA in Teaching English to Speakers of Other Languages (T.E.S.O.L.) from Herzen State Pedagogical University. Later, I moved to the United States where I obtained a position in the Nevada Community School District (C.S.D.) in Iowa as a K-12 English as a
Second Language (E.S.L.) teacher working with students of various nationalities and various native languages. During years of teaching students from various countries I have often heard, “American high school is not what I thought it would be. I thought I would have more fun.” I observed that negative perceptions that did not prove to be real made my students happy, while positive perceptions that were not real caused them to have hard feelings and sadness.

In 2015, I became a doctoral student in higher education at Iowa State University. Throughout the course of my studies I have continually been interested in the value of an international education and the belief systems of people studying internationally which I experienced through multiple conversations I had on campus with other international students. Before studying at the University of Northern Iowa (U.N.I.) I held certain perceptions about college life in the United States, which affected my decision to study in the U.S. In fact, I almost did not come because I believed it was not beneficial for my career as a teacher and future professor. I thought Russia might not recognize my American Master’s degree and I would have spent two years in vain. Yet I was curious about the U.S. and its culture. I was curious to experience its culture, which ultimately shifted my decision scale. Looking back at my perceptions, I find them incorrect compared to the reality and experience of my actual college life and the quality of my education.

I possess a strong desire to examine other international students’ perceived values of U.S. higher education so that the administration and staff can become acquainted with the information and obtain an understanding of international student decision-making. I further desire to examine the perceived values leading students to study in the U.S., and the belief systems they held prior to their formal international education. I hope researching this topic
will better prepare college faculty and student affairs coordinators to support international students in their educational journey. In my study I chose students from China and Russia because there is a huge difference in the number of international students coming to the U.S. from the two countries despite the similarities. Chinese students currently constitute the largest group of international students, while the number of Russian international students remains significantly low. I am interested in learning about Chinese and Russian student perceptions of U.S. college education before they come to the United States. I would like to see higher numbers of Chinese and Russian students in the U.S. higher education institutions.

**Purpose of Study**

This study will examine Chinese and Russian students’ perceived value of U.S. higher education and how it affects the students’ desire to study in the U.S. Understanding perceived value would inform U.S. higher education institutions how to attract, recruit, and retain these students. Even though there are multiple research studies on international students, including Chinese students, there is a lack of research in perceived value of U.S. higher education of specifically Chinese and Russian international students and their decision-making processes before coming to the U.S. (Urban & Palmer, 2016). Simply put, Russian students do not choose the U.S. as an academic destination. Therefore this study examined Russian and Chinese students’ perceived value of U.S. higher education in connection to their desire to seek an American university education. Understanding what causes the difference in perceived value between Russian and Chinese students might help explain the difference in the number of these students studying in the U.S. My previous study about perceptions of college life in America among Chinese students who have not set foot on American soil can inform our understanding of Chinese and Russian students’ perceived
value of U.S. higher education and how they make a decision to study here (Kuznetsova, 2017).

U.S. higher education for international students is a multi-billion dollar a year business (Choudaha, Chang, L & Kono, 2013). To continue making a financial profit, as well as benefiting culturally and academically, U.S. higher education institutions are advised to determine the positive aspects of the perceived value of U.S. higher education (Ajzen, 1985). Accordingly, U.S. higher educational institutions should highlight the positive features of a college or a university based on the perceived value of those educational institutions in order to successfully attract international students. According to a report by Hanover Research (2014), an educational institution is a brand, similar to designer apparel. Just like any other brand, there is a strong need to market it with good strategies as there is an abundant supply of competition globally (Hanover Research, 2014). Higher education institutions need to market aspects that are perceived as having positive value and have a capacity to attract more students.

It is important to continue examining international students’ perceptions and the expectations of their higher education experiences to ensure that institutions provide appropriate and timely support for current international students, while simultaneously utilizing international students as a cultural resource for the entire campus community (Prem, 2017, p.37). An examination of international students’ perceptions that affect their selection of an U.S. higher education institution for study, students’ own engagement in the achievement of their goals, their perceptions of the support received on campus, and their personal and professional outcomes allows for a better understanding of how U.S. higher education adds value for international students and helps identify future directions for
intervention. Additionally, learning about Chinese and Russian students’ perceptions can help higher education institutions enhance their internationalization, global engagement efforts. Consequently, this assists campuses in supporting and attracting international talent.

**Research Design**

The study adapted a quantitative design with a qualitative section using text analysis of write-in questions. The research design was an *ex post facto* design to investigate how a dependent variable (desire to study in the U.S.) is affected by an independent variable (perceived value of a U.S. higher education and general perceptions of U.S. higher education) within the context of the study (Campbell, Stanley & Gage, 1963). Quantitative data can explain perceptions, attitudes, or a population’s ideas (Creswell, 2012). A survey designed for undergraduate students in Russia and China was developed to gather student demographic information related to age, gender, current tuition payment sources, sources of knowledge about U.S. higher education, programs of interest, major obstacles, and general perceptions of U.S. higher education to meet the stated goal.

Multiple scholars have indicated that qualitative studies permit rich, detailed, in-depth descriptions reflective of subject perceptions, and that is what was desired for this study (Creswell, 2012; Denzin & Lincoln, 2000). Qualitative research is a good tool to understand unique perceptions (Patton, 2002). The most important attribute of qualitative research for scholars is its origin in interpretive and constructivist perspectives. In epistemology, constructivism promotes the belief that “knowledge and meaning are constructed in and through the experiences of individuals involved with a phenomenon rather than as the direct result of an objective reality that is stable, observable and measurable” (Wagner, 2014, p.34). Participant meanings are coded, interpreted, and examined to identify shared perceptions in qualitative text analysis research.
Survey Instrument

This research was conducted utilizing a survey consisting of 15 five-part Likert-type multiple-choice questions and three open-ended questions. Using Likert-scale items is a primary tool for surveying attitudes, perceptions, and opinions (Likert, 1932). The survey was used to collect quantitative and qualitative data from Chinese and Russian students who had not visited the U.S. This methodology allowed for both a statistical analysis and text analysis of the data. Observations and personal interviews would not have provided the honesty that the anonymous survey allowed. An anonymous survey is the best instrument to ensure the integrity of participant answers (Smith, 2008).

The survey 15 questions assessed the perceived value of higher education in four broad categories: Intrinsic value (interest and enjoyment), Prestige value (usefulness or relevance), Attainment value (importance of political climate) and Cost-Culture value (financial hardship, loss of time, culture shock) and specifically asked about participant desires to study in the U.S., given the opportunity. The survey included demographic questions about participant gender, age, and whether or not they were paying for their education in their home country. Some questions asked for participant sources of information about U.S. higher education, major obstacles that would prevent them from studying in the U.S., and events and situations that would make enrolling in U.S. colleges and universities possible. The survey also included a question about programs of interest in U.S. higher education. The survey is included in the appendices of this dissertation.

Questions about the value of a U.S. higher education were designed to reflect perceived value in accordance to Expectancy-Value Theory in education (Eccles & Wigfield, 2002), and questions about perceptions were based on an earlier study of perceptions of college life in America (Kuznetsova, 2017). According to Suskie (1996), a rating survey
instrument adds comfort for most people and allows the researcher to make comparisons among respondents. The comparative data produced by a Likert scale add to the researcher's ability to administer quantitative examinations (Likert, 1932).

**Context of the Study**

This study targeted two countries: Russia and China. The study utilized a convenience sample. Because of the difficulty conducting research by an American student in the communist country and post-communist country of Russia, this Iowa State University Institutional Review Board approved study utilized the avenues that were open to study. The first location in China was at a private university in Central China, and the second location was at a public university in Northeast China where I participated in a summer camp program and had access to Chinese students. The third location in China was the Bald Eagle and Panda virtual conference\(^1\) where conferees received the Qualtrics survey link and an explanation letter (Appendix C). I utilized various academic connections with Russian universities in the cities of Moscow, Saint Petersburg, and Kazan to send the survey to Russian students. As a part of the *Vkontakte* (VK.com) Russian social network, the Russian equivalent to Facebook, university representatives helped me gain access to multiple undergraduate students through specific education-based groups belonging to particular academic institutions. The Qualtrics survey link and an explanation letter were posted in these university-connected academic groups in *Vkontakte*. In addition to the social network and upon gaining permission from university officials, the survey and the explanation letter were sent electronically to students in four different universities: two in Saint Petersburg, one in Moscow, and one in Kazan. The method of delivery varied from one higher-education institution.

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\(^1\) Bald Eagle & Panda is a U.S. China Culture Exchange virtual conference that focuses on contemporary and future issues in American and Chinese culture, the impact of culture on bilateral connections, and improving mutual understanding.
institutions to another, and included emails, class announcements, and college newsletters. The Qualtrics survey link garnered the interest of 119 Russian students who participated in my study. The names of Russian educational institution associated with participating students are unclear because of the anonymous nature of the study.

All students in China from the summer camp and those remaining in university dorms at a university in Central China received a paper copy of the survey; a total of 77 students completed them. The paper surveys were later electronically entered into the Qualtrics database. The study was also sent as a Qualtrics survey link with an explanation letter to students attending a university in Northeast China, and all participants of the Bald Eagle and Panda virtual conference, and an additional 29 Chinese students responded and participated.

The purpose of the survey was to evaluate the relationships between the perceived value of a U.S. higher education consisting of four broad categories, and how this value affected Chinese and Russian students’ decisions to study in the U.S. It is important to note that data collection of this nature is difficult in communist and post-communist countries. While the data collection would not meet “experimental design” qualifications, every effort to obtain a representative sampling was done despite true “convenience sampling.”

Participants

All participation in the study was voluntary and anonymous. Participants included 225 undergraduate students in Russia and China. The 2017 summer camp was one of the “Bald Eagle and Panda” series activities under the collaboration of Iowa State University (ISU) in the U.S. and a Chinese university in central China. Six ISU students served as camp counselors in China with the goal of gaining international experience, promoting mutual understanding, and establishing friendship between the U.S. and China (Kuznetsova, 2017).
Chinese students were given the surveys prior to all camp activities to ensure they would not receive any information about U.S. higher education from the American counselors. Students were informed prior to taking part in the IRB approved study that survey participation was entirely optional. Students willing to participate received consent forms with all contact information for the researcher, her major professor, and the IRB of Iowa State University. Completion of the survey took, on average, 20 minutes. Students who took the survey via a web link completed the survey on their own time. Majors and programs of study for Chinese students were unclear because of the anonymous nature of the survey.

All Russian participants were undergraduate students in three major Russian cities: Saint Petersburg, Moscow, and Kazan. Majors and programs of study of Russian students were not disclosed because of the anonymous nature of the survey. Russian students completed the surveys on their own time; it is unknown how long it took them. Neither Russian nor Chinese students received any benefits from completing the survey.

Purposeful and convenience sampling was suitable for this study as it required knowledge of the experience. Merriam (2009) stated that purposeful sampling assumed “the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned” (p.77). I wanted to identify Chinese and Russian students who had not experienced U.S. higher education, and who possessed at least intermediate English language proficiency to satisfy the purposes of my study. The camp was free for Chinese student participants and they did not receive grades, extra credit, or other benefits from the Chinese university or from Iowa State University counselors. All students from the summer camp met the criteria for the study. Surveys were offered to all students from the summer camp.
Surveys sent to Russian students asked for the voluntary participation of students who met the survey criteria and they were allowed do so at their own discretion.

**Instrumentation**

The survey (Appendix A) consisted of 15 multiple-choice questions using the following 5-point scale: completely disagree, disagree, not sure, agree, and completely agree. The first part of the survey consisted of four questions that dealt with student demographics. The remaining 11 questions focused on the perceived value of a U.S. higher education, the desire to study in the U.S., and general perceptions about college life in America. Items were based on the Expectancy-Value Theory (Eccles & Wigfield, 2002).

Questions patterned to reflect the Expectancy-Value Theory were divided into four categories: Intrinsic value (enjoyment or interest in activity), Prestige value (brand of U.S. higher education or a particular institution, possible career advancement, and future financial benefits), Attainment value (political climate between the host country and the U.S., and seeing oneself as an international students in the U.S.) and Cost-Culture value (U.S. higher education being costly, culture shock, long physical distance between countries, and missing family and friends). Questions about the value of a U.S. higher education reflect the perceived value in accordance with the Expectancy-Value Theory in education (Eccles & Wigfield, 2002). Questions about perceptions were based on an earlier study of perceptions of college life in America (Kuznetsova, 2017). Questions related to perceptions were open-ended and specifically asked about perceived positive and negative aspects of a U.S. higher education, and the top five things a Chinese or Russian student would do as an international student in the U.S.

The final survey questions were developed by the author under the guidance of the author’s major professor, Dr. Linda Serra Hagedorn. Dr. Hagedorn’s interaction and
approval was necessary as she has interacted and worked with international students in both China and Russia and has published studies concerning both countries. Special care was taken to word questions so that Chinese and Russian students who spoke English as a second language would comprehend. The survey (questionnaires) method was selected because the Chinese education system strongly emphasizes written literacy in Teaching English as a Foreign Language over oral communication (Pavlik, 2012).

In addition, drafts of survey questions were sent to a group of university professors for feedback and suggestions prior to conducting the pilot; subsequently, the survey was edited per committee comments. The survey was piloted with five Chinese students and three Russian students in the U.S., resulting in more revisions per pilot participants’ feedback. The IRB permission is attached in Appendix E.

Data Collection

Data obtained in this study was generated using hardcopy surveys in China and a Qualtrics web link in Russia. Information regarding Chinese and Russian student perceptions on the value of a U.S. higher education was collected from a self-administered online survey instrument administered in the summer and autumn of 2017. Participants in the study included Chinese and Russian college students who had not studied in the U.S. and had sufficient English proficiency to participate in the study. The survey results were then collected and analyzed.

Quantitative and Qualitative Data Analysis

Descriptive analysis, reliability analysis, comparative analysis (independent t-tests), and text analysis were utilized to answer the study’s research questions. The data analysis for this study was generated using Qualtrics software, Version 2018.
Quantitative data were later analyzed using IBM SPSS 25.0 software.

**RQ1a: Demographics RQ1b: Desire to Study in the U.S.**

To answer questions RQ1a and b, a descriptive analysis (frequencies and proportions) was conducted to determine the demographics and background of the sample in terms of age, gender, and current state of paying for an education in their home country. Also, Descriptive analysis determined frequencies in terms of student desire to study in the U.S., what this opportunity would depend on, major obstacles, and possible desired programs of study. It is impossible to do a test of comparison such as t-tests or chi-square tests due to the nature of the test non-exclusivity of these questions. The comparison tests would be inappropriate for the level of data in this study.

**RQ2: Value, Cost, and Prestige of U.S. Higher Education**

A reliability analysis was conducted for RQ2 a, b, and c to ensure that sets of items in a scale load appropriately on the scale as measured using item-total correlation (Urdan, 2010). Three scales were created: Intrinsic value (enjoyment or interest), Prestige value (usefulness or relevance), and Cost-Culture value (finance, loss of time, overly-high effort demands, loss of valued alternatives, or negative psychological experiences such as stress). Attainment value, part of Eccles’ Expectancy-Value Theory, was not used because the scales did not load. However, it was used in the descriptive analysis of the political climate between host countries and the U.S., and possession of English skills and text analysis. Cronbach’s alpha was utilized as a measure of reliability, with .70 or larger used as a cut-off point for acceptance of internal consistency between items in a scale (Cronbach, 1951).
**RQ3: Testing Differences Between Chinese and Russian Students**

A comparative analysis was used to answer RQ3. Independent sample t-tests were performed to determine if there were significant differences between means of dependent variables such as Intrinsic value, Prestige Value, Cost-Culture value, and Attainment value in the form of importance of political climate between the U.S. and a home country, and the importance of English proficiency.

**RQ4: Perceptions of U.S. Higher Education**

A text analysis research design was conducted for this question on Chinese and Russian student perceptions about college life in America. One of the purposes of the study was to determine student perceptions about the U.S. college experience, whether these perceptions were positive, negative, or both, and in what way they perceived differences between a U.S. higher education and a Chinese higher education.

Text Analysis software was utilized upon completion of the surveys to conduct a first cycle of the in vivo coding method to analyze each open-ended survey response, and decode the data by determining keywords and phrases common among Chinese and Russian participant answers (Saldana, 2013).

Once the codes were categorized, they were compared to one another. Next, a second cycle pattern coding method was used (Saldana, 2013) to recognize similarities in data coding and further summarize it into sub-categories. Memos of patterns and themes occurring in the data were noted using a thesaurus and acknowledged for further reference.

Subsequently, the third level of coding was applied using the axial coding method (Saldana, 2013, p.151)--to further investigate the results. Qualitative methodologies included 3 levels of coding to ensure the rigor of the analysis.
Primary coding was completed through the process of structural coding, where initial raw data was labeled. The structural coding of the raw data developed the memo code, and the following labels were assigned: Positive Perceptions, Negative Perceptions, and Five Top Things to Do as an International student in the U.S. for both Russia and China. The process of structural coding was designed to start organizing data around my research questions (Saldana, 2013).

Confidentiality

Several considerations were incorporated for the protection of data and participant privacy. All considerations were outlined in the informed consent document received by each participant, and participants were asked to review them prior to their participation in the study (Appendix B). They were informed that upon completion of the study, data, data analysis, and surveys would be retained for at least three years until 2021. The data, data analysis, and surveys would be destroyed at that time.

Transferability and Generalizability

The study provided thorough and explicit descriptions of all aspects of the study to allow the reader to evaluate the study’s transferability. Due to the number of participants in the study, and the lack of a random sample, the findings are not generalizable but do provide important information and evidence that may be used in future studies to better understand the phenomena studied.

Theoretical Framework

This study adopts the framework of the Theory of Planned Behavior by Ajzen (1985), a theory linking beliefs and behavior. Reasoned action predicts that behavioral direction is created or caused by two factors: our attitudes, and our subjective norms. An attitude is a
person’s opinion about whether a behavior is positive or negative, while a subjective norm is a perception.

The study analyzed Chinese and Russian student perceived values of a U.S. higher education in connection to their desire to study in the U.S. before making a decision to come to the U.S. I refer to a person’s value of education as various social, economic, and career advancement factors. Perception of value defines how humans see situations as well as determines how they behave toward a situation or object (Allport, 1987). These intentions partly, but not entirely, reflect an individual’s personal attitude: the extent to which acts are perceived as desirable or unfavorable.

Ajzen's Theory of Planned Behavior (T.P.B.) is crucial for this study because it explains the importance of perceived value of a behavior and how it will influence a person's decision-making process and behavior in various situations. For instance, if the perceived value of a U.S. higher education is low, it will negatively impact a person's experience in a given situation. If Chinese or Russian students do not perceive a U.S. higher education as valuable, they will probably not want to embark on a journey to the U.S. It is important to understand which categories of value are attributed to a high or low value of a U.S. higher education in order to plan appropriate responses that will increase the number of Russian international students in the U.S. and retain the present number of Chinese students.

One way to understand what perceived value Chinese and Russian students hold regarding a U.S. higher education is to examine their perceptions prior to coming to America. Understanding Chinese and Russian student perceptions is important for successful retention and recruitment of these students in U.S. higher education institutions. A recruiter of international students might be able to address some perceptions before students arrive, and
build promotional material that takes advantage of positive perception or value attributes students might already possess. Understanding the connection between perceived value and the desire to come to the U.S. is crucial in understanding the decision-making process of prospective Russian and Chinese international students.

Perceptions about college life in America refer to an individual’s awareness or knowledge of concepts and ideas related to academic and social life in America. According to the T.P.B., intentions are the product of three different processes: behavior attitudes, subjective norms, and perceived behavioral control. The T.P.B. suggests that the first predictors of intentions are behavioral attitudes. Behavioral attitudes show how an individual feels and thinks about the behavior. Behavioral attitudes reflect students’ expectations and evaluations of the behavior. Behavior can be split into two separate aspects: affective attitude and instrumental attitude. Affective attitude relates to the perception of whether the behavior is perceived as positive (enjoyable) or negative (not enjoyable). Instrumental attitude relates to whether the person believes the behavior is beneficial or not. There may be no clear attitude, and an individual might experience a mixture of instrumental and affective attitudes.

The second predicator of attitude is subjective norms. Subjective norms relate to the support given or not given by social groups such as family and friends. Similar to attitudes, subjective norms can be divided into two types: injunctive and subjunctive norms. Injunctive norms refer to whether the social support group encourages the individuals’ behavior. Subjunctive norms refer to whether the social support group engages in the behavior.

The third and final contribution of the T.P.B. is perceived behavioral control. Control is an important variable because the reality perceived, is the reality that can be controlled and interacted with. Perceived reality is the prism that affects the behavioral control a person
plans to employ in a given situation. Control in the T.P.B. is the extent to which an individual feels capable and confident in their ability to engage in the behavior, and it will play a central role in an individual’s intentions and actual behavioral outcomes. A perception can be linked to the person’s potential to overcome possible barriers and challenges. The T.P.B. states that when an individual perceives an activity as enjoyable with good benefits, when he or she has the support and encouragement of others, and when the student believes in possessing an ability to meet the demands of the task, the individual will have stronger intentions and opportunities to become successful in the activity. Thus, perceptions are key components of a person’s belief system.

If a Chinese or Russian student perceives college life in America as a positive experience that has value within a given belief system that indicates what it might look like, he or she is likely to transfer it into expectations and behaviors that leads them to choose the U.S. as their academic destination.

**Summary**

This chapter described the methods and procedures employed to provide insight into the perceptions of Chinese and Russian international student values of a U.S. higher education, and how they affect their desire to study in the U.S. The challenge of the study was to determine the reason(s) for the marked differences in numbers of international students coming from China and Russia. The problem, research design, research questions, researcher positionality statement, instrumentation (survey), sample population, data collection, context of the study, theoretical framework (Theory of Planned Behavior by Ajzen), confidentiality, trustworthiness, transferability, and generalizability were included. The study employed the following statistical methods employing a quantitative research design: descriptive analysis (frequencies), reliability analysis, comparative analysis in a form
of independent t-tests, and as a qualitative part of the research design, text analysis. All research methods correspond with the research questions, and the reasoning behind the selection is explained.
CHAPTER 4. FINDINGS

This chapter presents a comprehensive overview of results as well as a qualitative summary that answers all research questions in sections via tables, figures, and descriptions. The first section of this chapter provides the results of the descriptive analysis (frequencies) for the entire sample and subsequently provides separate findings for students from Russia and China. The results of reliability testing on the relationships between items measuring the value of U.S. higher education among Chinese and Russian students are also included. Results of the comparative analyses are presented in the second section and encapsulate the results of independent T-tests by illustrating the comparison between students from China and Russia. Lastly, the final section summarizes general perceptions of American college student life, the pros and cons of U.S. higher education, by using text analysis to analyze the answers to the related open-ended questions.

This study is guided by the following research questions:

RQ1: 1a. Among the survey participants what are the demographic characteristics of the students from China and Russia, respectively, in terms of gender, age, paying the tuition for their education, and source of their knowledge about U.S. higher education?

1b. Given the opportunity to study in the U.S., would students from Russia and China accept it and which programs would they prefer, what would this opportunity depend on, and what are the major obstacles that prevent Russian and Chinese students from studying in the U.S.?

RQ2: 2a. Among the survey participants, what inter-relationships exist regarding the intrinsic value of U.S. higher education?
2b. Among the survey participants, what inter-relationships exist regarding the cost-culture value of U.S. higher education?

2c. Among the survey participants, what inter-relationships exist regarding the prestige value of U.S. higher education?

RQ3: 3a. Are there any significant differences among survey participants in Perceived Value of U.S. higher education in terms of intrinsic value, cross-culture value, and prestige value, based on their home country of China and Russia.

3b. Are there any significant differences among survey participants in Perceived Ability to afford U.S. higher education, importance of political climate between the U.S. and home country, and a lack of English skills, based on their home country of China and Russia?

RQ4: What are the general, positive, and negative perceptions of U.S. higher education among Chinese and Russian participants?

**RQ1a: Demographics**

A descriptive analysis of demographic characteristics was conducted on all student respondents from Russia and China respectively to illustrate the demographics of the sample. The total sample of this study included 225 responses: 119 from Russia and 106 from China. The results of the analyses are presented in Tables 2, 3, and 4.

In response to RQ1a, among the survey participants what are the demographic characteristics of the students from China and Russia, respectively, in terms of gender, age, paying the tuition for their education, and source of their knowledge about U.S. higher education, Table 2 provides the demographic characteristics to the two subsamples: China and Russia.
Table 2 Demographic Characteristics of Sample Chinese and Russian students (n=225)

<table>
<thead>
<tr>
<th>Variable</th>
<th>China</th>
<th>%China</th>
<th>Russia</th>
<th>%Russia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>37</td>
<td>34.6</td>
<td>58</td>
<td>48.7</td>
</tr>
<tr>
<td>Female</td>
<td>69</td>
<td>65.4</td>
<td>61</td>
<td>51.3</td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-20</td>
<td>26</td>
<td>24.3</td>
<td>18</td>
<td>14.8</td>
</tr>
<tr>
<td>21-25</td>
<td>79</td>
<td>73.8</td>
<td>87</td>
<td>73.4</td>
</tr>
<tr>
<td>26-30</td>
<td>1</td>
<td>1.9</td>
<td>14</td>
<td>11.8</td>
</tr>
<tr>
<td>Knowledge of U.S. movies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet</td>
<td>84</td>
<td>78.5</td>
<td>63</td>
<td>52.9</td>
</tr>
<tr>
<td>Friends and family</td>
<td>20</td>
<td>18.3</td>
<td>25</td>
<td>21</td>
</tr>
<tr>
<td>Local news</td>
<td>10</td>
<td>9.3</td>
<td>22</td>
<td>18.5</td>
</tr>
<tr>
<td>International news</td>
<td>44</td>
<td>41.1</td>
<td>53</td>
<td>44.5</td>
</tr>
<tr>
<td>Personal experience</td>
<td>11</td>
<td>10.3</td>
<td>30</td>
<td>25.2</td>
</tr>
<tr>
<td>Media</td>
<td>45</td>
<td>42.1</td>
<td>38</td>
<td>31.9</td>
</tr>
<tr>
<td>Teachers and professors</td>
<td>47</td>
<td>43.9</td>
<td>29</td>
<td>24.4</td>
</tr>
<tr>
<td>Books</td>
<td>53</td>
<td>49.5</td>
<td>16</td>
<td>13.4</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
<td>12.1</td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>Currently paying for education?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>61</td>
<td>57</td>
<td>47</td>
<td>39.5</td>
</tr>
<tr>
<td>No</td>
<td>45</td>
<td>43</td>
<td>72</td>
<td>60.5</td>
</tr>
<tr>
<td>Given the opportunity, would you like to study in the U.S.?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>94</td>
<td>87.9</td>
<td>37</td>
<td>31.1</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>6.5</td>
<td>67</td>
<td>62.5</td>
</tr>
<tr>
<td>Not sure</td>
<td>6</td>
<td>5.6</td>
<td>15</td>
<td>6.4</td>
</tr>
<tr>
<td>The opportunity to study in the U.S. will depend on:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial support from a University in the form of a grant or a scholarship</td>
<td>78</td>
<td>72.9</td>
<td>40</td>
<td>33.6</td>
</tr>
<tr>
<td>Financial support of the family</td>
<td>46</td>
<td>41.4</td>
<td>33</td>
<td>27.7</td>
</tr>
<tr>
<td>English language proficiency</td>
<td>40</td>
<td>35</td>
<td>65</td>
<td>54.6</td>
</tr>
<tr>
<td>Student’s desire</td>
<td>46</td>
<td>41.4</td>
<td>94</td>
<td>79</td>
</tr>
<tr>
<td>Political climate between the countries involved</td>
<td>53</td>
<td>47.8</td>
<td>62</td>
<td>52.1</td>
</tr>
<tr>
<td>Other</td>
<td>34</td>
<td>28.7</td>
<td>4</td>
<td>3.4</td>
</tr>
</tbody>
</table>

Note. The responses to knowledge about U.S. education and the opportunity to studying the U.S. were not exclusive. Survey participants were asked to select all that applied.
Age and Gender

According to Table 2, more than half of the Chinese participants in this study were female (65.4%), as well as the majority of Russian participants (51.3%). The most prevalent age group for Chinese participants was 21-25 years (73.8%), with 24.3% of participants reporting ages 18 to 20 years, and 1.9% reporting 26 to 30 years. The most prevalent age group among Russian participants was 21-25 years (73.4%), with 14.8% of participants reporting 18 to 20 years, and 11.8% reporting 26 to 30 years.

Knowledge of US higher education

Most Chinese participants gained knowledge of U.S. higher education from U.S. movies (81.3%) and the Internet (78.5%), followed by books (49.5%), teachers and professors (43.9%), media (42.1%) and international news (41.1%), while only a small group of participants reported learning about U.S. higher education from friends and family (18.3%), other resources (12.1%), personal experience (10.3%), and local news (9.3%). The majority of Russian participants obtained knowledge of U.S. higher education from the Internet (52.9%) and U.S. movies (49.6%), followed by international news (44.5%), media (31.9%), personal experience (25.2%), teachers and professors (24.4%); only a small group of participants reported learning about US higher education from friends and family (21%), books (13.4%), and other resources (0.8%).

Paying for Education

Students were asked if they were paying for their education to understand their situation at that time. The assumption being that if the education was free in their own country they would be less likely to study abroad. Paying for education among Chinese participants was divided into two groups, with 57% of Chinese participants paying for their
educations and 43% of them not paying for their educations in China. As for the Russian participants, only 39.5% of Russian participants stated they were paying for their education, while 60.5% of them stated they were not.

The sample was overall similar and comparable. However major differences were noted among some of the categories. Chinese participants were slightly younger than Russian participants. More Chinese students than Russian students learned about U.S. higher education from the movies, while more Russian students appeared to have more personal experience with Americans. More Chinese students than Russian students obtained knowledge of U.S. higher education from teachers, professors, and books.

**RQ1b: Desire to Study in the U.S.**

Tables 2, 3 and 4 answer RQ1b: given the opportunity to study in the U.S., would students from Russia and China accept it and which programs would they prefer, what would this opportunity depend on, and what major obstacles would prevent Russian and Chinese students from studying in the U.S.?

There was a large difference in the proportions of Russians and Chinese in interest in U.S. study. Given the opportunity to study in the U.S., 87.9% of Chinese participants indicated that they would take advantage of it, while 6.5% of participants would not, leaving 5.6% of the participants undecided. Given the opportunity to study in the U.S., 31.1% of Russian participants would have taken it, while 62.5% of participants would not, leaving 6.4% of the participants undecided.

For Chinese participants, acting on this opportunity would depend on financial support from a university in the form of a grant or a scholarship for 72.9% of the participants, followed by the political climate between the countries (47.8%), student’s own desire
(41.4%), support from the family (41.4%), English language proficiency (35%), and other factors (28.7%).

For Russian participants to take advantage of this opportunity, it would most heavily depend on personal desire (79%), English language proficiency (54.6%), and the political climate between Russia and the U.S. (52.1%), with a smaller number of participants citing financial support from a university in the form of a grant or a scholarship (33.6%), support from family (27.7%), and other resources (3.4%).

Obstacles

Table 3 provides responses regarding obstacles of studying in the U.S. by Chinese and Russian subsamples.

<table>
<thead>
<tr>
<th>Variable</th>
<th>China (n)</th>
<th>China (%)</th>
<th>Russia (n)</th>
<th>Russia (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money</td>
<td>84</td>
<td>78.5</td>
<td>71</td>
<td>59.7</td>
</tr>
<tr>
<td>Having no desire to do it</td>
<td>3</td>
<td>2.8</td>
<td>67</td>
<td>58.8</td>
</tr>
<tr>
<td>Family Responsibility</td>
<td>27</td>
<td>25.2</td>
<td>41</td>
<td>34.5</td>
</tr>
<tr>
<td>English Skills</td>
<td>38</td>
<td>35.5</td>
<td>37</td>
<td>31.1</td>
</tr>
<tr>
<td>Large Physical Distance between Countries</td>
<td>17</td>
<td>15.9</td>
<td>40</td>
<td>33.6</td>
</tr>
</tbody>
</table>

Note. The responses to knowledge about U.S. education and the opportunity to studying the U.S. were not exclusive. Survey participants were asked to select all that applied.

The major obstacle to pursuing U.S. higher education for Chinese students (78.5%) and Russian participants (59.7%) is financial hardship, as shown in Table 4. Additionally, a lack of desire also appeared to be a serious obstacle for Russian participants (58.8%). For Chinese participants, lack of desire to study in the U.S. was only a concern for 2.8% of the students. English skills were an obstacle for 35.5% of the Chinese participants, and 31.1% of the Russian participants. Family responsibility was a concern for 25.2% of the Chinese participants, and 34.5% of the Russian participants. The large physical distance between
countries was an important obstacle for 33.6% of Russian participants and 15.9% of Chinese participants.

**Programs of Study**

Table 4 indicates which programs Chinese and Russian students would like to attend if they came to the U.S.

<table>
<thead>
<tr>
<th>Program</th>
<th>China (n)</th>
<th>China (%)</th>
<th>Russia (n)</th>
<th>Russia (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensive English</td>
<td>28</td>
<td>26.2</td>
<td>43</td>
<td>36.1</td>
</tr>
<tr>
<td>Community College</td>
<td>32</td>
<td>29.9</td>
<td>10</td>
<td>8.4</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>51</td>
<td>47.7</td>
<td>51</td>
<td>42.9</td>
</tr>
<tr>
<td>Graduate</td>
<td>74</td>
<td>69.2</td>
<td>97</td>
<td>81.5</td>
</tr>
</tbody>
</table>

Note. The responses to knowledge about U.S. education and the opportunity to studying the U.S. were not exclusive. Survey participants were asked to select all that applied.

The students from Russia and China were asked which programs would be of interest to them if they were students in the U.S. Table 4 indicates that the majority of Russian students (81.5%) and Chinese students (69.2%) are interested in attending graduate programs in the U.S. However international students may also express interest in other college types for individual reasons such as English language learning and vocational programs. Interest in attending undergraduate U.S. programs among the Chinese participants is 47.7%, while among the Russian students it is 42.9%. Community college programs were of interest to 29.9% of Chinese students but only 8.4% of Russian students. The Intensive English Program was popular among 26.2% of Chinese students and 36.1% of Russian students.

There was a profound difference between Chinese and Russian subsamples in the desire to come to the U.S. Most Chinese students wanted to study in the U.S., while most Russian students did not. For most Russian students one of the major obstacles to study in the
U.S. were a lack of money and a lack of a personal desire while Chinese students cited financial obstacles as their main concern.

RQ2: Value, Cost, and Prestige of U.S. Higher Education

An in-depth understanding of construct items is achieved by analyzing multi-item measures instead of a single item (Gliem & Gliem, 2003). Carmines and McIver(1981) state that a single item analysis is less accurate and does not provide sufficient information (Carmines & McIver, 1981). In order to better understand the latent constructs of this study, scales were constructed as appropriate. Reliability analysis was conducted to assist in the answering of research question RQ2:

2a. Among the survey participants, what inter-relationships exist regarding the intrinsic value of U.S. higher education?

2b. Among survey participants, what inter-relationships exist regarding the cost-culture value of U.S. higher education?

2c. Among the survey participants, what inter-relationships exist regarding the prestige value of U.S. higher education?
Table 5 Reliability of scales pertaining to perceived value of U.S. higher education

<table>
<thead>
<tr>
<th>Intrinsic value of US Education</th>
<th>(n=226)</th>
<th>(α = .842)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will play American sports.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will attend sporting events at the American university.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will have lots of American friends.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will be invited to and attend many parties.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will be friends with my professors.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will study very hard.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will date an American.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will have a part time job.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost-Cultural Value of US Education</th>
<th>(n=221)</th>
<th>(α = .754)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am worried about culture shock if I go to the U.S.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is my dream to study in the U.S.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prestige Value of US Education</th>
<th>(n=219)</th>
<th>(α = .828)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employers in my country value U.S. higher education.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiving a degree from a U.S. college will be beneficial for my career.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I believe U.S. higher education provides more opportunities for my field than my country.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Responses in 5-point Likert scale, 1= completely disagree, 2= disagree, 3= not sure, 4= agree, 5= completely agree

The stronger the correlation between items, the closer the Cronbach’s Alpha will be to 1.0. A Cronbach’s Alpha of .70 or higher is considered acceptably reliable and .80 is considered to have good reliability (Urdan, 2010). Table 5 shows that all Cronbach’s Alpha levels were .70 or higher and therefore are considered reliable (Cronbach, 1951).
RQ3: Testing Differences Between Chinese and Russian Students

Independent t-tests were conducted to answer RQ3, are there any significant differences among survey participants in perceived value of U.S. higher education in terms of intrinsic value, cross-culture value, and prestige value, based on home country of China or Russia.

RQ3 sought to compare how the means of two independent variables differ when measuring perceived value of U.S. higher education and the importance of political climate between the U.S. and home country, and a lack of English skills.

Table 6 T-test results of comparing perceived value of U.S. higher education between Chinese and Russian students

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>***</td>
</tr>
<tr>
<td>China</td>
<td>106</td>
<td>3.86</td>
<td>0.379</td>
<td>12.00</td>
<td>219</td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td>119</td>
<td>3.13</td>
<td>0.500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross-Culture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.74</td>
</tr>
<tr>
<td>China</td>
<td>106</td>
<td>3.07</td>
<td>0.904</td>
<td></td>
<td>220</td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td>119</td>
<td>2.85</td>
<td>0.972</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prestige</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8.25</td>
</tr>
<tr>
<td>China</td>
<td>106</td>
<td>3.79</td>
<td>0.581</td>
<td></td>
<td>210</td>
<td>***</td>
</tr>
<tr>
<td>Russia</td>
<td>119</td>
<td>3</td>
<td>0.827</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to afford U.S. Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.34</td>
</tr>
<tr>
<td>China</td>
<td>106</td>
<td>3.2</td>
<td>1.000</td>
<td></td>
<td>221</td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td>119</td>
<td>3.24</td>
<td>0.843</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Climate between Countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-4.24</td>
</tr>
<tr>
<td>China</td>
<td>106</td>
<td>2.72</td>
<td>1.180</td>
<td></td>
<td>217</td>
<td>***</td>
</tr>
<tr>
<td>Russia</td>
<td>119</td>
<td>3.39</td>
<td>1.170</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of English Proficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.31</td>
</tr>
<tr>
<td>China</td>
<td>106</td>
<td>3.43</td>
<td>0.896</td>
<td></td>
<td>195</td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td>119</td>
<td>3.47</td>
<td>0.727</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, ***p<.001

Table 6 indicates the difference between means of grouped independent variables for U.S. higher education value. It provides the results of the statistical comparison of the Russian and
Chinese subsamples. The differences were found for intrinsic value, prestige, and political climate variables. Not statistically different were cross-culture, affordability, and a lack of English proficiency variables. Chinese students had significantly higher prestige and intrinsic values of U.S. higher education than Russian students. Russian students expressed significantly higher concern about the political climate between Russia and the U.S. than Chinese students.

**RQ4: Perceptions of U.S. Higher Education**

Text analysis was performed to answer RQ4; what are the general, positive, and negative perceptions of U.S. higher education among Chinese and Russian participants? Text analysis was chosen to interpret participants’ responses to the open-ended questions on the survey. Students were asked the following three open-ended questions:

1. In your opinion, what are some positive things about U.S. higher education? Please describe.
2. In your opinion, what are some negative things about U.S. higher education? Please describe.
3. List 5 top things that you hope to do as an international student in the U.S.

As anticipated, many students (40%) chose not to answer this part of the survey completely, while some provided one-word answers (50%), and only 10% wrote complete sentences.

**Positive Perceptions of U.S. Higher Education**

Figures 1 and 2 provide quantitative tallying of the Positive Perceptions themes derived from Chinese and Russian textual responses respectively.
Figure 1 Positive perceptions of U.S. higher education (China)
Figure 2 Positive perceptions of U.S. higher education (Russia)
According to Figure 1, 52 Chinese participants listed a variety of features they considered positive and beneficial: 35 students listed freedom and independence as a significant attractive feature of U.S. higher education, 24 students liked that U.S. classes are interesting and they can study what they want, 22 students found improving their English skills and proficiency a benefit, 20 students liked that they can engage in multiple extracurricular activities like sports and clubs, and 18 students stated that U.S. education is a quality education that leads to a better career. Learning about American culture was an important benefit for 17 students, and making new friends a benefit for 14. The beautiful nature and fresh air of the U.S. were appealing to 12 students, while going to parties and enjoying oneself was of interest to 10 students. Eight students cited better living conditions at American universities compared to their home country of China. Four students said they would enjoy Internet connections without restrictions, and four students would enjoy dating. The following are quotes from Chinese students:

“Make more money when I come back to China because I will speak English well.”

“People in America are freer and have more opportunities for free thinking.”

“U.S. education is highly valued in most other countries (better career opportunities).”

“The way of teaching is better than the education in China.”

“Beautiful campus and free academic environment.”

Figure 2 suggests that the major benefit for Russian students studying in America is learning English (32 students). Visiting places in the U.S. such as New York, Miami, Los Angeles, Hollywood, Texas, and Seattle was a positive feature for 15 Russian students.
Studying in America was something new to do and was important for eight students. Good weather and climate was a definite positive aspect for seven Russian students, and access to technology was important for six Russian students. Five students found it beneficial to learn about American culture. Five students thought that studying medicine was better in the U.S. than in Russia. Equally important to report is that four Russian students claimed there was nothing positive about U.S. higher education. The following are quotes from Russian participants:

“I would be interested to study outside of Russia because you can gain new perspective about the world.”

“It is interesting to know how American live.”

“Americans seem nice and smile a lot.”

“The climate in the USA is better than in Russia.”

“There are some fields and specializations available that do not exist in Russia.”

“It is a great opportunity to live in the English-speaking country and imagine yourself as an American student.”

**Negative Perceptions of U.S. Higher Education**

Figures 2 and 4 provide quantitative tallying of the Negative Perceptions themes derived from Chinese and Russian textual responses respectively.
Figure 3 Negative perceptions about U.S. higher education (China)
Figure 4 Negative perceptions of U.S. higher education (Russia)
According to Figure 3, the most prevalent major negative aspect of receiving a U.S. higher education for Chinese students is that it is very expensive (41 students). The second most prevalent major negative issue involved guns and a lack of gun safety (34 students). Accessibility of drugs was a concern for 17 Chinese students, while bad habits that included sex and excessive drinking was an expressed concern of 16 students. Eleven students stated that U.S. higher education is amazing and there are no negative issues. Eleven students were concerned that American people do not like the Chinese. Culture shock was a problem for nine students, and eight students were concerned about inferior medical services in the U.S. The large distance between countries was troublesome for eight students, while bad food was a negative aspect for five students. Four students thought that a lack of respect for elders was a negative feature as well. Below are quotes from Chinese participants:

“I think in the US there are lots of drugs around people and I think it is not really ok to use such stuff during the education.”

“Life on campus is not quite safe like in China.”

“I am worried that people have guns and shoot other people.”

“People do not treat people well if they look different.”

“I am not sure about negative things about American education because for me it is a dream to go there”

“Too much of active sex makes me fear.”

“In some recent news, I got that American campus maybe not that safe.”

According to Figure 4, a fear of hostility toward Russians is a major concern for 47 Russian participants: 44 Russian students consider the relationship between Russia and the U.S. to be very negative. Expensive tuition is a negative factor for 21 students, and 21 students felt that bad food, possibly leading to obesity, is a negative feature. The large
distance between Russia and the U.S. is a problem for 16 Russian students. Receiving a bad education is a negative factor for 12 Russian students, and the feeling that U.S. higher education is inferior to European education is a problem for nine students. Seven students were concerned that studying in the U.S. is not safe. Missing family and friends was an obstacle for four students, and a lack of English skills was a concern for three students. The following are quotes from Russian participants:

“Now Americans do not like Russians: Olympic games, sanctions, I am not sure I will feel comfortable as a student in the US.”

“I heard American education is not bad but it is not as good as from England for example.”

“I am afraid I will have to eat hamburgers every day and I will become chubby.”

**Top Five Things to Do in the U.S. as an International Student**

Figures 5 and 6 provide quantitative tallying of “The Top Five Things to Do in the U.S. as an International Student” themes derived from Chinese and Russian textual responses respectively.
Figure 5 Top five things to do as an international student in the U.S. (China)
Figure 6 Top five things to do as an international student in the U.S. (Russia)
According to Figure 5, the top five activities that could be enjoyed by Chinese students studying in the U.S. were: enjoying life and freedom (36 students), international friendships (34 students), learning English (26 students), self-growth and self-development (20 students), and going to parties (19 students).

As shown in Figure 6, the top five activities that would be enjoyed by Russian students studying in the U.S. were: travelling (46 students), learning English (21 students), learning about American culture (11 students), teaching about Russian culture (4 students), and meeting new people (3 students).

**Summary**

This chapter presented the results of the study. Descriptive results illustrated the demographic characteristics of the students participating in this study in terms of their age, gender, and current status of paying for their education at home and the extent to which they learned about U.S. higher education from various sources. Descriptive analysis (frequencies) outlined the differences in Chinese and Russian students’ desire to study in American colleges and universities. Also, major obstacles to pursue academic goals in the U.S were identified by Chinese and Russian students along with desired programs of study. Reliability testing produced a single factor to measure different constructs of value according to Eccles’ Expectancy-Value Theory, associated with U.S. higher education (Eccles & Wigfield, 2002). The results of reliability testing were found reliable in the particular construct grouping.

Independent *t*-test results indicated there was a significant difference in how Chinese and Russian participants viewed the value of a U.S. higher education. Qualitative results of open-ended questions were summarized in terms of positive perceptions of U.S. higher education, negative, perceptions and top five things to do in the U.S. as an international
student. Discussion of the quantitative and qualitative results will be examined more deeply in Chapter 5, concluding with implications for practice and recommendations for future research.
CHAPTER 5. DISCUSSION AND CONCLUSION

This final chapter summarizes and discusses the results and significance of the five research questions presented in previous chapters. Based on this discussion, implications for practice and policy will be presented, followed by recommendations for future research.

Discussion

The goal of the present study, as identified in Chapter 1, was to address the problematic large difference between the numbers of Chinese and Russian students studying in U.S. colleges and universities in spite of the multiple geo-political similarities between China and Russia. Chapter 2 reviewed literature describing the importance of research about international students, the benefits of having international students, and the differences in numbers of Chinese and Russian students coming to the U.S. to study. There are ample research reports in the literature about Chinese international students studying in the U.S.; however, Russian international students barely get mentioned. This gap in the literature identifies the need to better understand how Chinese and Russian students make the choice to study in the U.S.

There were four overarching goals of this study. First, there was a need to understand perceived value of U.S. higher education by Chinese and Russian students using Eccles’ Value Theory framework. Second, it was important to determine if the Intrinsic value, the Prestige value of a U.S. higher education, the Cost-Culture value, and the Attainment value (political climate of the host country in regard to English skills) varied between Chinese and Russian students. The final goal was to understand the discrepancy between the numbers of Chinese and Russian students studying in the U.S. using Ajzen’s Theory of Planned Behavior
framework, and to make suggestions to universities about how they might retain high numbers of Chinese international students and attract more Russian international students.

**RQ1a: Demographics**

**Age and Gender**

The results of the participant demographic characteristics were used to answer RQ1a: among survey participants, what are the demographic characteristics of students from China and Russia, respectively, in terms of gender, age, tuition payment, and source of their knowledge about U.S. higher education? Understanding the demographics of the samples was important to better understand student backgrounds and experiences. The goal was to find a comparable sample of Russian and Chinese students for an accurate comparison, acknowledging the difficulties in data collection faced for both countries. Most Russian and Chinese students in the sample were undergraduate students enrolled in Russian and Chinese universities. Overall, the samples from Russia and China were similar. The Russian student sample included 119 students, while the Chinese student sample included 106 students. Gender and ages were similar for both sets of participants because all students were college or university undergraduates. A slightly larger proportion of participants in this study were female: Russians (51.3%) and Chinese (65.4%)-typical for survey respondents because women tend to participate in surveys more often than men (Smith, 2008). The age group most represented by Chinese and Russian students in the sample fell between 21 and 25 years.

**Sources of Knowledge about U.S. Higher Education**

The most popular sources of knowledge about U.S. higher education were U.S. movies and the Internet, with much higher numbers in the Chinese sample (81.3%, 78.5%) than in the Russian sample (49.6%, 52.9%): U.S. movies were higher in the Chinese sample
while the Internet was the top source within the Russian sample. According to Spangler (2016) and others, the younger generation relies heavily on information from the Internet and movie viewing (Spangler, 2016). In fact, according to Chen (2018), more Chinese watch U.S. movies than Americans. Russians have significantly increased their use and reliance on the Internet (Pavlov, 2017). Therefore, it is not surprising that the Internet and movies are the main providers of knowledge about U.S. higher education between both student groups. More Chinese students (49.5%) than Russian students (13.4%) learned about U.S. higher education from books; book and textbook reading is more common in China than in Russia (Zhao, 2015). More Chinese students (43.9%) than Russian students (24.4%) learned about U.S. higher education from teachers and professors. The university where the survey was conducted has an American center, and the students who were in this group were already interested in American education, while Russian students came from different universities with unknown interests in U.S. higher education. More Russian students (25.2%) than Chinese students (10.3%) learned about U.S. higher education from personal experience. The students from Russia came from three major Russian cities: Moscow, Saint Petersburg, and Kazan, all frequented by tourists. More Russian students (44.5%) than Chinese students (41.1%) learned about U.S. higher education from international news sources. It is unclear which source Russian students called international news. More Russian students (18.5%) than Chinese students (9.3%) learned about U.S. higher education from local news sources. Russian state channels that are very popular among Russian citizens often broadcast world news. Many Russians claim they do not trust the news, yet watching the news is considered a favorite Russian pastime (Gatehouse, 2016). More Chinese students (12.1%) than Russian students (0.8%) used other sources to gain information about U.S. higher education. Friends
and family who served as knowledge sources about U.S. higher education were somewhat similar, with Russian students rating it slightly higher (21%) than Chinese students (18.3%). Media as a source of knowledge about U.S. higher education was somewhat similar, with Chinese students rating it slightly higher (42.1%) than Russian students (31.9%).

**Paying for education**

Both samples were similar in how the participants currently paid for education in their home countries. In fact, more Chinese students from the sample were paying for their education in China (57%) than Russian students in Russia (39.5%). Some students in Russia and China get full scholarships to study in universities based on their excellent high school exam scores (Gaokao in China and EGE in Russia); other students must pay for their own tuition. Universities in Russia usually have a range of students who pay or do not pay for the same program. The necessity to pay for Russian higher education is usually linked to a lower EGE score. China has a similar system (Li, 2016).

Overall, the study sample in terms of participant numbers, gender, age, and current necessity to pay for their own tuition is similar, and therefore at least somewhat comparable. These findings suggest that higher education recruiters targeting these audiences should advertise their institutions online: the Internet is one of the main sources of knowledge about U.S. higher education. To counteract disappointment, it is important to emphasize to Chinese students that Hollywood movies about campus life is generally not an accurate portrayal of life at a U.S. college or university (Chen & Lu, 2006). Providing an accurate picture of academic life is important to assure reasonable expectations and subsequent satisfaction.

Chinese teachers and educators talk to their students about education abroad, specifically in the U.S., and they are highly respected in their society. Many of the Chinese professors have visited or studied in the U.S., unlike Russian professors. Universities and
colleges in the U.S. could invite both Chinese and Russian teachers and educators to tour their institutions so the Chinese could promote these institutions in China. Books are popular resources for learning about U.S. higher education that recruiting agents should employ. By making comprehensible and attractive booklets about their institutions with an accompanying expansive volume of information delineating the specifics of their college or university recruiters could simplify the task of gathering information. Recruiters should also provide a short, general guide to U.S. higher education. It would also be helpful if the admissions office hired Chinese and Russian speaking consultants to highlight important aspects of U.S. higher education for potential international students from China and Russia and outline the major educational and cultural differences that students will encounter. A professionally designed comprehensive booklet would be a valuable source of promotional information to attract Chinese and Russian students to U.S. higher education.

**RQ1b: Desire to Study in the U.S.**

RQ1b sought to discover if Chinese and Russian students who were given the opportunity to study in the U.S would accept it, which programs they would prefer, what the opportunity would depend on, and what major obstacles would prevent them from studying in the U.S.

There is a significant difference in expressed desires to study in the U.S. between Chinese and Russian participants. Most Chinese students (87.9%) in the sample would have accepted an opportunity to study in the U.S., while most Russian students (62.5%) would not. Many more Russian students (6.4%) were indecisive about accepting the opportunity to study in the U.S. compared to Chinese students (5.6%). According to the Ajzen’s Theory of Planned Behavior (1985), perceiving a behavior as desirable has a significant impact on engaging in a behavior. The performance of a behavior is determined by an individual’s
intention to engage in it. Therefore, because Russians are reluctant to study in the U.S., they do not enroll in American colleges. The implications of these findings are significant. While the Chinese have a positive picture of U.S. higher education and would like to come, Russian students do not perceive U.S. higher education as desirable and therefore do not want to and do not come. U.S. higher education institutions could benefit from having more enrolled Russian students in terms of garnered tuition and multicultural experiences for all students. Moreover, having more interactions with individuals from Russia could have significant cultural and social value during a time when there is an acute distrust between the nations.

The opportunity to study in the U.S. for the majority of students in the Russian student sample depended upon personal desire (79%), which is consistent with the Theory of Planned Behavior by Ajzen (1985): a lack of desirability or a behavior leads to the unlikelihood of engagement in the behavior. These findings could be interpreted as such: if Russian students desired to study in the U.S. they would, but because they do not want to come, they simply do not enroll in American universities. Personal desire was important for only 41.4% of Chinese students. Speaking English well to understand classes was important for more Russian students (54.6%) than Chinese students (35%). Of course, mastery of the English language is both a goal and a necessity in U.S. higher education. Both Chinese and Russian students want to be fluent in English, or be more proficient in English; they understand that a functional level of English is necessary to survive and be successful in the U.S. A financial grant and scholarship from a U.S. university would be important for more Chinese (72.9%) than Russian students (33.6%). While there is an assumption that many mainland Chinese are extremely wealthy, there are a substantial number of students in China who do not possess the necessary financial resources (Samurai, 2015). This is consistent with
the present study’s findings: money is a major obstacle for many Chinese students. While the majority of Chinese students would like to study in the U.S., the lack of financing may make it impossible for some to accomplish their academic dreams. The political climate between their home country and the U.S. was important for more Russian students (52.1%) than Chinese students (47.8%), even though the difference is not striking. China and the U.S. currently have a better relationship than Russia and the U.S., and if the relationship between China and the U.S. deteriorates, U.S. higher education institutions might see a drop in Chinese students. In contrast, Russian state TV channels provide negative publicity about U.S. national affairs, as well as U.S. hostility directed towards Russia and Russians (Vorotnikov 2017). Most Russians watch state TV channels and the news (Gatehouse, 2016). Family financial support was more important for more Chinese students (41.4%) than Russian students (27.7%). Chinese students rely heavily on the financial support of their families (Samurai, 2015); without which it is hard to afford a U.S. higher education. Other factors that were not specified were important for 28.7% of the Chinese students, but only 3.4% of Russian students indicating that we continue to have an incomplete picture and more research is warranted.

To conclude, Chinese students generally would like to study in U.S. higher education institutions and will come if they have the financial means to afford it, while Russian students are very much less likely to want to come to the U.S., primarily because the current political climate between Russia and the U.S. is problematic.

**Major obstacles**

Money is an obstacle for more Chinese students (78.5%) than Russian students (59.7%). Having no desire to study in the U.S. was important for more Russian students (58.8%) than Chinese students (2.8%). Family responsibility as an obstacle was more
important for Russian students (34.5%) than Chinese students (25.2%), possibly because students in the Russian sample were older. The extensive physical distance between the home country and the U.S. was a concern for more Russian students (33.6%) than Chinese students (15.9%).

Chinese students want to come to the U.S., but for this to happen, financial resources must be present, while for Russian students who do not want to come the deciding factor is a lack of personal desire to study in the U.S. Most Chinese and Russian students reported they obtained knowledge about U.S. higher education from U.S. movies and the Internet. Both Chinese and Russian students use online resources and U.S. movies as major sources of information about the U.S. higher education system, common pastimes among young college students. Among obstacles, money played an important role for both Russian and Chinese students; however, Russian students emphasized an absence of interest in coming to the U.S. Physical distance and family responsibility concerned students in the Russian sample more than in the Chinese sample.

Programs of study

The majority of students in the Russian and Chinese samples were undergraduates and would have been interested in attending graduate programs if they came to the U.S. to study. Surprisingly, some students selected community college, possibly to get a taste of U.S. higher education or prepare for graduate studies. Graduate programs subsequent to Chinese and Russian undergraduate programs could be attractive for these student groups in order to attain different experiences. University graduate programs should be promoted to more Chinese undergraduate students as well as Russian students, since both groups have expressed some degree of interest in it.
RQ2: Value, Cost, and Prestige of U.S. higher education

RQ2 sought to examine the inter-relationships that exist among the following variables: intrinsic, cost-culture, and prestige values of U.S. higher education.

The question queried if a reliable measure could be constructed, and hence, used in subsequent questions. Research question two sought to discover how participants rated their perceived value of U.S. higher education by rating specific questions utilizing the Likert-scale ratings. All the items had a strong correlation and construct reliability. The reliability analyses were performed on the sample data and hence may not be representative of other samples. However, the positive reliability results may inform future studies and provide important information for the measurement of Eccles’ Expectancy-Value Theory.

RQ3: Testing Differences Between Chinese and Russian students

Research question three sought to determine if significant differences existed between Chinese and Russian students based on their perceived value of U.S. higher education. A significant difference was found between perceived intrinsic value of U.S. higher education, perceived prestige of U.S. higher education, and the importance of the political climate between the home country and the U.S. in making the decision to study in U.S. colleges and universities. This finding is consistent with the Ajzen’s (1985) Theory of Planned Behavior and the Eccles’ Expectancy-Value Theory. If students do not perceive U.S. higher education as prestigious, beneficial, and enjoyable, they are unlikely to pursue it. Russian students from the sample were much less interested to perceive U.S. education as valuable, unlike their as Chinese counterparts; therefore, this sample of Russian students did not wish to enroll in U.S. higher education institutions. Chinese students considered U.S. higher education much more prestigious than Russian students. Chinese students believe U.S. higher education is an elite education that will provide them with better career opportunities, more competitive salaries,
and other benefits such as higher social status and societal respect. Russian students do not perceive U.S. higher education as prestigious and do not believe it will provide professional advancement and opportunities beyond more advanced English proficiency. Russian students from the sample saw greater value in a European education, and many considered a Russian education more prestigious than a U.S. education in most areas except Medicine. Rogof (2016) reported that Russians speak openly about America, and their conversations do not paint a positive picture. A survey investigating Russian mood toward the U.S. and Americans in general shows a growing dislike for U.S. goods and services from education to politics (Rogof, 2016). In 2016 the Russian sociologist Denis Volkov conducted an opinion poll about the U.S. and reported that the attitude of 81% of Russians towards the United States was negative. Another study reported that the United States has been at the top of the list of Russia’s enemies since 2008, sharing first place with I.S.I.S. (Makarenko, 2017).

The pursuit of better English proficiency is not sufficiently attractive for Russians to pursue an American education. Intrinsic value, and the value of interest and enjoyment were also much higher for Chinese students than for Russian students. Chinese students were interested in dating experiences, freedom, independence, parties, and better living conditions. High on the Chinese students’ lists were participation in sports and extracurricular activities. Russian students did not indicate a high value on the “fun part” of education, possibly because education is generally not perceived by Russians as an enjoyable activity, and Russian students are more focused on obtaining knowledge and skills (Rogof, 2016). Interestingly, there were no significant differences in Cost-Culture value, ability to afford U.S. education, or a lack of English proficiency. Therefore, it is safe to conclude that a lack of English skills, finances, and cultural differences are not the major deciding factors in the
desirability of a U.S. higher education, while prestige, enjoyment, and political climate between the host country and the U.S. certainly are.

Prestige and enjoyment of U.S. higher education could be addressed via promotional materials; however, global relationships are not something that educational institutions can significantly improve or alter. The political relationship between China and the U.S., and Russia and the U.S. will without doubt affect the population of these groups in U.S. higher education institutions.

RQ4: Perceptions of U.S. Higher Education

Research question four pertaining to positive and negative perceptions about U.S. higher education, and five top things to do in the U.S. as an international student was answered via short responses in the survey.

Positive Perceptions

One of the major positive themes in Chinese student responses was related to freedom to choose classes, freedom to grow, freedom to participate in activities one enjoys, and independent living. The perception of freedom is one of the main reasons U.S. higher education is popular among Chinese students. They often imagine a fun-filled carefree college life through the lenses of unrealistic Hollywood movies such as *High School Musical*, or *Legally Blonde* (Fish, 2018). Chinese students find Chinese higher education more restrictive with less opportunity to choose educational paths or extracurricular activities than an American education (Kuznetsova, 2017). Chinese students expected American classes to be interesting and engaging. Improving English, a language considered by many Chinese to be the most important language (Kuznetsova, 2017), was an important benefit of receiving U.S. higher education as well. Having free time was also high on Chinese students’ priorities list. Enjoyment of activities like sports, clubs, and other fun events are hard to squeeze into
the tight Chinese collegiate schedule (Fish, 2018). Chinese students expressed excitement about making new friends and enjoying the beautiful nature and fresh air. Fresh air was noted by multiple Chinese students, possibly because of dangerous levels of air pollution in China (Nielsen & Mun, 2017). The persistence of China’s air pollution has made headline news for a number of years, and even led to the creation of the word “airpocalypse.” Chinese opinion polls show anxiety and concern over air quality as a potential health hazard (Nielsen & Mun, 2017).

Some students looked forward to enjoying unrestricted Wi-Fi and better living conditions. China’s Wi-Fi has a plethora of restrictions such as numerous blocked websites including Google, Facebook, Gmail, and Twitter. In spite of the Chinese government’s constant effort to expand the Chinese middle class, the comparison of living conditions sways favorably in the U.S. direction (Savic, 2016). Overall, the central theme in Chinese responses was freedom and independence; they wanted to study the subjects that interested them and to participate in the activities of their choice.

Far fewer Russian students listed the benefits expressed by the Chinese students. The majority of Russian students who replied to the open-ended questions agreed that the major benefit of studying in the U.S., if any, is English proficiency. Learning English is important and prestigious for Russians, as activities such as business and travelling require a functional level of English proficiency (Rogof, 2016). Many Russians, like Chinese, start learning English in elementary school and continue taking classes on their own well into adulthood (Vorotnikov, 2017). Travelling came in second with a long list of potentially interesting places such as New York, Los Angeles, Miami, Texas, Seattle, Hollywood, and Hawaii. Ever since the lifting of the Soviet Union’s iron curtain, travelling has gradually become the
Russians’ favorite pastime, and a competition for who has visited the most number of places occurs among friends and acquaintances (Vladimirova, 2017). Some Russian students stated they could not list any benefits of an American education, and some felt that American education is far inferior to Russian or European education (Makarenko, 2017). Overall, when Russian students do come to the U.S., the only two items that seem to interest them are learning English, which they can do in other countries like England, and U.S. sightseeing, which they also can do without becoming a U.S. international university student.

In general, Chinese students listed many more positive perceptions than Russian students, and their perceptions were U.S. higher education specific such as choosing classes and activities, while Russian students chose positive traits that can be achieved through other means like studying in an Intensive English program somewhere else.

If students are to be encouraged to study in the U.S., positive perceptions should be reinforced by recruiting agents, admissions offices, and orientation leaders via conversations, promotional materials, and orientation sessions while advertising educational institutions. According to Ajzen (1985), the specific benefits of a behavior might be a deciding factor to further engage in this behavior or not. If Russians like to travel and learn English, universities in tourist destinations like Los Angeles, Miami, and New York should take note and advertise in Russia, stressing the location of the educational institution. Intensive English opportunities should be emphasized as well. It is possible that Russian students will at first only be attracted to Intensive English programs, and consider a lengthier educational path later. Chinese student promotional materials should include pictures of the university with blue sky and green grass, students joyfully studying with each other, and images of sport
activities and various clubs. Educational agents could possibly use slogans such as, “Choose what you want to learn!” to stress the perception of academic freedom in U.S. universities.

**Negative Perceptions**

There were far fewer negative statements made about U.S. higher education in the Chinese student responses than in Russian student responses. Some Chinese students thought that U.S. higher education is expensive while others are concerned about guns and shooting on campuses; several students were under the impression that most people in the U.S. carry guns and utilize them if they wish (Kuznetsova, 2017). Guns are not available for possession by private citizens in China, and there are far fewer acts of violence in educational institutions in China compared to the U.S. (Fallows, 2012). Several students perceived dating and sexual relationships while in college inappropriate. In general, dating while in high school and college is discouraged in China. Dating is considered more pragmatic than a romantic affair in China, with the ultimate goal of marriage. Sex before marriage is less common in China than in the U.S. (Custer, 2018). Some students mentioned that U.S. higher education was great and there was nothing negative about it. According to Fish (2018) many Chinese students who have not had experiences the U.S. or in U.S. higher education institutions have only positive things to say about an American education. Many Chinese students think highly of the U.S. and its higher education system (Samurai, 2015). Some students in the survey responses called U.S. education elite. Overall, Chinese students were worried about money and safety.

The biggest concern expressed by Russian students overall was the poor current relationship between the U.S. and Russia. Of course their perceptions were understandable as Russia-U.S. relations are at an all-time low (Vorotnikov, 2017). Some students stated that a U.S. higher education is expensive. In reality, U.S. education is slightly more expensive than
major universities in Moscow and Saint Petersburg, yet comparable tuition wise according to Fish (2018). If one takes into consideration current flight fares, a round-trip ticket from Russia to the U.S. costs easily over a thousand dollars. Many Russian students were concerned that eating American food would lead to obesity. The Russian beauty standard for a young female is a ballet dancer (Wilkinson, 2008): therefore, because more women than men answered the survey, gaining weight while eating at McDonalds and other American restaurants was a big negative feature for the Russian women.

Many Russian students also noted that a European higher education was better than a U.S. higher education, and universities were physically closer to home. Why go to the U.S. when one can learn English in England or another European university that is more proximal to Russia and involves less expensive flights? Overall, most Russians who answered the survey were concerned about the political situation between Russia and the U.S. It is important to first acknowledge negative perceptions about U.S. higher education in order to combat misinformation. The U.S. definitely has a different gun policy than Russia and China, but higher education institution shootings are still rare and gun violence on campus is not common (Elliot & Tudge, 2011). These facts should be presented to Chinese and Russian students along with other concerns discussed above. American students do not sit in class with guns resting on their desks, and while safety is a valid concern, it is still very unlikely that international students will be harmed in the U.S.

It is suggested that Russian promotional materials could include pictures of slender students eating healthy food and students with welcoming and friendly facial expressions. The slogan for Russian students might be, “Welcome to the U.S. We are happy to meet you!”
Educational recruiters could provide information with cheaper flight options for both Chinese and Russian students.

**Top Five Things to Do in the U.S. as an International Student**

The responses from both the Chinese and Russian samples corresponded well in regard to positive attributes of U.S. higher education, with Chinese students having more detailed and elaborate answers on this topic. Chinese students seemed excited about experiencing freedom, making new friends, learning English, engaging in self-growth and development, and having a good time at parties. The responses of Russian students were much less enthusiastic. They would travel the U.S. and learn English. Of far less interest was learning about American culture, being ambassadors of Russian culture, and meeting new people.

Overall, Chinese students have a much more positive perception of U.S. education and value it more highly than Russian students. This is consistent with the numbers of Chinese and Russian students in U.S. higher education institutions. Through the lens of the Theory of Planned Behavior it can be explained as follows: Chinese students think U.S. higher education is elite and provides opportunities for pleasant activities and personal and professional growth, and they especially want to come to the U.S. because the political climate between the U.S. and China is not yet worrisome. Russian students, on the other hand, perceive a U.S. education as inferior to European and possibly Russian education and are troubled by the current political climate between Russia and the U.S. They do not wish to come even if given the opportunity.

**Implications for Practice and Policy**

There are numerous implications for practice that can impact all U.S. higher education institutions’ stakeholders based on the findings of this study.
First, Chinese students still show high enrollment in U.S. higher education institutions. In order to ensure this enrollment continues and attract even more Chinese students, educational recruiters should reinforce the positive perceptions of U.S. higher education and address negative perceptions. Positive perceptions include the prestige of U.S. higher education, enjoyment of freedom, having fun, enjoying fresh air and experiencing good living conditions. Recruiters and admission offices can emphasize these positive perceptions in the form of posters, presentations, and possibly a movie trailer for Chinese students who are thinking of coming to the U.S. Additionally, utilization of the Planned Behavior Framework by Ajzen predicts that if Chinese students think of U.S. higher education as a desirable activity, they will more likely come to study here. Negative perceptions should also be addressed, especially safety on campus to ensure that gun policies are explained, as well as drug and other policies.

Second, the political situation between Russia and the U.S. needs to improve to promote U.S. higher education for Russian students. If that happens in the future, admissions and educational recruiting agents should target Russia and promote Intensive English programs possibly in tourist locations like Miami, Los Angeles, and New York to provide travel opportunities. Negative perceptions should also be addressed by comparing European educational institutions to U.S. educational opportunities, and also focus on less expensive travel options and campus safety and laws.

Finally, institutions and programs should embody and promote a welcoming environment and create excitement for Chinese, Russian, and international students in general; international students are extremely beneficial to educational institutions both culturally and financially. Admissions offices could facilitate the creation of campus
welcoming committees for international students to act as support groups for international students.

**Implications for Future Research**

This study sought to understand the high number of Chinese students in U.S. higher education institutions and ways to increase or retain them, juxtaposed with the relatively low number of Russian international students in U.S. higher education institutions and ways to attract more. The findings of this study contribute to existing literature pertaining to international students; specifically those from and Russia and China. There are several implications for future research in this area. First, the survey instrument used in this study was an original design and hence would benefit from additional testing and subsequent modification. Second, the survey can be used on different groups of international students in order to determine the value of U.S. higher education through their cultural lenses. Students from South Korea, India, and Malaysia form the most populous international student groups in the U.S. after the Chinese, and they should be interviewed and surveyed about their perceptions of the value of U.S. higher education and their desire to study on U.S. soil. In addition, other students in countries that do not choose the U.S. in great numbers should also be queried and interviewed.

Third, the study can be qualitatively enhanced utilizing an in-depth interview method. Finally, a study could target post-enrollment Chinese and Russian student perceptions and whether they changed their opinions after coming to the U.S.

**Conclusion**

This study was designed to understand why there is a significant difference in the numbers of Chinese and Russian student enrollments in U.S. higher education institutions. The goals of the study were achieved and provided contrasting evidence that Chinese
students highly value U.S. higher education and would like to come to the U.S. to study and enroll in U.S. higher education institutions in high numbers, while Russian students do not believe U.S. higher education is of high quality, do not wish to study in the U.S. and therefore do not enroll in U.S. colleges and universities. Overall, Chinese students have positive perceptions of U.S. higher education such as freedom to choose classes, engage in self-discovery, and choose educational pathways, activities, sports, and have dating partners, while Russians only perceive benefit in learning English and travelling to specific tourist destinations.

When planning my study, the original objective was to see how Russian student enrollment in U.S. higher education institutions could be increased to match Chinese student enrollment, based on similarities between the two countries. The results of the study support my conclusion and prediction that Russian enrollment will not increase unless better relations develop between the U.S. and Russia, which is outside the power of U.S. higher education institutions. My prediction is that Chinese enrollment in U.S. higher education will decline if the political situation between the U.S. and China worsens. This should be a concern for U.S higher education institutions. Chinese students will not enroll in U.S. colleges and universities if the relationship between the U.S. and China deteriorates.
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APPENDIX A. SURVEY

Background:

1. Gender: MARK
   Male
   Female
   Other

2. Age: MARK
   15-18
   18-20
   20-25
   25-30

4. Are you currently paying for your education? MARK
   Yes
   No

5. Most of my knowledge about U.S. higher education and college life comes from:
   (Mark all that apply)
   1. U.S. movies
   2. Internet
   3. Friends and family
   4. Local news
   5. International news
   6. Personal experience
   7. Media
   8. Teachers and professors
   9. Books
   10. Other

3. If you had an opportunity to pursue a degree in a U.S. college/university, would you take it? MARK
   1. Yes
   2. No
   3. I don't know

   What would this opportunity depend on: Mark all that apply
   1. Financial support from the university in a form of a grant or a scholarship
2. Financial support of my family
3. English language proficiency
4. My desire
5. Political climate between the countries
6. Other

If you had an opportunity to study in the United States you would mostly be interested in: Mark all that apply

1. Intensive English program
2. Community college program
4. Undergraduate program
5. Graduate program (Master, Phd)

What is your major obstacle of getting U.S. higher education? Mark all that apply

1. Money
2. Having no desire to do it.
3. Family responsibility
4. English skills
5. Large physical distance between my home country and the U.S
5. Other
6. None

From 1-5 How true are the following statements.

1-Completely disagree 2-Disagree 3-Not sure 4-Agree 5-Completely agree

As an international student in the USA, I WILL:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Completely Disagree</th>
<th>Disagree</th>
<th>Not sure</th>
<th>Agree</th>
<th>Completely Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will be able to afford my education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will have trouble adjusting to a new environment in the U.S.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am worried about a culture shock if I go to the U.S.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will have lots of American friends.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I will be invited and attend many parties.  
I will study very hard.  
I will be friends with my professors.  
I will have problems understanding lectures in English.  
I will miss my friends and family from home.  
I will have lots of spare time.  
I will enjoy the American food.  
I will miss the food from my home country.  
I will play American sports.  
I will attend sporting events at the American university.  
I will date an American.

I will have a part time job.

Please rate the following statements:

1-Completely disagree 2-Disagree 3-Not sure 4-Agree 5-Completely agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>Completely Disagree</th>
<th>Disagree</th>
<th>Not sure</th>
<th>Agree</th>
<th>Completely Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am worried about a culture shock if I go to the U.S.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My English proficiency is sufficient to be successful in college classes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think I will have excellent living conditions in a U.S. college.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employers in my country value U.S. higher education.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Political climate between the U.S. and my country will affect my decision to study in the U.S.

U.S. college classes are much easier than my country’s college classes.

It is my dream to study in the U.S.

Receiving a degree from a U.S. college will be beneficial for my career.

I wish to attend a grad school (Master, PhD) in my country

I am interested in attending a grad school (Master, PhD) in the U.S.

I believe U.S. higher education provides more opportunities for my field than my country.

Life on campus in the U.S. is very safe.

My English proficiency is sufficient to be successful in college classes

I think I will have excellent living conditions in a U.S. college.

---

**In your opinion what are some positive things about the U.S. higher education? Please describe.**

---

**In your opinion what are some negative things about the U.S. higher education? Please describe.**
List 5 top things that you hope to do as an international students in the USA.

1

2

3

4

5
APPENDIX B. CONSENT FORM

Iowa State University
CONSENT FORM FOR RESEARCH PARTICIPATION

Study Title: What is the value and perceptions of U.S. higher education among Russian and Chinese students and how does it influence their desire to study abroad.

Principal Investigator: Dr. Linda Hagedorn, PhD, Inna Kuznetsova, PhD candidate

IRB Study Number: (IRB ID: 17-330)

I am a doctoral student at the Iowa State University, studying Higher Education. I invite you to take part in a research study. This form has important information about the study, what your role in the study, and the way I will use the information.

You are being asked to participate in a research study about Perceptions about College Life in America
The purpose of this study is to understand Chinese and Russian college students’ assumptions of college life is in the US and whether or not their perceptions influence their decisions to study in the U.S. The study is guided by the following questions:

1) What is the perceived value of U.S. higher education among college students in China and Russia?
2) Does the perceived value and benefit of U.S. higher education among college students in China and Russia correspond with their desire to study in the U.S.?
3) What are some general perceptions of benefits and obstacles of the U.S. higher education among college students in Russia and China and how are they similar or different?
4) What are some possible explanations of high number of Chinese students enrolling in the U.S. colleges and low numbers of Russian students pursuing an American college degree?

What will I do if I choose to be in this study?
You will be asked to fill out a survey.

How much of my time is required? Study participation will take approximately 10 -15 minutes of your time.
Study location: **China:** All study procedures will take place at Xinlian college in China, and online via Qualtrix. **Russia:** All study procedures will take place at Herzen State Pedagogical University of Russia and in online vk.com group for Russian students interested in studying abroad via Qualtrix.

**What are the possible risks or discomforts?**
There are no anticipated risks or discomforts associated with your participation.

**What are the possible benefits for me or others?**
You are not likely to have any direct benefit from participation in this research study. This study is designed to learn more about Chinese and Russian students’ perceptions about college life in the United States. The study results may be used to help other people in the future.

**How will you protect the information you collect about me, and how will that information be shared?**
Results of this study may be used in publications and presentations. Your study data will be handled as confidentially as possible. If results of this study are published or presented, individual names and other personally identifiable information will not be used.

**Financial Information**
Participation in this study will involve no cost to you. You will not be paid for participating in this study.

**What are my rights as a research participant?**
Participation in this study is voluntary. You do not have to answer any question you do not want to answer. If at any time and for any reason, you would prefer not to participate in this study, please feel free not to.

**Who can I contact if I have questions or concerns about this research study?**
If you have questions, you are free to ask them now. If you have questions later, you may contact the researchers at
Inna Kuznetsova, doctoral student innak@iastate.edu
Dr. Hagedorn, PhD, major Professor at lindah@iastate.edu

If you have any questions about your rights as a participant in this research, you can contact the following office at the Iowa State University:

IRB Administrator, (515) 294-4566, IRB@iastate.edu, or Director, Office for Responsible Research, (515) 294-3115.
Office for Responsible Research, 1138 Pearson Hall, Ames, IA 50011-2200
APPENDIX C. SCRIPT FOR CHINESE COLLEGE PARTICIPANTS

Dear Chinese college student,

You are invited to participate in a PhD dissertation study about perceptions and value of U.S. higher education and how it might impact international student’s desire to study in the U.S.

The survey should take no more than 10 to 20 minutes of your time and your participation is very important for the study. Before the survey, you will need to agree to the terms and conditions listed in the consent form. The consent form provides the information about the study and your rights as a participant.

Please follow the link in order to take the test
https://iastate.Qualtrics.com/jfe/form/SV_8p49nmiOx5Xdypn

Thank you,
Inna Kuznetsova
APPENDIX D: SCRIPT FOR RUSSIAN COLLEGE PARTICIPANTS

Dear Russian college student,

You are invited to participate in a PhD dissertation study about perceptions and value of U.S. higher education and how it might impact international student’s desire to study in the U.S.

The survey should take no more than 10 to 20 minutes of your time and your participation is very important for the study. Before the survey, you will need to agree to the terms and conditions listed in the consent form. The consent form provides the information about the study and your rights as a participant.

Please follow the link in order to take the test
https://iastate.Qualtrics.com/jfe/form/SV_8p49nmiOx5Xdypn

Thank you,
Inna Kuznetsova
APPENDIX E. IRB APPROVAL

Date: 8/18/2017

To: Inna Kuznetsova
221 S Oak Ave, Unit 22
Ames, IA 50010

From: Office for Responsible Research

Title: Dissertation Project: Value of American Higher Education among undergraduate students in China and Russia

IRB ID: 17-330

Study Review Date: 8/18/2017

The project referenced above has been declared exempt from the requirements of the human subject protections regulations as described in 45 CFR 46.101(b) because it meets the following federal requirements for exemption:

1. (2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey or interview procedures with adults or observation of public behavior where
   a. Information obtained is recorded in such a manner that human subjects cannot be identified directly or through identifiers linked to the subjects; or
   b. Any disclosure of the human subjects' responses outside the research could not reasonably place the subject at risk of criminal or civil liability or be damaging to their financial standing, employability, or reputation.

The determination of exemption means that:

1. You do not need to submit an application for annual continuing review.

2. You must carry out the research as described in the IRB application. Review by IRB staff is required prior to implementing modifications that may change the exempt status of the research. In general, review is required for any modifications to the research procedures (e.g., method of data collection, nature or scope of information to be collected, changes in confidentiality measures, etc.), modifications that result in the inclusion of participants from vulnerable populations, and/or any change that may increase the risk or discomfort to participants. Changes to key personnel must also be approved. The purpose of review is to determine if the project still meets the federal criteria for exemption.

Non-exempt research is subject to many regulatory requirements that must be addressed prior to implementation of the study. Conducting non-exempt research without IRB review and approval may constitute non-compliance with federal regulations and/or academic misconduct according to ISU policy.

Detailed information about requirements for submission of modifications can be found on the Exempt Study Modification Form. A Personnel Change Form may be submitted when the only modification involves changes in study staff. If it is determined that exemption is no longer warranted, then an Application for Approval of Research Involving Humans Form will need to be submitted and approved before proceeding with data collection.

Please note that you must submit all research involving human participants for review. Only the IRB or designees may make the determination of exemption, even if you conduct a study in the future that is exactly like this study.

Please be aware that approval from other entities may also be needed. For example, access to data from private records (e.g., student, medical, or employment records, etc.) that are protected by FERPA, HIPPA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. An IRB determination of exemption in no way implies or guarantees that permission from these other entities will be granted.