Peer Reviewed Article

ISSN: 2162-3104 Print/ ISSN: 2166-3750 Online
Volume 3, Issue 2 (2013), 140-154

http://jistudents.org/

Studying Overseas: Factors Impacting Intention of Female Students in Mainland China

Yi (Leaf) Zhang, PhD
Assistant Professor, University of Texas at Arlington (USA)

Jie Sun, Doctoral Student
Iowa State University (USA)

Linda Serra Hagedorn, PhD
Professor and Associate Dean, Iowa State University (USA)

Abstract

The purpose of this study was to investigate the factors that impact Chinese female students' intention to study overseas. This study also aimed to understand how these factors impact female students' decision making process. Using a survey questionnaire, data were collected from 96 female undergraduates who enrolled in a 4-year public university in North Central China fall 2010. Descriptive analyses, exploratory factor analyses, and structural equations modeling were utilized to answer the research questions. The results of the study indicated that students' satisfaction with campus experience, English proficiency, and only child status had significant direct effects on their intention to study overseas. The results also identified parents' education, Level of Institutional Support, Quality of Campus Relationship as significant indirect effects.

Keywords: Study overseas; mainland China; female students

Mainland China is the largest source of overseas students in the world and the number of Chinese students pursued higher education overseas has been steadily growing in the past decades. According to Ministry of Education (MOE) statistics, in 2011, 339,700 Chinese students studied overseas, of which, over 90% studied on their own expense (Ministry of Education of People's Republic of China, 2012). The reasons for the increased interest in international study by Chinese prospective students include their country's sustained economic development and stable political environment that has made their option to study abroad more affordable (EIC Group, 2012). In addition, cultural changes such as the "one-child" policy have also contributed to increased family ability to support the single offspring, especially their daughters (Hagedorn & Zhang, 2010).

Despite the influx of international students, there has been only minimal attention paid to how these students make their choice of an international postsecondary institution (e.g., Chen & Barnett, 2000; Maringe & Carter, 2007; Habu, 2000; Ren, Hagedorn, & McGill, 2011; Weiler, 1984). In fact, the topic of college choice has been concentrated on domestic students (e.g., Chapman, 1984; Hossler & Gallagher, 1987; Jun & Colyar, 2002; McDonough, 1997). Even less information is available on the context of Chinese students seeking to study overseas. And almost

nothing is available about the choice and decision making specifically of female students who choose to pursue postsecondary education overseas.

According to a Chinese proverb, "women hold up half of the sky," a considerable number of students who participate in study-abroad activities are females. Born after the one-child family policy which was first implemented in 1978, the current generation of China's young women is not only able to run on unfettered feet but also have unprecedented personal options, opportunities, and responsibilities denied to previous generations (Hagedorn & Zhang, 2010). It is important to invest in obtaining a better understanding about Chinese female students' choice and decision making process as they play an increasingly important role in study-abroad activities. Therefore, the purpose of this study was to investigate the factors that impact Chinese female students' choice to study overseas and how these factors impact their decision making process. The specific research questions driving our investigation are:

1. How do the background characteristics of female students who intend to study abroad differ from their female counterparts who choose to remain in mainland China?
2. What are the specific factors that predict female students' intent to study abroad and what are the relationships between those factors?

Review of Relevant Literature

Factors Influencing Choice of Study Abroad

The decision to study abroad may be considered as the most significant and expensive commitment students and their families ever make (Mazzarol, 1998). Numerous researchers (e.g., Agarwal & Winkler, 1985; Daily, Farewell & Kumar, 2010; Lee & Tan, 1984; Mazzarol & Soutar, 2002; McMahon, 1992; Pimpa, 2003) have studied factors that impact international students' choice of education destination. For instance, Barnick (2006) found that Canadian students considered studying in a different country as an investment to their future success by becoming global citizens and internationally competent knowledge-workers. Maiworm and Teichler (1995) claimed that European students were motivated to study abroad to learn a foreign language, gain a better understanding of the host country, and improve career prospects. A study with a focus on American students (Carlson, Burn, Useem, & Yachimovicz, 1990) indicated that students were seeking opportunities overseas to enhance their future careers. Studies of international students from Indonesia, Taiwan, India, and mainland China (Mazzarol & Soutar, 2002) identified 14 common factors impacted international students' decision to pursue a degree in Australia. These factors included students' positive perception of education abroad, inclination to a foreign culture, accessibility of information on the host country, students' knowledge of the host country, educational quality in the host country, recognition of a foreign degree in the home country, recommendations from family and friends, costs of education in home and host countries, a low-crime rate, a presence of students from the home country, and family ties in the host country.

Research (Bodycott, 2009) specifically focused on students from mainland China indicated the three most important factors motivating students to study abroad: 1) immigration to the hosting country after graduation, 2) a perceived better quality of education, and 3) a competitive tuition. Zhang (2010) found that Chinese students who intended to pursue a bachelors' degree consider studying abroad as an opportunity to enrich their personal experiences in a different country, to receive a better higher education, and to become more competitive when they return to China. In a study of Taiwanese students (Chen & Zimitat, 2006), researchers found that the most important factor shaping Taiwanese intention to study in the U.S. was family and peers. Bodycott and Lai (2012) also indicated that Chinese parents have a strong influence on their children's decision-making process regarding study overseas, although the children have become more involved.

In order to make a sound decision, international students consider what is important for them and make a conscious or unconscious trade-off among the features (Soutar & Turner, 2002). Unlike domestic students, the factors that influence international students' decision-making extend beyond the typical indicators presented in college access research in the U.S. (gender, race, social class, parents, high school preparation, etc.). International students wanting to pursue higher education in a foreign country have a different process of making decisions as well as a unique set of influencing factors.

Mazzarol and Soutar (2002) indicated that the college choice decision process for international students consists of at least three steps: 1) to study internationally; 2) decide upon a host country; and 3) decide upon a specific institution. They explored "push" and "pull" factors that impact students' choice. "Push" factors are the factors that "operate within the source country and initiate a student's decision to undertake international study," and "pull" factors are those "within a host country to make that country relatively attractive to international students" (p. 82). Other researchers (Bourke, 2000; Srikatanyoo & Gnoth, 2002) also found evidence that international students tend to choose the country first followed by the institution.

International students' choice to study abroad is a complex and a multi-level decision making process. A wide range of factors involved in the process could be categorized as factors from the home country that "push" and ones in the host country that "pull" students to study abroad (Mazzarol & Soutar, 2002).

Chinese Students' Study Abroad

During the past century, having students studying overseas has been a significant strategy to enhance the nation's modernization (Orleans, 1988). The practice is not new as the first group of 30 Chinese students were sent to America by the Imperial government in 1872. After the People's Republic of China was established in 1949, an increasing number of students were asked to study the state-of-the-arts technology and foreign languages overseas in order to strengthen the development of the country when they return. However, the destination countries were limited. Study abroad became more available since 1978, when the Open Door Policy was first implemented, but it was not until the mid1980's that study abroad began to become a possibility to regular students in urban China (Orleans, 1988).

China's increasing economic growth in the past three decades has fuelled increased interest in study abroad and it has become more acceptable and affordable for many Chinese students. From 1978 to 2011, a total of 2,245,100 students studied abroad, including those who were funded by family, work, and the Chinese government. In 2011, 339,700 Chinese students studied overseas, which increased 19.32% from the previous year (MOE of People's Republic of China, 2012). The United States (U.S.), Australia, and the United Kingdom remained as the top three destination countries (EIC Group, 2012). For instance, The Institute of International Education in the U.S. (IIE, 2011) reported that the number of international postsecondary students in the U.S. higher education has reached an all-time high with China exporting the largest number. In the 2010-11 academic year, one in every five international students studying in the U.S. arrived from China (IIE, 2011). It is expected that the number of Chinese students pursuing higher education overseas will continue to escalate.

Progress of Gender Equity in China

Mainland China has a long and interesting history of gender equity progress. In the early 20th century, Chinese women were forced to perform foot binding; while 100 years later, the current generation of female students can attend higher education through a genderless admission process.

Since the founding of the People's Republic of China in 1949, new laws and regulations were established to grant women equal rights with men. As a result, an increasing number of women chose to work outside of the home and female employment has gradually become common and acceptable. "Equal pay for equal work" was adopted as a primary guide to enhance employment equality and was commonly employed in state-own companies (Jiang, 2004). Another national policy that contributed to the progress of gender equity in mainland China is the one-child family policy. Although it has been critiqued by the West since its inception, the one-child family policy slowed down the rate of population increase in mainland China (Greenhalgh, 1994). More importantly, this policy challenged the traditional norm that women should be responsible to bear a large family. As a result, implementation of this policy allowed women to have fewer children and allowed mothers to pursue a career outside the home. Additionally, this policy empowered daughters' status at home and weakened preference for sons. Daughters, particularly daughters without any siblings, received considerable attention and the best their parents could provide for their education and career development (Hagedorn & Zhang, 2010). With the continuous support from their parents, the young generation of women in China is able to make full use of their academic talents and take advantage of study abroad programs and other educational opportunities.

Theoretical Framework

Considering education as a service, Cubillo, Sánchez, and Cerviño (2006) developed a theoretical model of international student college choice to determine prospective international students' purchase intention. In their study, purchase intention is "used as a predictor for the preferential choices of consumers, and is defined as the intention of the student regarding the destination country as provider of the education service" (p. 104). This model comprises the purchase intention as a dependent variable and summarizes 19 independent variables into four factors: personal reasons, country image, institution image, and program evaluation (see Figure 1).

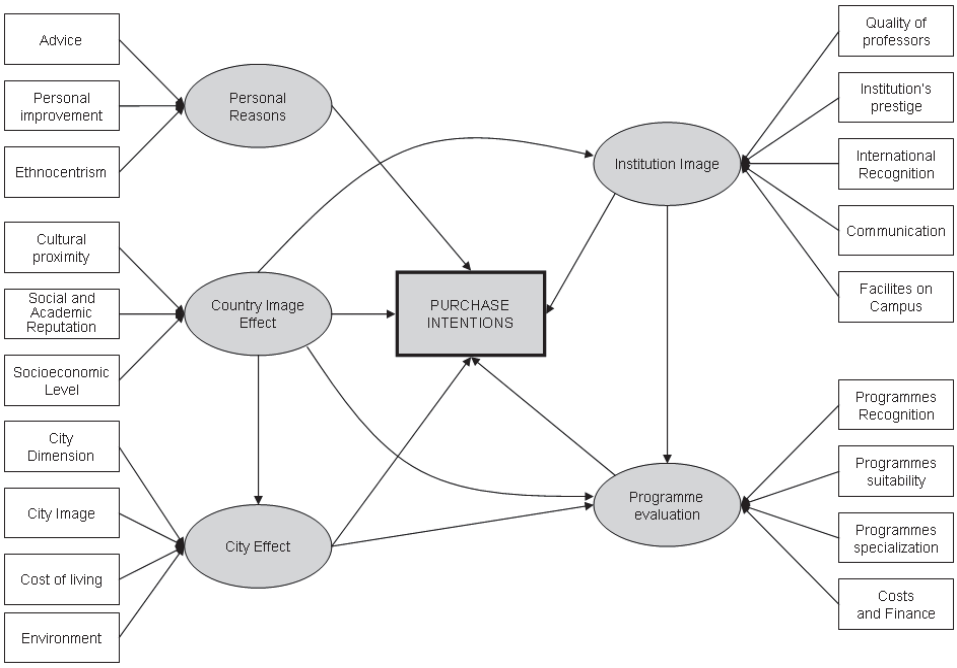

Figure 1. A model of international students' preferences (Cubillo, Sánchez, & Cerviño, 2006, p. 107)

Students' personal reasons include personal improvement, skill development, further career opportunities, reorganization of the institution and programs, service expectation, and advice from others. Country image can greatly influence the purchase intention of students and their perception of education. It is also the first source that consumers consider in the decision making process because it was found that consumers' attitude towards the products or series are associated with their conceptions of the country of origin. Prospective students tend to hold a higher perceived value of the quality of higher education in countries for which they hold a positive or favorable attitude. City image also has an influence on students' choice since the city represents the environment where international students will attend college. Institution image, including academic reputation, quality and expertise of faculty, attractiveness of the campus, quality of facilities, students' services and activities, institutional cultures, etc., can strongly impact students' choice of institutions. The last factor, program evaluation, influences students' selection of a program and a major. Suitability, selection of courses, entry requirements, costs, and opportunities of financial support will be considered before a prospective student decides in which program to enroll.

Methodology

Data Source

Data for this study were collected in North Central China fall 2010. Approximately 150 students who enrolled in a 4-year public university participated in the study but only the responses from female students are included in the current inquiry. In total, 96 female students completed the survey. Students filled out a paper-based survey with questions regarding background information, academic performance, choice of study abroad, and college experience. The surveys were personally hand delivered to each student in an auditorium setting. The survey was written in Chinese in order to provide a natural setting for the participants where they can most authentically reflect their thinking.

Analytic Approach

These analyses were conducted in three steps. First, descriptive statistics were employed to analyze the characteristics of the overall sample. In step two, we employed exploratory factor analyses as a data reduction tool to identify the underlying factor structures. Exploratory factor analyses also served as *a priori* structures for further model specifications. In step three, we used the confirmatory factor analyses to check the measurement models using AMOS 19.0.

Additionally, we tested the structural relations among the variables using structural equation modeling techniques. We assessed goodness of fit using a number of measures and indices. First, we checked the *chi-square* statistic. A *chi*-square that is not significant is indicative of adequate model fit. In addition a ratio of less than 3 of the *chi-square* to degree of freedom comparison is also evidence of acceptable fit. Other fit indices, such as the Incremental Fit Index (IFI), Tucker-Lewis Fit index (TLI) and Comparative Fit Index (CFI) of value above .90 indicate a reasonable fit. If the values of the above fit index are greater than .95, the model is cast as having a good fit. Root Mean-Square Error Approximation (RMSEA) of less than .08 is indicative of a good fit.

Variables

The variables used in this study are explained below.

Dependent variable. The dependent variable of the study was a dichotomous measure of whether students intend to pursue an advanced degree overseas.

Independent variables. The independent variables included student background characteristics and three latent variables regarding students' college experiences. The latent variables were:

- Overall Satisfaction with the University evaluated the extent to which students were satisfied with the university.
- Level of Institutional Support explained the extent to which students felt supported by the university.
- Quality of Campus Relationship measured the quality of students' relationships with peer students, faculty members, and administrators.

Table 1. *Background Characteristics of Female Students in China by Choice of Study Abroad*

Variables	SO Student (n = 40)	Non-SO Student (n = 56)
Only child	28.2%	9.1%
Age		
22 or younger	92.5%	94.5%
23 or older	7.5%	5.5%
Ethnicity		
Han (Majority)	92.5%	92.9%
Minority	7.5%	7.1%
Province		
Henan	92.5%	94.6%
Other	7.5%	5.4%
Grade		
Freshman	2.6%	0.0%
Sophomore	30.8%	50.0%
Junior	33.3%	19.6%
Senior	33.3%	30.4%
Father's highest degree		
Middle School and lower	35.0%	42.9%
High School	35.0%	39.3%
Associate's	10.0%	10.7%
Bachelor's	17.5%	5.4%
Master's	2.5%	1.8%
Mother's highest degree		
Middle School and lower	47.4%	64.2%
High School	26.3%	20.8%
Associate's	15.8%	13.2%
Bachelor's	7.9%	1.9%
Master's	2.6%	0.0%
Ranking		
Medium low	5.0%	1.8%
Medium	20.0%	41.1%
Medium high	45.0%	41.1%
High	30.0%	16.1%
The highest degree plan to obtain		
Bachelor's	0.0%	3.9%
Master's	26.3%	60.8%
Ph.D.	73.7%	35.3%

Results

Descriptive Analyses

Among the 96 female students, 42% reported that they planned to study overseas to continue their higher education or pursue an advanced degree (i.e., SO students) while 58% did not (i.e., non-SO students). SO and non-SO students shared many common characteristics (see Table 1). The majority was 22 years old or younger, almost all of them were from Central China, and only a small proportion was identified as ethnic minority. Differences were also found between the two groups. A higher proportion of non-SO students had siblings but a larger percentage of SO students ranked medium high or high in their cohort, planned to obtain a doctoral degree, and have parents with at least a bachelor's degree.

Exploratory Factor Analyses

Our hypothesized model based on the existing literature is presented in Figure 2. Principal axis factoring (PAF) was performed to extract the underlying factors from the survey items. The survey instrument consisted of several sections and an exploratory factor analysis was conducted within each section respectively.

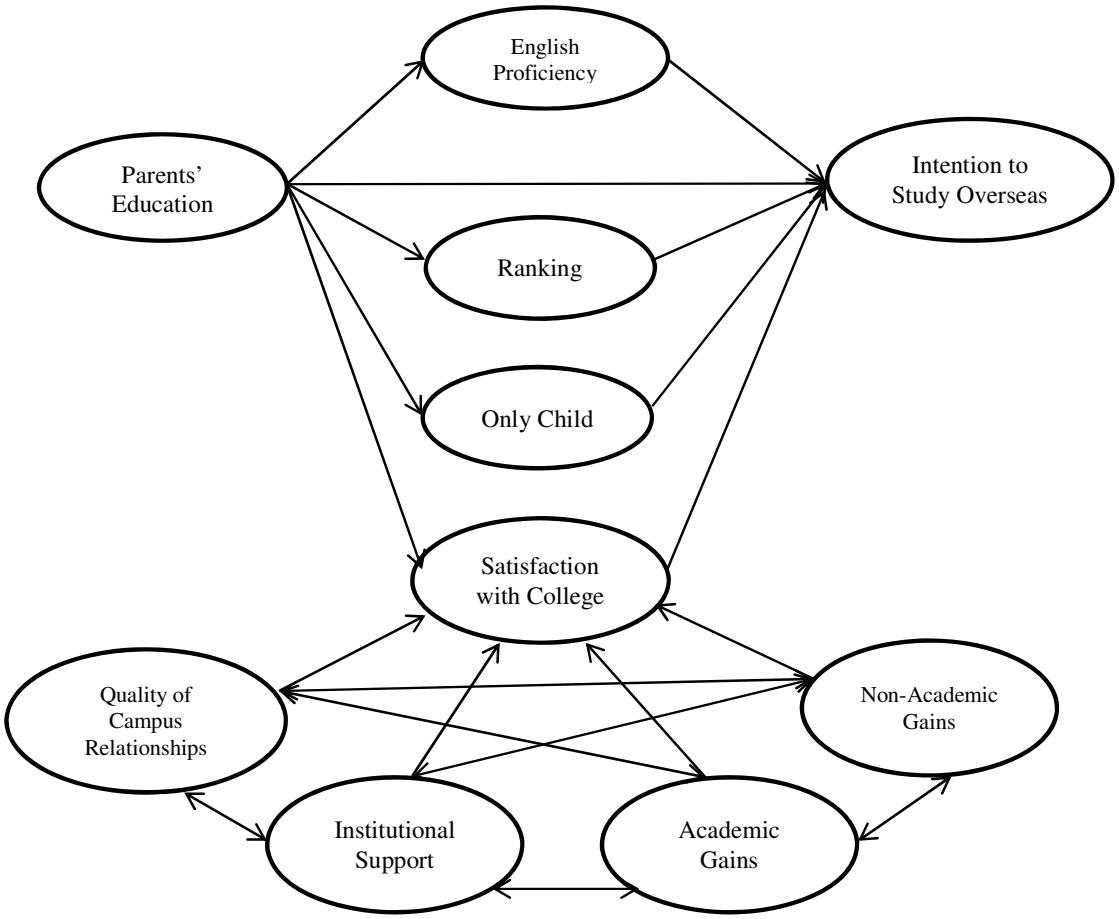

Figure 2. Hypothetical model

A promax solution was used for rotation to gain the simple structure. The number of factors was determined by the parallel analysis was well as examining eigenvalues which were greater than 1. If the number of factors indicated by the parallel analysis was greater than that of eigenvalues which were greater 1, we fixed the number of factors in PAF at all the numbers between and

compare all the pattern matrixes. The number of factors whose corresponding pattern matrix was closest to the simple structure was chosen.

The results of exploratory factor analysis showed there was a factor underlying the four variables of English self-reported abilities: Listening, Speaking, Reading and Writing, accounting for 48.49% of the variance. A clear one-factor structure was identified for relationships with students, faculty, and administration offices, explaining 60.8% of the variance. A one-factor solution was obtained for institutional support, accounting for 41.54% of the variance. In the 27 survey items addressing the gains through coursework, interaction with faculty and peers, the initial exploratory factor analysis results suggested a four-factor solution. However, several items had cross- or low- loadings and were removed them from the analysis. As a result, two factors were identified for the remaining items, explaining 48.67% of the variance. After reviewing the contents of the items, we named these two factors "Academic Gains" and "Non-Academic Gains." Table 2 presents the factor loading of each item on the corresponding factors as well as Cronbach's alpha as the reliability statistic.

Table 2. *Factors and Factor Loading*

Factors	Items	Labels	Factor Loadings	α
English Proficiency	B1L	English Listening	.678	0.787
	B1S	English Speaking	.751	
	B1R	English Writing	.662	
	B1W	English Reading	.691	
Quality of Campus Relation (OCR)	D1_1	Relationships with students	.588	0.799
	D1_2	Relationships with faculty	.930	
	D1_3	Relationships with administrative personnel and officers	.783	
Institutional Support	D2_1	providing the support I need to help myself succeed academically	.405	0.755
	D2_2	encoraging contact among students from different backgrounds	.462	
	D2_3	helping me cope with my non-academic responsibilities	.675	
	D2_4	providing the support I need to thrive socially	.874	
	D2_5	attending campus events and activities	.692	
Academic Gains	B7_1	coursework increased-overall intellectual growth	.574	0.880
	B7_2	coursework increased-ability to critically analyze ideas and information	.715	
	B7_3	coursework increased-ability to understand numerical or quantitative concepts	.665	
	B7_6	coursework increased-ability to understand scientific concepts	.727	
	B8_1	Interaction with faculty increased-overall intellectual growth	.780	
	B8_2	Interaction with faculty increased-ability to critically analyze ideas and information	.801	
	B8_3	Interaction with faculty increased-ability to understand numerical or quantitative concepts	.743	
	B8_6	Interaction with faculty increased-ability to understand scientific concepts	.630	
Non-Academic Gains	B7_5	coursework increased-motivation to pursue ideas presented in class	.733	0.904
	B7_7	coursework increased-interested in learning more about things that are new to me	.594	
	B7_8	coursework increased-ability to work with others in groups	.550	

B7_9	coursework increased-confidence that I can perform successfully in college	.864
B8_5	Interaction with faculty increased-motivation to pursue ideas presented in class	.435
B8_7	Interaction with faculty increased-interested in learning more about things that are new to me	.515
B8_9	Interaction with faculty increased-confidence that I can perform successfully in college	.516
B9_5	Interaction with peers increased-motivation to pursue ideas presented in class	.707
B9_7	Interaction with peers increased-interested in learning more about things that are new to me	.733
B9_8	Interaction with peers increased-ability to work with others in groups	.503
B9_9	Interaction with peers increased-confidence that I can perform successfully in college	.798

Structural Equations Modeling

All the confirmatory factor analyses were performed based on the five latent variables and five observed variables. The five latent variables are the five factors extracted in the previous exploratory factor analyses: English Proficiency, Quality of Campus Relationship, Level of Institutional Support, Academic Gains, and Non-Academic Gains. The five observed variables include the highest level of parents' education, the academic ranking in class, whether the only child in family, students' satisfaction of the campus experience and their intention to study abroad. Since the three latent variables, Level of Institutional Support, Academic Gains, and Non-Academic Gains, consisted of at least eight items respectively, we combined the items into three composite constructs with the purpose of reducing the dimension of covariance matrix in the following confirmatory factor analyses.

Initial evaluation showed that the fit of the hypothesized model was not satisfactory. The analytic results indicated that the academic ranking in class did not have a significant effect on students' intent to study abroad; neither did it have a significant relationship with students' English proficiency. Other factors such as Academic Gains and Non-Academic Gains were not found as significant predictors to students' satisfaction with their campus experience nor their intention to study abroad. In sum, the three variables, Class Ranking, Academic Gains, and Non-Academic Gains did not have a significant contribution to predict student intention to study abroad. Thus, they were removed from the model and were not included in further analyses. We argue that the trimming and restructure of the hypothesized model is appropriate due to the experimental nature of the model. Although we are guided by the literature, we also acknowledged that there is very little guidance for a study of this nature.

The modification indices suggested that more variance would be explained if a path from Quality of Campus Relationships to English proficiency was added. A better relationship with faculty, staff, and peer students may create a more positive learning environment, which could help students to perform better in their academic studies. The positive relationship on campus may also provide more support when they encounter difficulties in their study. Therefore, it was deemed appropriate to add a path from Quality of Campus Relationships to English proficiency.

In the final model (see Figure 3), the chi-square was not significant (chi-square=91.24, df=72, p=0.063). Additionally, the RMSEA value was .053, which was lower than the .08 threshold

and the IFI, TLI and CFI were .954, .927, and .950 respectively. These indexes indicated that this model fit the data well. Moreover, the regression coefficients for paths were all significant at α=0.05 level and their standardized values are displayed in table 3.

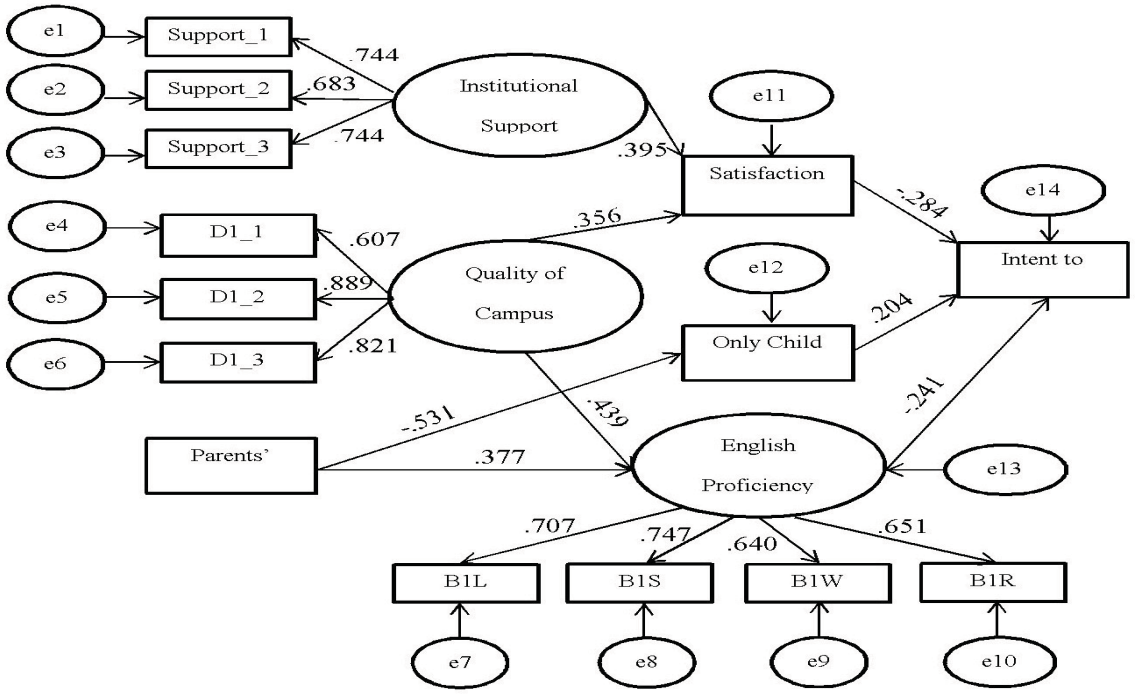

Figure 3. Modified structure equation model

The decomposition of the total effects into direct and indirect effects is displayed in table 4. As displayed in the table, students' satisfaction of the campus experience, their English proficiency, and whether they were the only child in the family had significant direct effects on their intention to study abroad. Students having a higher satisfaction with their campus experience in China were less likely to pursue an advanced degree in a foreign country. Students without any siblings were more likely to choose to study abroad compared to those with siblings. In addition, women who reported a higher level of English proficiency were less likely to plan to study abroad; however, the *p* value associated with the path from English proficiency to student intention to study abroad was only 0.04, which indicated that the effect was marginal.

Institutional support and Quality of Campus Relationships have indirect effect on students' intention to study abroad through the mediation of Evaluation variable. Using the formula

$$Z = \frac{IE(P_a P_b)}{se(IE)} = \frac{IE(P_a P_b)}{\sqrt{P_a^2 \times se(P_b)^2 + P_b^2 \times se(P_a)^2}}$$

to test the significance of these indirect effects, after inputting the path coefficients and its corresponding standard deviations, the Z scores for Level of Institution Support and Quality of Campus Relationship to students' intention to study abroad were -2.10 and -2.02 respectively. Since both values have a larger magnitude than 1.96, it indicated that the indirect effects from the Level of Institutional Support and Quality of Campus Relationship to students' intention were statistically significant at α=0.05 level. Student who received higher level of institutional support and had a better quality of campus relations tend to have a higher level of satisfaction with their campus experiences, thus, they were less likely to choose to study abroad. As indicated by the coefficients

in Table 3, parents' education had a significant direct effect on whether the woman was the only child in the family. Parents with higher level of education were less likely to have more than one child. The *Z* score for parents' education on students' intention to study abroad through the variable Only Child was -.18 with a magnitude less than 1.96. This indicated that the indirect effect of parents' education on whether students choose to study overseas was not statistically significant.

Table 3.
Regression Coefficients and Standardized Values

Predictor variable	Criterion variable	Estimate
Institutional Support	Support_1	0.744
Institutional Support	Support_2	0.683
Institutional Support	Support_3	0.744
Quality of Campus Relations	D1_1	0.607
Quality of Campus Relations	D1_2	0.889
Quality of Campus Relations	D1_3	0.821
English_Proficiency	B1L	0.707
English_Proficiency	B1S	0.747
English_Proficiency	B1W	0.64
English_Proficiency	B1R	0.651
Institutional Support	Evaluation	0.395
Quality of Campus Relations	Evaluation	0.356
Parents' Education	Only Child	-0.531
Parents' Education	English_Proficiency	0.377
Quality of Campus Relations	English_Proficiency	0.439
Evaluation	Intent to Study Abroad	-0.284
Only Child	Intent to Study Abroad	0.204
English_Proficiency	Intent to Study Abroad	-0.241

Table 4.
Direct and Indirect Effects

Standardized Total Effects	Institutional Support	Quality of Campus Relations	Evaluation	Parents' Education	Only Child	English Proficiency
Study Abroad	-0.112	-0.207	-0.284	-0.199	0.204	-0.241
Only Child	0	0	0	-0.531	0	0
Evalution	0.395	0.356	0	0	0	0
English Proficiency	0	0.439	0	0.377	0	0

Standardized Direct Effects	Institutional Support	Quality of Campus Relations	Evaluation	Parents' Education	Only Child	English Proficiency
Study Abroad	0	0	-0.284	0	0.204	-0.241
Only Child	0	0	0	-0.531	0	0
Evalution	0.395	0.356	0	0	0	0
English Proficiency	0	0.439	0	0.377	0	0

Standardized Indirect Effects	Institutional Support	Quality of Campus Relations	Evaluation	Parents' Education	Only Child	English Proficiency
Study Abroad	-0.112	-0.207	0	-0.199	0	0
Only Child	0	0	0	0	0	0
Evalution	0	0	0	0	0	0
English Proficiency	0	0	0	0	0	0

Discussion

The results of descriptive analyses provided an overall picture of the female students who participated in the study. This study surprisingly demonstrated that almost half of the participants were considering study abroad to continue their current study or to pursue a more advanced degree. Most of the participants were traditional-aged students, identified as Han people (ethnic majority in mainland China), and almost all of them were from Henan province. This was not surprising since the university was a comprehensive, residential university located in Henan Province. Compared to those who did not intend to pursue a degree outside of China, a higher proportion of students who planned to study overseas were the only child of their families, ranked medium high or high in their classes, willing to pursue an advanced degree in the future, and had parents with more education. Parents had a strong impact on students' decision to study abroad (Pimpa, 2004). Another research study (Bodycott, 2009) of mainland Chinese students in Hong Kong acknowledged the influence of Confucian values of *filial piety* and confirmed that parents play an integral role in students' decision making processes. Students whose parents received less education may not be aware of the possibility of studying outside of China. In contrast, parents who had obtained higher degrees may have a better understanding about the education opportunities in both China and overseas. They were also more likely to provide financial support to assist their children to pursue higher education in a foreign country. Students' academic preparation and self-motivation may be another important factor that influences students' intention to study overseas. This study indicated that students who had a stronger desire of pursuing higher degrees in education may be more willing to explore opportunities in other countries.

In this study, we also evaluated the relationships of student characteristics, English proficiency, parent's education, and their college experiences with the university in China. A measurement model comprised of seven variables was robust. The results of structural equation modeling indicated that students' satisfaction, being an only child in the family, and level of English proficiency were identified as significant factors that impact directly on students' intention to study abroad. Among the three variables, students' English proficiency and students' satisfaction with college had negative associations with the students' intention. In other words, students who were less satisfied with the university, being an only child in the family, and reported a lower English proficiency level were more likely to choose to study abroad.

Student satisfaction has been utilized as a key indicator to organization effectiveness (Cameron, 1978), quality of student life on campus (Kara & DeShields, 2004), and student persistence (Bean, 1980, 1983). In the current study, it was not surprising that students who expressed a higher level of satisfaction with the current Chinese university were less likely to pursue education overseas. In contrast, students who were less satisfied with the university tend to search for other options and more likely to consider studying in a different country.

Being an only child in the family significantly increased the likelihood of students choosing studying abroad. This may indicate that students with limited resources and support may consider studying overseas intimidating thus less likely to pursue the opportunity. Wang (2010) also indicated that the one-child family policy greatly promoted the gender equity in China and reduced the gap of educational opportunities between male and female students.

English proficiency was also a significant predictor. A possible explanation could be that students with lower level of English proficiency consider studying overseas as an important opportunity to improve their language skills, thus tend to be more likely to choose to study outside of China. Learning a foreign language, particularly English, has been viewed as a significant part of education and one's English skills could be directly linked to his/her future career success. Numerous researchers (DeKeyser, 2007; Dwyer & Peters, 2004; Salisbury, Umbach, Paulsen, &

Pascarella, 2009) have found that improving foreign language skills an important benefit of attending education programs outside one's home country.

Several indirect effects were identified. Although parents' education did not have a direct effect on students' intention, it affected students' English proficiency and whether the student was the only child in the family. Students' satisfaction was affected directly by extent to which they were supported by the university and the quality of relationships with faculty, staff, and peer students. Numerous researchers (Machado, Brites, Magalhaes, & Sa, 2011) have found evidence that the level of institutional support and quality of relationships on campus were positive predictors to students' overall satisfaction with the university.

Conclusions and Implications

The results of the study provided a better understanding regarding characteristics and college experiences of female students in north central China with or without a plan of studying abroad. This study also identified factors that impact these students' choice of study abroad as well as the relationships between them. This study contributed to existing literature of international students' choice process and extends current knowledge to women students. International recruiters, admissions officers, and policy makers could gain a better understanding about factors that influence female students' choice in the context of international education. Future researchers can conduct a comparative study between male and female students, exploring gender differences in choices of studying overseas. Future researchers can also take a qualitative approach to understand why students decide to study abroad and how they make the decision.

References

Agarwal, V. B., & Winkler, D. R. (1985). Foreign demand for United States higher education: a study of developing countries in the eastern hemisphere. *Economic Development and Cultural Change, 33*(3), 623-644.

Barnick, H. (2006). *Personal motivations, political pathways: Canadian university students studying in Australia* (Master's thesis). Retrieved from http://spectrum.library.concordia.ca/9216/1/Barnick_2006.pdf

Bean, J. P. (1980). Dropouts and turnover: The synthesis and test of a causal model of student attrition. *Research in Higher Education, 12*, 155-187.

Bean, J. P. (1983). The application of a model of turnover in work organizations to the student attrition process. *The Review of Higher Education, 6,* 129-148.

Bodycott, P. (2009). Choosing a higher education study abroad destination: What mainland Chinese parents and students rate as important. *Journal of Research in International Education, 8*(3), 349-373.

Bodycott, P., & Lai, A. (2012). The influence and implications of Chinese culture in the decision to undertake cross-border higher education. *Journal of Studies in International Education*, *16*(3), 252-270.

Bourke, A. (2000). A model of the determinants of international trade in higher education. *The Service Industries Journal, 20*(1), 110-38.

Cameron, K. S. (1978). Measuring organizational effectiveness in institutions of higher education. *Administrative Science Quarterly, 23*, 604-632.

Carlson, J. S., Burns, B. B, Useem, J., & Yachimowicz, D. (1990). *Study abroad: The experience of American undergraduates in Western Europe and the United States*. New York, NY: Greenwood Press.

Chapman, R. (1984). Toward a theory of college choice: A model of college search and choice behavior. Alberta, Canada: University of Alberta Press.

Chen, T., & Barnett, G. A. (2000). Research on international student flows from a macro

perspective: A network analysis of 1985, 1989 and 1995. *Higher Education, 39*, 435-453.
Chen, C-H., & Zimitat, C. (2006). Understanding Taiwanese students' decision-making factors regarding Australian international higher education. *International Journal of Educational Management, 20*(2), 91-100.
Cubillo, J. M., Sánchez, J., & Cerviño, J. (2006). International students' decision-making process. *International Journal of Educational Management, 20*(2), 101-115.
Daily, C., Farewell, S., & Kumar, G. (2008). Factors influencing the university selecting of international students: Do students understand and consider AACSB accreditation? *Academy of Educational Leadership Journal, 14*(3). Retrieved from http://findarticles.com/p/articles/mi_hb6044/is_201007/ai_n55070368/
DeKeyser, R. M. (2007). Study abroad as foreign language practice. In R. M. DeKeyser (Ed.), *Practice in a second language: Perspectives from applied linguistics and cognitive psychology* (pp. 208-226). New York: Cambridge University Press.
Dwyer, M. M., & Peters, C. K., (2004). The benefits of study abroad: New study confirms significant gains. Retrieved from https://www.clarku.net/offices/studyabroad/pdfs/IES%20Study.pdf
EIC Group, (2012). 2012 zhongguo xuesheng liuxue yixiang diaocha baogao [Intent of studying abroad of Chinese students: 2012 report]. China: Author.
Greenhalgh, S. (1994). Controlling births and bodies in village China. *American Ethnologist, 21*(1), 3-30.
Habu, T. (2000). The irony of globalization: The experience of Japanese women in British higher education. *Higher Education, 39*, 43-66.
Hagedorn, L. S., & Zhang, Y. L. (2010). China's progress toward gender equity: From bound feet to boundless possibilities. *Forum on Public Policy: A Journal of the Oxford Round Table, 2010* (5). Retrieved from http://www.forumonpublicpolicy.com/vol2010no5/womencareers2010.html
Hossler, D., & Gallagher, K. (1987). Studying college choice: A three-phase model and the implication for policy makers. *College and University, 2*, 207-221.
Institute of International Education. (2011). International student totals by place of origin, 2009/10 – 2010/11. *Open Doors report on International Educational Exchange*. Retrieved from http://www.iie.org/Research-and-Publications/Open-Doors/Data/International-Students/All-Places-of-Origin/2009-11
Jiang, Y. (2004). Employment and Chinese urban women under two systems. In J. Tao, B. Zheng, & S. L. Mow (Eds.), *Holding Up Half the Sky* (pp. 207-220). New York: The Feminist Press at the City University of New York.
Jun, A., & Colyar, J. (2002). Parental guidance suggested: Famliy involvement in college preparation programs. In W. G. Tierney & L.S. Hagedorn (Eds.), Increasing access to college: Extending possibilities for all students (pp. 195-216). Albany, NY: State University of New York Press.
Kara, A., & DeShields, O. W. (2004). Business student satisfaction, intention and retention in higher education: An empirical investigation. *MEQ, 3*. Retrieved from http://www.marketing power.com/Community/ARC/gated/Documents/Teaching/MEO/ student _satisfaction.pdf
Lee, K. H. & Tan, J. P. (1984). The international flow of third level lesser developed country students to developed countries: Determinants and implications. *Higher Education, 13*(6), 687-707.
Machado, M. L., Brites, R., Magalhaes, K., & Sa, M. J. (2011). Satisfaction with higher education: Critical data for student development. *European Journal of Education, 46*(3), 415-432.
Maiworm, F., & Teichler, U. (1995). *The first years of Ects in the view of the students.* ERASMUS Monographs No. 20. Retrieved from http://www.uni-kassel.de/wz1/v_pub/wb/wb47.pdf
Maringe, F., & Carter, S. (2007). International students' motivations for studying in UK HE. *International Journal of Educational Management, 21*(6), 459-475.

Mazzarol, T. (1998). Critical success factors for international education marketing. *International Journal of Education Management, 12* (4), 163-75.

Mazzarol, T., & Soutar, G. (2002). "Push-pull" factors influencing international student destination choice. *The International Journal of Educational Management. 16*(2), 82-90. Retrieved from http://www.emeraldinsight.com/Insight/ viewPDF.jsp?contentType= Article&Filename=html/Output/Published/Emerald FullTextArticle /Pdf/0600160203.pdf

McDonough, P. (1997). Choosing colleges: how social class and schools structure opportunity. Albany, NY: State University of New York Press.

McMahon, M. E. (1992). Higher education in a world market: An historical look at the global context of international study. *Higher Education, 24*(4), 465-482.

Ministry of Education of the People's Republic of China, (2012, February 2). 2011 niandu woguo chuguo liuxue renyuan qingkuang tongji [Statistics of China's overseas students in 2011]. Retrieved from http://www.moe.gov.cn/publicfiles/business/htmlfiles/moe /s5987/201202/130328.html

Pimpa, N. (2003). The influence of family on Thai students' choices of international education. *The International Journal of Educational Management 17*(5), 211-219.

Pimpa, N. (2004). The relationships between Thai students' choices of international education and their families. *International Education Journal, 5*(3), 352-359. Retrieved from http://iej.cjb.net.

Orleans, L. A. (1998). *Chinese students in America: Policies, issues, and numbers*. Washington, DC: National Academy Press.

Ren, J., Hagedorn, L. S., & McGill, M. T. (2011). Graduate students: How do they choose academic majors? *Enrollment Management Journal*, Winter, 91-117.

Salisbury, M. H., Umbach, P. D., Paulsen, M. B., & Pascarella, E. T. (2009). Going global: Understanding the choice process of the intent to study abroad. *Research in Higher Education, 50,* 119-143

Soutar, G. N., & Turner, J. P. (2002). Students' preferences for universities: A conjoint analysis. *The International Journal of Educational Management, 16*(1), 40-45.

Srikatanyoo, N., & Gnoth, J. (2002). Country image and international tertiary education. *Journal of Brand Management, 10*(2), 139-146.

Sung, Y. W. (1991). *The China-Hong Kong connection: The key to China's Open-Door Policy.* Cambridge, UK: Cambridge University Press.

Wang, J. (2010). *The impact of one-child policy on Chinese women.* Retrieved from http://www.insidethemoderndragon.com/onechildfull.pdf

Weiler, H. N. (1984). The political dilemmas of foreign study (Special issue: foreign students in comparative perspective). *Comparative Education Review, 28*, 168-179.

Zhang, Y. L. (2010). *Coming to the U.S.: Experience of college application of the international Chinese undergraduates at Iowa State University*. Unpublished report. Department of Educational Leadership and Policy Studies, Iowa State University, Ames, Iowa.

About the Authors

Yi Zhang, *PhD, interests in better understanding how access to higher education affects student choice, mobility, and success. Her current research agenda also attempts to investigate higher education access and student college choice in a global context.*

Jie Sun *is currently a doctoral student at Iowa State University. His research interests include international education, student success, and quantitative methodology.*

Linda S. Hagedorn, *PhD, focuses her research on college student success. She is especially interested in issues pertaining to underrepresented student groups, and equity. Prior to joining the faculty at Iowa State University, she directed the Institute of Higher Education at the University of Florida.*