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Chinese International Student's Decision making and Attitudes towards Studying in the United States.

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Chinese international student's decision making and attitudes towards studying in the United States

by

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ABSTRACT

Using a survey, this study investigates Chinese undergraduate students' sociodemographic characteristics, decision making of studying in the U.S., adaptation experience, and their attitudes towards studying in the U.S. It demonstrated how quantitative methods help to improve understanding of less common but emerging social groups and phenomena.

This study examined decision making, in the form of factors that influence pre attitudes and post attitudes of a group of 124 Chinese undergraduate students in a large Midwest university in the U.S. The results indicate that the Chinese undergraduate students are a homogenous group; most of them are from urban area of China, and most of their parents were highly educated and white collar employers.

 The results also show that the Chinese undergraduate students who have the expectations of having a different life experience, having better job opportunities after graduation, and getting a better education, have more positive pre attitudes than do those without these expectations. And Chinese undergraduate students' pre attitude, English speaking comfortableness, English ability, employment, academic grades, and social adaptation significantly influence their post attitude towards studying in the U.S.

CHAPTER 1. GENERAL INTRODUCTTION

Introduction

With the trend of globalization, the borders between countries have become blurred. The economic cooperation and cultural exchange between China and U.S. are increasing with years and internationalized talents play an important part in the multinational cooperation of modern society. Along with these trends, the number of Chinese student studying in U.S. has increased rapidly. It is reported that the enrolment of Chinese students in the U.S. had reached 157,558 by 2011, which increased by 23% than last school year (Xinhua Net 2011). Simultaneously, the number of Chinese undergraduate students studying in U.S. has gone beyond the graduate students (Liuxue Net 2012), and brought billions of revenue to U.S. economy. Chinese student group has become the largest international student group in the United States.

The recognition of U.S. as a world power and the desire to have knowledge and skills in English language and American culture will open up possibilities of cooperation in businesses and trade with China. These are the key factors that motivate Chinese students to study in U.S. Yet very limited research has tried to measure Chinese students' attitudes toward studying in the U.S. and there lack of local social support to help them transition to the new culture (Cemalicilar, Falbo, & Stapleton, 2005). Hence, it's important to have a better view of how Chinese students think about study in U.S. The research reported here examines the decision making and the pre and post attitudes of a group of 124 Chinese undergraduate students in a large Midwest university in the U.S.

Backgrounds

Acculturation Attitudes

Attitudes and behaviors should be linked to the important reference groups in individuals live. This link shows that individual attitudes of group members are manifested in collective action when both come from and contribute to salient social identities. It is important to know attitudes of a group because attitudes shape people's perceptions of social and physical world, and also impact behaviors (Prislin & Crano, 2008). Today, international students become a big group of population in U.S. which specific characteristics make them different from other migrating groups like immigrants or refugees (Berry, 1997). In general, Chinese students accepted host language training before they arrive in the host country and prepared to accept the host culture. They are a more homogenous group who are young and comparatively well educated. It's important to know their attitudes towards studying in the U.S.

Suedfeld (2007) concluded consistency theories assume that attitude serve some function like to fit the individual into his/her group, and provide them the cognitive structure and maintain ones self-esteem. If someone's attitude helps oneself to meet the goal successfully, the attitude will not change without some reason and the new attitude should be more useful than the old one. The key hypothesis of the motivational theories of attitude change is that people need to maintain their internal attitude consistently, then attitude change is a way to restore this consistent state. When Chinese student study in the U.S. they come to an entirely new environment and join a different cultural group. Their attitudes not only serve the function to let them adjust to fit the new group, but also provide them the cognitive structure to adapt the new culture and help them maintain their self-esteem. If their

attitudes do not make them achieved the goal in the new group, their attitude may change to help them adapt to the new culture.

Nonconsistency theories focused on attitude formation and stressed that attitude can be adapted by the people who hold them, to be a guide to know the world seem to be more understandable and friendly. Learning theories considered attitude formation as attitudes developed through reinforcement or contiguity. Doob's (1947) considers attitude as an implicit response between stimuli and overt responses. And Suedfeld (2007) concluded that "the harder one has worked for a given outcome, the less pleasurable that outcome should seem as a matter of profit rather than of straight reward. If the profit is little, there should be little attitude change". That it's reasonable to conclude Chinese undergraduate students' attitudes towards studying in the U.S. can be modified by themselves, and those attitudes closely connect to their adaptation experience. As Suedfeld (2007) pointed out attitude closely link to previous stimulus: The rewards and punishments which Chinese students received in the new culture environment would lead to difference attitude. Effort is considered to stimulate dissonance and may lead to attitude change, Chinese students can make efforts to across the dissonance and make themselves to adapt the new environment.

Brehm and Cohen (1962) extended Festinger (1954)'s cognitive dissonance theory which focuses on the results of dissonance between two related cognitions, which may be thoughts, memories beliefs or attitudes. Such dissonances happen when the opposite of one's cognition is implied by the other. Like studying hard implies to get a good grade for a test, if one studies hard but did not get good grade, the dissonance happen. The dissonance analysis directly related to effects of effort. Zimbardo (1965) pointed out we would expect the more work to reach a goal, the more valuable the goal would be. The experimenter could know that

subjects in the dissonance group experienced dissonance via their attitudes changed, also the subjects' attitudes changed because of the dissonance experience. If the subjects don't change their attitudes, the experimenter can explain that the dissonance must be reduced in another way by the subjects themselves.

For the Chinese undergraduate student, the dissonance happened when they encounter obstacles, the process of attitude change and dissonance adjustment for them is the responses of generation to overcome the obstacles. Anderson (1994)'s cross-cultural adaptation process model pointed out all adjustment is a circular process of overcoming obstacles and solving problems. This model consisted of a string of adjustments to environmental or internal obstacles, which can be described as transition experience. The Chinese students' obstacles of studying in the U.S. can come from both external states and internal states. External states included living circumstances, academic situation and surrounding culture. Internal states are psychological states, included the sense of social belongings or homesickness, which may become the hurdles that the international students must overcome before other goals are achieved. When Chinese students take efforts to overcome the obstacles but received less achievement, the obstacles can cause their attitude change towards studying in the U.S.

Attitudes and Adaptation

Helson (1964) attempted to apply the original of adaptation-level theory to attitude area. He expressed surrounding environment and previous stimulus influenced the adaptation level, judgment characteristics of objects also influenced the adaptation level. Helson (1964) also proposed that the behaviors and attitudes of a person usually experienced can stand for his/her adaptation level, which can be changed if the subject stimulate by other variables.

Many researchers have tried to analyze cross cultural adaptation, and most of the cognitive perspective on adaptation was related to the attitudes measurement toward the host culture (Berry, Kim, Power, Young, & Bujaki, 1989; Ward & Kennedy, 1994), and attitude is identified as an important predictor of cross-cultural competence. In these studies, attitudes towards acculturation were measured by combining in a single statement of attitudes toward the host society, which tested the factors influence attitude.

Searle and Ward (1990) summarized two forms of adaptation: sociocultural adaptation and psychological adaptation. Sociocultural adaptation refers to one's daily life organizing ability in a new environment, like language proficiency, academic results, and social relationships. Psychological adaptation refers to physical and mental health. Accordingly, more recent studies show that international students encounter problems not only to sociocultural adaptation, such as adjustment to social customs (Schwarzer, Hahn, & Schroder 1994), and psychological adaptation, such as feeling depressed, anxious and lonely due to the loss of their social support networks (Sandhu & Asrabadi 1994).

For a Chinese undergraduate student, the change of attitude towards studying in the U.S. can come from many ways and adaptation experience can be consider as the main factor which influence their attitudes and attitude change. Previous research showed there are two important facets of adaptation of international students. Berry (1985) identified four factors for foreign students' adaptation, there are: environmental (such as housing condition, climate, dress, and food), sociocultural (such as social contact interpersonal and intergroup relation), academic (such as courses, exams grade and language comprehension) and psychological (such as attitudes, homesick). Church (1982) suggested that international students

experienced difficulties influence by the new culture in addition to the problems encountered by domestic students.

Researches also indicated that international student expressed anxiety towards the new culture highly related to their academic performance and language proficiency. Furnham and Bochner (1982) found that some of the problems confronting international students were natural and predictable: language problems, accommodation difficulties, racial discrimination, separation reactions, dietary adjustments, financial stress, misunderstandings and lack of social belongings. It needs to point out some of the academic stresses were common to both international and native students.

The primary task of most Chinese students' in the U.S. is to obtain good academic results. Academic issues are at the forefront of both these students' and their institutions' concerns. Research showed that academic success has a significant impact on students' sociocultural and psychological adaptation and vice versa (Li and Kaye 1998). Researchers in both western countries and China have long considered that attitudes are an essential factor for academic results. Students' attitudes towards study will impact their study behaviors, the academic results decided by their attitudes to a certain degree. Dornyei (2001) and Oxford and Ehrman (1992) proposed that learners' attitudes and motivation were important for increased second language proficiency, which is the basic to gain good results on study abroad.

All of the above can be considered as Helson (1964)'s stimulus, which influence the adaptation level of Chinese undergraduate students. This adaptation level can be denoted by their attitude.

Process of Attitude Change

Kelman (1961) claimed that to know what attitude data mean, it is not only necessary to know individual's respondent direction or distribution, it is also necessary to know the information about the their observed attitudes, the information about their attitude motivation and the information about the linkage between cognition and attitudes: the nature of the information, the specific expectations and evaluations. All these detailed information will help in predicting the subsequent behavior and concrete action. If something about the public determinants and motivational bases of particular attitudes is known, their expression and consequent behavior in particular conditions can be predicted. This model can help to examine the Chinese students' attitude change towards studying in the U.S. theoretically.

Kelman (1961) distinguished three process of social influence: compliance, identification, and internalization. Compliance can be concluded to happen when an individual hopes to get a positive reaction from another person or a group, he/she accept the influence of this person or group. When a Chinese undergraduate student decided to accept the influence of U.S culture, he/she has positive reaction from U.S. culture, this can be called Chinese students' compliance. Identification can be concluded to happen when an individual's behavior is linked to the relationship of self-defining satisfaction and other person or group, he/she adopts behavior from this person or group. Identification to a Chinese undergraduate student can be defined as he/she adopts the behaviors which he/she agrees with from U.S. culture group. Also, identification maintains the individual's relationship to a group when the self-definition is anchored. Though identification differs from compliance, the individual already believes the attitude and behaviors he/she adopts. Finally, internalization means individual accepts this person or group's influence because the

induced behavior is matching with his/her value system. When a Chinese student accepts the behaviors he/she adopted and considers himself/herself is a part of the U.S. culture group, internalization happened. All these three process are not mutually exclusive.

Kelman (1961)'s preliminary analysis showed the individual's reaction and self-image of four patterns: First, the confirmation process is an individual may maintain the original form of self-image essentially when he/she focus on the internal structure of self-image. That means confirmation process to a Chinese student can be explained as the process he/she tends to maintain Chinese culture when studying in the U.S. Second, Identification process is an individual changed his/her self-image by a reshaping of the social relationships in which this image is anchored. In this process, Chinese students reshape their social relationships to U.S. culture group. Third, the internalization process is an individual may change his self-image by reorganizing its internal structure. Chinese students internalize U.S. culture and try to fit in U.S. society in this process. Finally, the resistance process would happened when an individual maintain his/her self-image through a focus on its original social anchorage. Chinese students insist to maintain Chinese culture and refuse to accept U.S. culture can be called resistance.

Berry et al. (1989) pointed out the acculturation adaptation strategies can be classified into four categories: assimilation, integration, separation and marginalization, which correspond to Kelman (1961)'s four attitude change patterns. These four strategies were based on how the immigrants want to acculturate. Assimilation is similar to the individual's internalization, the Chinese undergraduate students who experience assimilation may consider original culture is not important, whereas majority new culture is important. Integration is similar to identification, those who experience integration may consider both

the original and new culture are important. Separation is similar to compliance, that is original culture is considered important whereas contact to the new culture is not. Marginalization is similar to resistance process, which Chinese students in this process may focus on themselves considered both original and new culture is not important.

To verify the acculturation adaptation strategies of Berry et al. (1989), Kosic (2002) tested the immigrants' attitudes toward maintenance of home culture and the relationships to host country culture. It's reported ethnic groups are often motivated to keep their own cultures rather than assimilate into host culture if they have great cultural differences to host country (Taylor & Moghaddam, 1994). In Kosic (2002) research, immigrants who held integration attitude did not have difference from those who held assimilation attitude in sociocultural and psychological adaptation. and Assimilation was linked to higher sociocultural and psychological adaptation while separation and marginalization related to lower sociocultural and psychological adaptation.

Length of Residential Time, Gender, Social Class in the U.S., and Attitudes

The most important cross-cultural measurement model is Lysgaard's culture shock model (1955). Using the U- curve theory, Lysgaard saw the adaptation process for the young people begin from an excitement period which like honeymoon period; culture shock period which result from culture difference; a gradual period which is a tentative recovery period; and finally, the adaptation process climb up and out to full culture recovery. That means the students attitudes towards studying in the U.S. may differ depending on how long they have live in the U.S. Those Chinese student who in honeymoon period may hold a positive attitude towards studying in the U.S., then their attitude may go down when the culture shock comes,

and the attitude may keep relatively steadily or have a little climb up since they begin to adapt their studying life in the U.S.

Previous studies show that the process of adaptation can be smoother the younger the individuals were, while those who were older often had more adaptation problems. Black and Mendenhall (1991) pointed out that lack of longitudinal design, it had problem to simply accept the Lysgaard's U-curve of adaptation. This conclusion suggested the important factors like time-related variables such as age of arrival and length of residence, which determined the levels of adaptation.

Some researchers found that students select to study abroad because they have the interest to learn different culture, and wish to increase their future job opportunities (Orahood, Kruze & Pearson, 2004; Williams, 2005). Students can gains the following ability from the experiences of cross- culture study: the skill of foreign language, the ability to find the way of national contexts and foreign culture, the more critical attitude toward original country (Segalowitz & Freed, 2004).

Difference gender role expectations by countries pushed students who study abroad to think more about their own society, when gender roles were violated that can forced gender differences to rise to the surface (Phillion , Malewski, Rodriguez, Shirley, Kulago & Bulington, 2009). Twombly (1995) examined how gender identity impacted students' study abroad experiences and found out gender identity played a major role in student's alienating experience. In the study of Talburt and Stewart (1999), students' socio-cultural differences including their differences in race and gender, often influenced their attitudes toward the host culture. That means as a different race group in U.S., gender identity of eastern culture may influence Chinese students experience. In east culture, male student received more social

expectation than female student, and female students may be more sensitive and may experience more emotion adaptation obstacles than male students. Thus male students may have more positive pre attitudes towards study in the U.S. then female student.

Phillion et al. (2008) pointed out that social class issues were central to international students study abroad experiences, and can shape the perceptions of students and members of the host country. The social was always defined as a combination of income, education, wealth and occupation. Mospens (2008) concluded that social class highly effect students' satisfaction. The students from higher social class families may hold more positive attitude towards study in school. In a word, gender social class and race diversity among international students. The Chinese students are a more homogenous group, especially the undergraduate Chinese students, and most of them can afford the high tuition fee because they are from higher social class in China.

Hypotheses

Based on the above literature review, I proposed following hypotheses:

Pre attitude

Hypothesis 1: Male undergraduate students may have more positive pre attitudes toward study in U.S. than female students.

Hypothesis 2: Chinese undergraduate students who have higher parents' education may have more positive pre attitudes towards study in U.S. than those who have lower parents' education.

Hypothesis 3: Chinese students who hold positive pre attitudes towards study in U.S. have higher English proficiency then those who hold negative pre attitudes.

Hypothesis 4: Chinese students who hold positive pre attitudes towards study in U.S. have higher academic grades then those who hold negative pre attitudes.

Hypothesis 5: Chinese students who hold positive pre attitudes towards study in U.S. are more likely to be employed then those who hold negative pre attitudes.

Hypothesis 6: Chinese students who hold positive pre attitudes towards study in U.S. experience higher social adaptation then those who hold negative pre attitudes.

Hypothesis 7: Chinese students who hold positive pre attitudes towards study in U.S. experience higher academic adaptation then those who hold negative pre attitudes.

Hypothesis 8: Chinese students who hold positive pre attitudes towards study in U.S. experience higher cultural adaptation then those who hold negative pre attitudes.

Post attitude

Hypothesis 9: Chinese undergraduate students who have longer residential time in U.S. have positive post attitudes towards study in U.S then those who have shorter residential time.

Hypothesis 10: Chinese undergraduate students who have greater English proficiency have more positive post attitudes towards study in U.S. then those who with less English proficiency.

Hypothesis 11: Chinese undergraduate students who feel more comfortable speaking English have more post attitudes towards study in U.S. then those who feel less comfortable.

Hypothesis 12: Chinese undergraduate students who have greater academic grades have more positive post attitudes towards study in U.S. then those who have worse academic grades.

Hypothesis 13: Chinese undergraduate students who are employed have more positive post attitude towards study in the U.S. then those who are unlikely to be employed.

Hypothesis 14: Chinese undergraduate students who experience greater social adaptation have more positive post attitude towards study in the U.S. then those who with less social adaptation.

Hypothesis 15: Chinese undergraduate students who experience greater academic adaptation have more positive post attitude towards study in the U.S. then those who with less academic adaptation.

Hypothesis 16: Chinese undergraduate students who experience greater cultural adaptation have more positive post attitude towards study in the U.S. then those who with less cultural adaptation.

Hypothesis 17: Chinese undergraduate students who have more positive pre attitude towards study in the U.S. have more positive post attitude towards study in the U.S. then those who hold negative pre attitudes.

English speaking comfortableness, English proficiency and GPA

Hypothesis 18: Chinese undergraduate students who feel more comfortable speaking English have a higher English proficiency then those who feel less comfortable.

Hypothesis 19: Chinese undergraduate students who feel more comfortable speaking English have a higher academic grade then those who feel less comfortable.

Hypothesis 20: Chinese undergraduate students who feel more comfortable speaking English are more likely to be employed then those who feel less comfortable.

Hypothesis 21: Chinese undergraduate students who feel more comfortable speaking English may experience greater social adaptation then those who feel less comfortable.

Hypothesis 22: Chinese undergraduate students who feel more comfortable speaking English may experience greater academic adaptation then those who feel less comfortable.

Hypothesis 23: Chinese undergraduate students who feel more comfortable speaking English may experience greater cultural adaptation then those who feel less comfortable.

Hypothesis 24: Chinese undergraduate students who have greater English proficiency have a higher academic grade then those who with less English proficiency.

Hypothesis 25: Chinese undergraduate students who have greater English proficiency are more likely to be employed then those who with less English proficiency.

Hypothesis 26: Chinese undergraduate students who have greater English proficiency may experience greater social adaptation then those who with less English proficiency.

Hypothesis 27: Chinese undergraduate students who have greater English proficiency may experience greater academic adaptation then those who with less English proficiency.

Hypothesis 28: Chinese undergraduate students who have greater English proficiency may experience higher cultural adaptation then those who with less English proficiency.

Hypothesis 29: Chinese undergraduate students who have higher academic grades may experience greater academic adaptation then those who with worse academic grades.

CHAPTER 2. METHOD

Method

Participants

This study is proved by Institutional Review Board by March 16th 2012. The link to the online questionnaire on Surveymonkey was sent via email to the undergraduate students who enrolled (N= 1135) in ISU Spring, 2012 semester. The online questionnaire had an English and simplified Chinese version; the simplified Chinese version was checked by two bilingual speakers. The participants only needed to finish one of them. A total of 165 questionnaires were collected, with a response rate of 14.5%. Only 8 of the participants chose to finish the English version, and 124 usable questionnaires were received.

Variables and Measurements

Demographic information

All participants completed a demographic questionnaire (e.g. age, gender, length of residential time, current student classification, primary major, current GPA, area of China of origin, work status, social class information included father and mother' education, father and mother's occupation and total family income of 2011), which measured of their background information. Based on the previous research, I considered gender, length of residential time and social class as the variables influence their pre attitude towards study in the U.S. before they arrived.

Pre attitude

The variable pre attitude tested Chinese undergraduate students' attitudes towards study in the U.S. before they arrived to study in the U.S. There two items asking "how excited were you about studying in U.S. before you arrive in U.S.?" Subjects respond on a 5 point scale, where 1 = Very excited, and 5 = Not excited at all. And "how prepared did you feel about the prospect of studying in the U.S. before you arrived in the U.S.?" A 5 point scale where 1 = Well prepared and 5 = Not prepared at all. Table 1 shows the results of reliability coefficients, the standardized Cronbach's alpha is 0.404 be low, and the mean are in a capable range.

Post attitude

The variable post attitude tested Chinese undergraduate students' attitudes towards study in the U.S. after they arrived to study in the U.S. There are also two items asking "how satisfied do you feel about your life while studying in the U.S.?" Subjects respond on a 5-point scale, where 1 = very satisfied, and 5 = not satisfied at all, and "how prepared do you feel about the prospect of studying in the U.S. now?" a 5- point scale range from 1 = well prepared to 5 = not prepared at all. Table 2 shows the results of reliability coefficients, the standardized Cronbach's alpha is 0.637, and the mean are also in a capable range.

English speaking comfortableness

Berry (1985) identified language comprehension and academic grades are the main factors in the acculturation adaptation. This variable is measured by asking "how comfortable

did you feel speaking English as a Second language before studying in the U.S.?" The responses were based on a 5-point scale (1= very comfortable to 5= not comfortable at all).

English Proficiency

Dornyei (2001) and Oxford & Ehrman (1992) proposed that learners' attitudes were important for increased second language proficiency, which is the basics for Chinese undergraduate students to gain good academic grades. This variable is measured by Chinese student's self rated English ability from a 5-point scale (1= very good to 5= very poor). The question asked "how would you rate your overall English ability when you arrived for your study in the U.S.?"

Decision making

Decision making is measured by asking "which of the following helped you make the decision to study in the U.S.? Participants can choose more than one answer to this question. Two highest proportion chosen answers: advice1 parents' advice (65.3% of the respondents chose this answer) and advice2 friends' advice (23.4% of the respondents chose this answer) are coded into dummy variables, with 1 = advice1/advice 2, and 0 = other.

Expectation

Expectation is measured by asking "what did you expect to gain from studying in the U.S. before you arrived? Participants also can choose more than one answer to this question. It's coded into dummy variables representing respondents who expect to get a better education (exp1), study a different culture (exp2), have better job opportunities after

graduation (exp3), have a different life experience (exp4), make more friends (exp5), coded 1 = exp1/exp2/exp3/exp4/exp5 and 0 for others.

Social, academic, and cultural adaptation

These three variables indicated Chinese undergraduate students' adaptation to studying in the U.S. The social adaptation items measured by their attitudes toward social belonging; academic adaptation items measured by their attitude towards class and teachers; the cultural adaptation measured by their attitude towards American school culture and social life.

A 7-item scale is used to measure Chinese students' adaptation, responses were based on a 6-point scale and reversed coded as (1 = strongly agree to 6 = strongly disagree). The factors are labeled as follow: F1 indicates social adaptation, F2 indicates academic adaptation and F3 indicates cultural adaptation. The principal component analysis result showed that the initial eigenvalues cumulative to 66.33% for the three factors (29.41% for F1, 22.39% for F2, 14.53% for F3). A social adaptation scale was created that included the following items: social adaptation scale, academic adaptation scale and cultural adaptation scale. Table 3 shows the factor analysis results of the items. The Cronbach's Appha are low for this sample.

Data Analyses

First, I carried out a descriptive analysis of the demographic variables of the sample. Second, in order to find all the possible unidentified relations in the tests and to contrast the set of hypotheses proposed, all variables were selected for inclusion in the structural equation model. The model was estimated using the SPSS 17.0 and Amos 7.0 programs

CHAPTER 3. RESULTS

Demographic Characteristics

Table 4 shows the demographic characteristics of the sample. In the sample, 51.6% participants were Male and 48.4% were Female. Mean age was 21.1 years (S.D. = 1.53). 21.8% were freshman, 16.9% were sophomore, 22.6% were Junior and 38.7% were senior students. Most of the participants are from business (33.9%), engineering (25.0%) and liberal arts and science (26.6%) college. The participants were from various majors and all classifications, and had different lengths of residence in the U.S., few of them having been in U.S. more than 49 months (4.8%).

The largest group of Chinese students was from provincial capital (44.4%), and 34.7% were from other urban area, 17.7% were from municipalities (Beijing, Tianjin, Shanghai or Chongqing), only 3.2% of the participants were from suburban area and none of them were from rural area. That most of the Chinese undergraduate student are from urban area of China (96.8%).

I used three variables to operationalize social class: parents' education level, parents' occupation and 2011 family income. Most all of the Chinese students' parents are white collar employers (only one respondent's parent are both blue collar employers, and one's mother was blue collar employees), others parents were both white collar. There isa lot of missing data in the family income of my sample. I used parents' education as the indicator of the social class in my research which is the combination of farther' highest education level and mother's highest education level, which produced a social class scale with a reliability coefficients standardized alpha is 0.862.

Correlations

Table 5 shows the correlation between the variables. The significant relationships are reported as follows. It's found that Chinese undergraduate students' academic grades positively and significantly correlated to the exp1 to get a better education (b = 0.323, $p <$ 0.001), academic adaptation (b = 0.200, $p = 0.029$) and post attitude (b = 0.201, $p = 0.026$). Parent's advice to make the decision of studying in the U.S. was found positively and significantly correlated to English speaking comfortableness (b = 0.190, $p = 0.034$).

The significant correlation of expectations and other variables are reported as follows: Exp1 to get a better education positively correlated to exp2 study a different culture (b = 0.436, $p < 0.001$), exp3 have better job opportunities (b = 0.257, $p < 0.001$), exp4 have a different life experience (b = 0.257, $p < 0.001$), exp5 make more friends (b = 0.279, $p = 0.002$), pre attitude (b = 0.336, $p < 0.001$) and post attitude (b = 0.229, $p = 0.011$). Exp2 study a different culture positively correlated to exp3 have better job opportunities (b = 0.310, $p < 0.001$), exp4 have a different life experience (b = 0.336, $p < 0.001$), exp5 make more friends (b = 0.401, $p < 0.001$), pre attitude (b = 0.355, $p < 0.001$) and post attitude (b = 0.181, $p = 0.046$). Exp3 have better job opportunities positively correlated to exp5 make more friends (b = 0.243, $p = 0.006$) and pre attitude (b = 0.342, $p < 0.001$). Exp4 have a different life experience positively correlated to exp5 make more friends (b = 0.358, $p < 0.001$) and pre attitude (b = 0.366, $p < 0.001$), and negatively correlated to employment (b = -0.249, $p = 0.005$). Exp5 make more friends positively correlated to pre attitude (b = 0.190, $p = 0.034$) and post attitude (b = 0.216, $p = 0.017$).

English speaking comfortableness was found significantly and positively correlated to social adaptation (b = 0.191, $p = 0.036$), academic adaptation (b = 0.231, $p = 0.011$) and

post attitude (b = 0.440, $p < 0.001$). English proficiency significantly and positively

correlated to employment (b = 0.246, $p = 0.006$) and social adaptation (b = 0.214, $p = $

0.019); English proficiency also significantly correlated to pre attitude (b = 0.226, $p = 0.012$)

and post attitude (b = 0.386, $p < 0.001$). Employment significantly and positively correlated

to pre attitude (b = 0.252, $p = 0.005$).

Social adaptation (b = 0.401, $p < 0.001$), academic adaptation (b = 0.275, $p = 0.002$)

and cultural adaptation (b = 0.199, $p = 0.030$) were all found significantly and positively

correlated to post attitude, social adaptation also significantly and positively correlated to pre

attitude (b = 0.183, $p = 0.045$). Also, there's a significant and positive correlation between

pre attitude and post attitude (b = 0.438, $p < 0.001$). The correlation results generally support

the hypotheses of the study.

Stepwise Multiple Regressions

To further test what factors influence Chinese undergraduate student's pre attitudes, I

used multiple stepwise regression analyses. The following variables were tested as

predictors: gender, parents' education, parents' advice (advice1), friends' advice (advice2),

exp1 expect to get a better education (exp1), study a different culture (exp2), have better job

opportunities after graduation (exp3), have a different life experience (exp4), and make more

friends (exp5).

Some of the results of stepwise multiple regressions are consistent with correlation:

Gender and parent's education were still not found significantly relates in the regression

model. Table 6 shows the results, the R square was equal to 0.252 with three significant

entered predictors: exp4 have a different life experience ($\beta = 0.651$, $p = 0.001$), exp3 have

better job opportunities after graduation ($\beta = 0.510$, $p = 0.003$) and exp1 expect to get a

better education ($\beta = 0.503$, $p = 0.017$), other variables had been eliminated as predictors.

That is, individuals with exp4, exp3 and exp1 showed more positive pre attitude than those

without.

Structural Equation Model

I designed three explanatory models using structural equations to further test the

hypotheses 3-8 and hypotheses 17-21. According to hypotheses 3-8, pre attitude is positively

related to Chinese students' English proficiency, academic grade, employment, social

adaptation, academic adaptation and cultural adaptation. According to the hypotheses 17-21,

English speaking comfortableness positively related to Chinese students' English

proficiency, academic grade, employment, social adaptation, academic adaptation and

cultural adaptation. Also, pre attitude and English speaking comfortableness positively

related to their post attitude. Below is presented a summary of the steps taken to reach the

first structural equation model presented in Figure.1

The model 1 is moderate fit the observed data (CMIN/$df = 1.640$, $p = 0.056$, TLI =

0.762, CFI = 0.921, RMSEA = 0.072). RMSEA and CFI are less sensitive to small sample

size like the one reported in this study. Results also show that for null hypothesis test, a value

of RMSEA no greater than 0.05 is good fit, RMSEA greater than 0.05 and less than 0.1 is

moderate fit. For the variables, square weights represented explained variance or the lower

bound estimate of reliability. Standardized path coefficients are presented on each arrow in

Fig. 1. Statistical significance for these coefficients is represented with asterisks.

English speaking comfortableness positively related to English proficiency (β = 0.429,

p < 0.001) and cultural adaptation (β = 0.234, p = 0.010). And pre attitude (β = 0.301, p =

0.010), English speaking comfortableness (β = 0.281, p < 0.001), employment (β = 0.140, p

= 0.030), academic grade (β = 0.190, p = 0.003) and social adaptation (β = 0.274, p <

0.001) had positive relations with post attitude.

Figure 1. Proposed Structural Equation Model 1 The number next to each connector
is the value of the standardized regression weights, and their significance is represented with
asterisks: *p<0.05, ** p<0.01.

Since model 1 is a moderate fit to the data, I built up the second structural equation model which added paths from English proficiency to employment, academic grade, social adaptation, academic adaptation and cultural adaptation. Because English proficiency not only is the basic for Chinese undergraduate students' to gain good academic grades (Dornyei, 2001, Oxford & Ehram, 1992), but also the basic of employment and adaptation

The model 2 is good fit the observed data (CMIN/df = 1.428, p = 0.160, TLI = 0.841, CFI = 0.965, RMSEA = 0.059). For the variables, square weights represented explained variance or the lower bound estimate of reliability. Standardized path coefficients are presented on each arrow in Fig. 2. Statistical significance for these coefficients is represented with asterisks. The significant relations in model 1 remain significant in model 2: English speaking comfortableness positively related to English proficiency (β = 0.429, p < 0.001) and cultural adaptation (β = 0.221, p = 0.028). And pre attitude (β = 0.300, p = 0.010), English speaking comfortableness (β = 0.280, p < 0.001), employment (β = 0.140, p = 0.034), academic grade (β = 0.189, p = 0.003) and social adaptation (β = 0.270, p < 0.001) had positive relations with post attitude.

All added paths were found to be positively related. English proficiency significantly predicts employment (β = 0.272, p = 0.006), and English proficiency marginally significantly predicts social adaptation (β = 0.169 , p = 0.093).
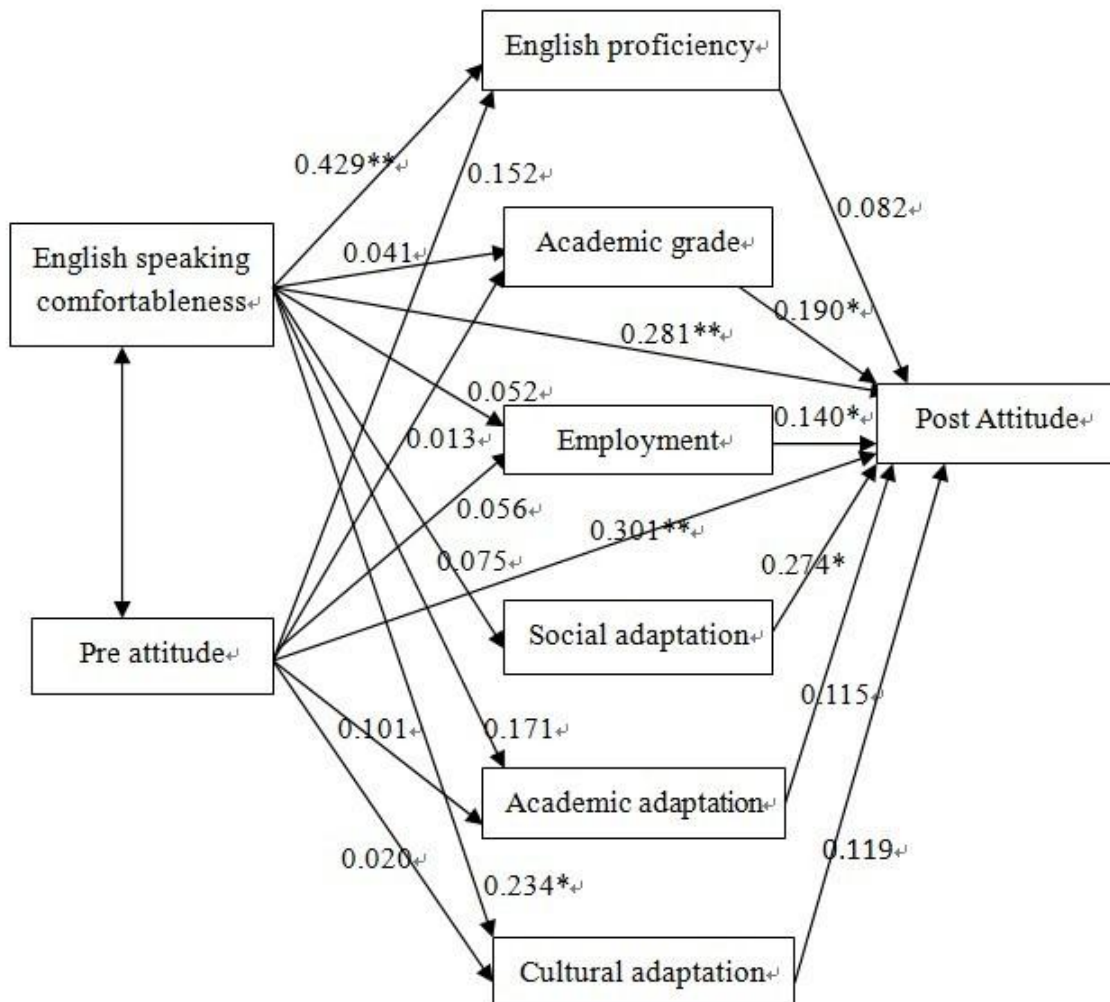
Figure 2. Proposed Structural Equation Model 2 The number next to each connector is the value of the standardized regression weights, and their significance is represented with asterisks: *$p<0.05$, ** $p<0.01$.

To seek a better model to fit the observe data, I added Chinese students' academic grades as a predictor of their academic adaptation. I constructed proposed structural equation model 3.

Model 3 is very good fit of the observed data (CMIN/df = 0.917, p = 0.509, TLI = 1.031, CFI = 1.000, RMSEA < 0.001). For the variables, square weights represented

explained variance or the lower bound estimate of reliability. Standardized path coefficients are presented on each arrow in Fig. 3. Statistical significance for these coefficients is represented with asterisks. Academic grade and academic adaptation was significant and positively related. Academic grade is a significant predictor of academic adaptation (β = 0.220, p = 0.012).

Other path coefficients do not have significant change from the results of model 1 and model 2. All the standardized regression coefficients are positive. The significant relationships are reported as follow for the final model: English speaking comfortableness positively related to English proficiency (β = 0.429, p < 0.001) and cultural adaptation (β = 0.221, p = 0.028). English proficiency positively related to employment (β = 0.272, p = 0.006). Academic grade positively related to academic adaptation (β = 0.220, p = 0.012). And pre attitude (β = 0.299, p < 0.001), English speaking comfortableness (β = 0.277, p < 0.001), employment (β = 0.139, p = 0.035), academic grade (β = 0.187, p = 0.004) and social adaptation (β = 0.269, p < 0.001) had positive relations with post attitude. The marginal significant relationships are reported as follow: English speaking comfortableness and academic adaptation, English proficiency and employment, pre attitude and social adaptation. Generally speaking, the results are consistent with the hypotheses of this study.

A covariance was tested between the variables pre attitude and English speaking comfortableness, which was marginally significant (p = 0.059) and was necessary for the fit of the model.
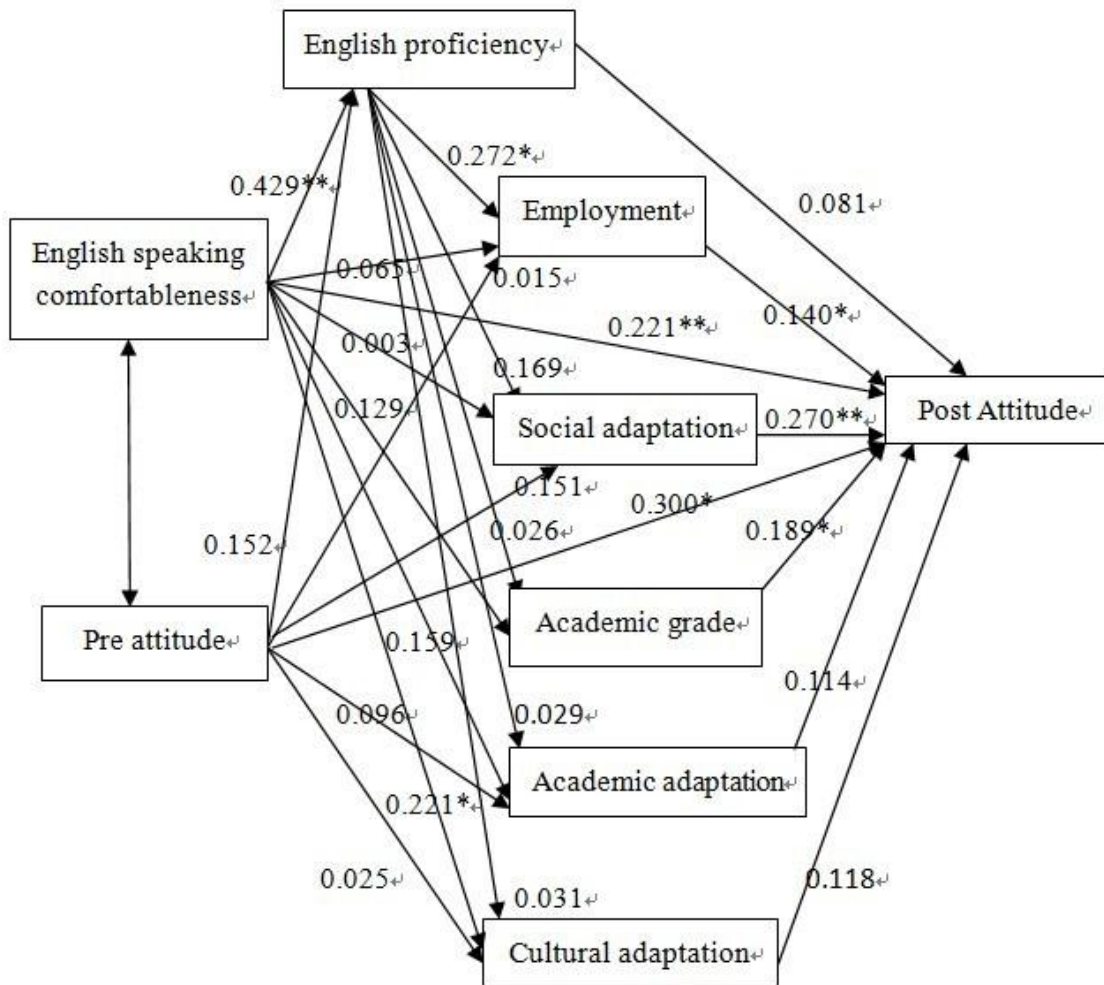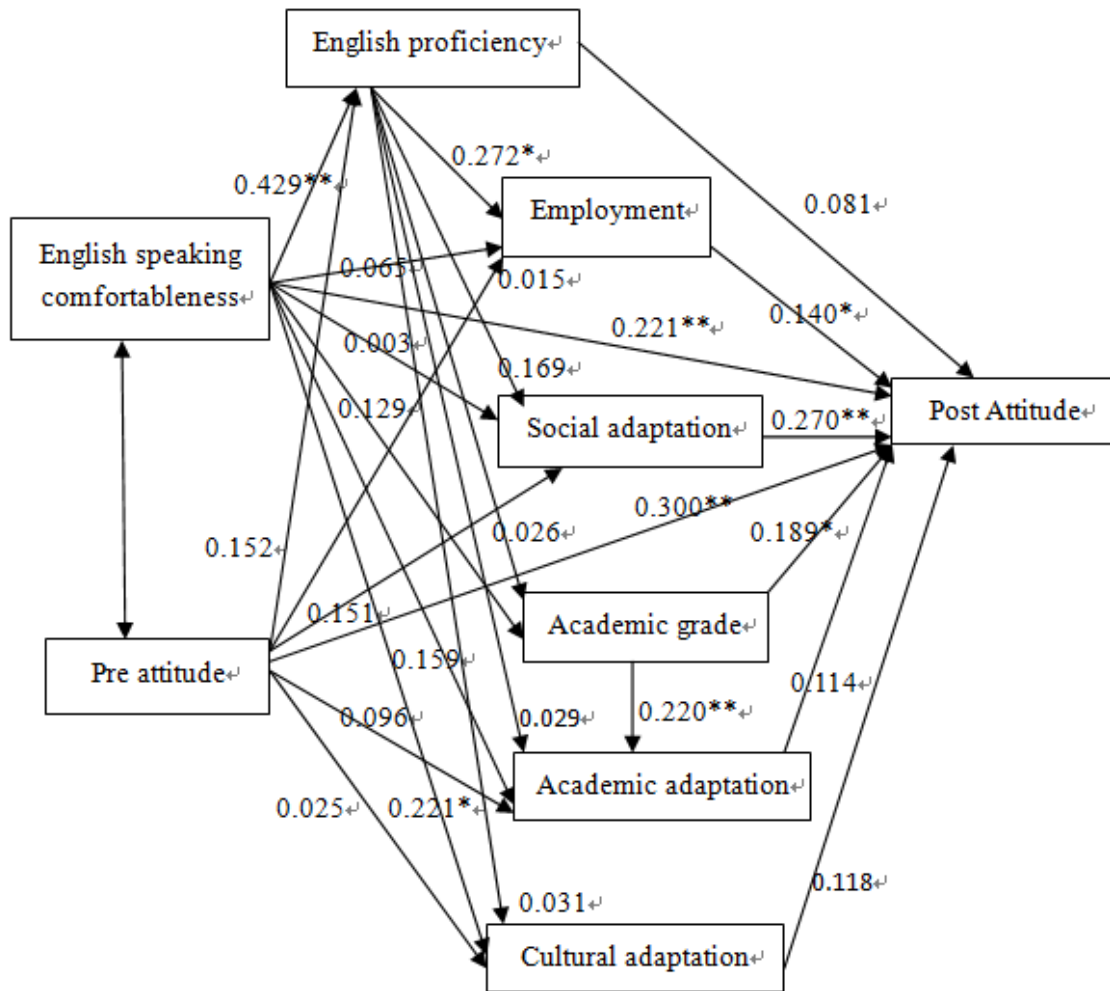
Figure 3. Proposed Structural Equation Model 3 The number next to each connector is the value of the standardized regression weights, and their significance is represented with asterisks: *p<0.05, ** p<0.01.

To test the relationship between residential time in U.S. and post attitudes, I sorted the sample to two groups: group1 (N = 64) is students who have less than two years and equals two years residential time, group 2 (N =60) is students who have more than two years residential time. I used structural equation model 3 to test if there are any significant difference between these two groups, the results shows Model 3 is very good fit in both

groups, group1 (CMIN/*df* = 0.918, *p* = 0.515, TLI = 1.010, CFI = 1.000, RMSEA < 0.001); group2 (CMIN/*df* = 0.996, *p* = 0.441, TLI = 1.004, CFI = 1.000, RMSEA < 0.001). All the significant paths in original model3 are also found significant in both groups. It can be conclude there is no significant difference between the residential time groups.

Direct and indirect effects

Tables 7 and 8 include the summary of standardized effects. Data of Table 7 show that pre attitude and English speaking comfortableness directly predict English proficiency, English proficiency directly predicts academic grades, social adaptation, cultural adaptation and employment. However, pre attitude have strong direct effects on social adaptation and post attitude; English speaking comfortableness have strong direct effects on academic adaptation, cultural adaptation and post attitude. English speaking comfortableness also have strong indirect effect on employment, there is mediation effect on this relationship. In other words, the independent variable English speaking comfortableness causes the mediator variable, which in turn causes the employment.

Table 8 shows that academic grades, employment, social adaptation, academic adaptation and cultural adaptation directly predict post attitude, but there are no indirect effect on post attitude. Social adaptation have the strongest direct effects on post attitude and academic grades have the second strongest effects. When comparing effects of external variables (English speaking comfortableness and pre attitude) with internal ones (academic grades, employment, social adaptation, academic adaptation and cultural adaptation) effect on post attitude, the explanatory power of the former is lower. Thus, academic grades,

employment, social adaptation, academic adaptation and cultural adaptation are key variables to understand post attitude.

CHAPTER 4. CONCLUSIONS AND DISCUSSION

This thesis has used quantitative approach to investigate an understudied group of Chinese undergraduate students in the U.S. Findings offer important insights into Chinese undergraduate students' sociodemographic characteristics, decision making and adaptation for studying in the U.S. and their pre and post attitude towards the study life in U.S. This study demonstrates how quantitative methods help for improving our understanding of less common but emerging social groups and phenomena.

Chinese undergraduate students group is a comparatively homogenous group, the average age of the sample was 21.1 years (S.D. = 1.53), most of them got good academic grades studying in the U.S. 75.8% of them got the 3.0-4.0 GPA. And most of the responders were from comparatively high social level class, 96.8% of them are from urban area of China, none of them are from rural area. Only one responder's parents were both blue collar employees, and one's mother was blue collar employees, others parents were both white collar. And most of their parents were collage educated: 77.4% of their fathers and 70.2% of their mothers were undergraduate degree and higher level degree of education.

Based on the results of structural equation model 3, I found that those Chinese undergraduate students who hold more positive pre attitude have a more positive post attitude towards studying in the U.S. And pre attitude predicted post attitude both directly and indirectly, that means pre attitude predicted post attitude via other variables.

Suedfeld (2007) concluded consistency theories assume that attitude serve some function like to fit the individuals into their group, and provide them the cognitive structure and maintain ones self-esteem. That means Chinese student's pre attitude serves the function to help them achieve their goal in the new group in U.S. And previous researches also

pointed out that language, academic results and acculturation adaptation such as adjustment to social customs and social belongings are the critical indicators of measuring acculturation attitudes. Dornyei (2001) and Oxford & Ehrman (1992) proposed that learners' attitudes were important for increased second language proficiency. Although Chinese student's pre attitude did not significantly predict their English proficiency, employment, academic grades and acculturation adaptations, it still positively related these variables, and directly predicted English proficiency. It still can be concluded to some extent that more positive pre attitude caused more positive adaptation results of Chinese undergraduate students.

Berry (1985) and some other previous researchers identified language as the main factor indicated acculturation adaptation, which is also the basic for Chinese student undergraduate student to gain good academic grades, since influence their attitude towards studying in the U.S.

In this research, it's found that English speaking comfortableness significantly predict post attitude, and English proficiency significantly predict the employment situation which significantly predict post attitude. Thus Chinese undergraduate students who feel more comfortable speaking in English hold more positive post attitude, and those who have better English proficiency are more likely to get jobs. Further speaking, those who are more likely get jobs hold more positive post attitude than those who are less likely to be employed. It can be concluded that English proficiency directly predicted employment situation, and employment further directly influence the post attitude towards the study life in the U.S.

English speaking comfortableness also found significantly predicted Chinese undergraduate students' cultural adaptation, and marginal significantly predicted their academic adaptation. It is likely that those Chinese undergraduate students' who feel more

comfortable speaking in English hold more positive attitude towards American school culture and more tend to be assimilated or integrated into the American student group, which is the majority group of U.S. school. This finding corresponds to Kelman (1961)'s internalization or identification process. During this stage of the process, the Chinese students believed the language, attitudes and behaviors they adopt from the west are congruent with western value system. They feel most American people are friendly and easy to work with, which caused them do not feel lonely and miss their parents' affection. Furthermore, it is reasonable to conclude that those who feel less comfortable speaking in English tend to experience more separation or marginalization, which correspond to Kelman (1961)'s compliance and resistance process. Those Chinese students experienced these processes tend to maintain their culture, language and behaviors. Dompierre and Lavallee (1990) explained that individuals have different attitudes take on different amounts of contact with the host society and different amounts of cultural maintenance (Kim, 1984). Chinese undergraduate students also vary in the extent to which their values change to conform to the host country.

The research of Li and Kaye (1998) showed that academic success has a significant impact on students' adaptation which was proved in this research. The Chinese undergraduate students who have higher academic grades were found have more positive post attitude than those who have lower academic grades. Holmes (2008) pointed out there have a causal connection to student's grade level and their attitude towards school, which is also proved in this research. Academic grades found to significantly and directly predict academic adaptation. That means those who have higher academic grades more tend to think their classes are interesting and their instructors are knowledgeable. However, there were no significant linkage found in the model 3 between English speaking comfortableness, English

proficiency and academic grades. This may be because most of the Chinese students' majors were business and engineering (58.9%), which exams were considered less relevant to the language applications.

Schwarzer, Hahn, and Schroder (1994) and Sandhu and Asrabadi (1994) summarized some variables of sociocultural adaptation and psychological adaptation, such as social relationships, adjustment to social customs feeling depressed, anxious and lonely et al, which I concluded as social adaptation, academic adaptation and cultural adaptation in this research. Social adaptation was found significantly and directly predicted post attitude, and academic adaptation and cultural adaptation were found marginal significantly and directly predicted post attitude. This finding suggests that those Chinese undergraduate students who experienced better cultural and academic adaptation had more positive post attitude than those experienced less adaptation. In other words, those students who tend to assimilation or integration held more positive post attitude than those who tend to separation or marginalization.

To seek the factors that influence Chinese student's pre attitude towards study in the U.S. before they arrived, I used multiple stepwise regression analyses. Twombly (1995) noted that gender identity played an important role in student's alienating experience. I proposed that male students had higher social expectation than did female students, and females may be more sensitive than males, and may experience more emotional adaptation obstacles than do males, so male students may have more positive pre attitudes towards study in the U.S. then do female students. Malewski and Phillion pointed out social class issues were the center of international students study abroad experiences. The social class always defined as a combination of income, education, wealth and occupation. Mospens (2008)

concluded that social class highly effect students' satisfaction. The students from higher

social class families may hold more positive attitude towards study in school. I used parents'

education as the indicator of the social class in my research and proposed Chinese

undergraduate students who have higher parents' education may have more positive pre

attitudes towards study in U.S. However, gender differences and parents' education

differences were not found for pre attitude. Because Chinese undergraduate students group

are a homogenous group, most of their parents were college educated, so this variable

significance was not found in this research.

Responders with exp4 have a different life experience, exp3 have better job

opportunities after graduation and exp1 get a better education showed more positive pre

attitude than those without. Thus Chinese undergraduate student with these expectations felt

more confidence before arrival at U.S. Compared to exp2 study a different culture and exp5

make more friends, exp4, exp3 and exp1 from above were more relevant to Chinese students'

expectations to enhance their personal ability from studying in the U.S. The study goal and

background of Chinese graduate students may be different from the Chinese undergraduate

students, these two group of students should be compared in the future study.

I acknowledge there are some limitations of the results in the study. First, the self-

reported measurement may lead to overestimate or underestimate, which cannot be checked

whether the estimate correctly measures the responders' attitudes. Using the external indices

to test the validity of self-reported measurement would help in such study. Second, some

opened ended questions in the questionnaire like the question asking for family income led to

missing data in the study, which should be avoid if using close ended question. Besides,

causality among variables cannot be assessed in the present study because of its concurrent nature, to measure the attitude change requires a longitude study.

However, despite of these limitations, the study provided insight into Chinese undergraduate students' decision making and their attitudes towards studying in the U.S. The study also helps to better understand the attitude change process and adaptation, in particular, the results of the study indicated the factors predicted attitudes. Furthermore, in order to smooth the process of acculturation adaptation of Chinese undergraduate students, administrators need to be aware that pre-entry material and orientation program should include solid cultural information. Counseling centers should provide help to those Chinese or other countries international students who have emotional effects of cross-cultural changes ranging from general fatigue, anxiety, depression and hostility through to rejection of the host culture, and provide guidance for them to build up a positive attitude toward study in U.S. The number of Chinese undergraduate students have been growing rapidly recent years. Consequently counselors should have Chinese culture knowledge background, in order to be effective in delivering services that will benefit Chinese undergraduate students studying in the United States.

Table 1

Reliability Coefficients for Pre Attitude Items

	Mean	Std. Deviation
How excited were you about studying in U.S. before you arrive in U.S.?	2.18	0.86
How prepared did you feel about the prospect of studying in the U.S. before you arrived in the U.S.?	2.51	1.01
	Alpha	Standardized Alpha
	0.40	0.40

Table2

Factor Analysis Coefficients for Post Attitude Items

	Mean	Std. Deviation
Generally speaking, how satisfied do you feel about your life while studying in the U.S.?	2.26	0.68
How prepared do you feel about the prospect of studying in the U.S. now?	2.34	0.86
	Alpha	Standardized Alpha
	0.63	0.64

Table 3

Factor Analysis of Social, Academic and Cultural Adaptation: 7-Item Model

Item	Factor Loading		
	F1	F2	F3
Social Adaptation			
Generally speaking, I feel comfortable working with American people.	**0.80**	0.14	0.08
I feel most American people are friendly	**0.72**	0.28	0.07
*I feel the lack of parents' affection in U.S.	**0.50**	0.42	0.25
Cronbach's Alpha	**0.43**		
Academic Adaptation			
I feel most of my class are interesting	0.13	**0.89**	0.18
I feel most of the instructors in my class are knowledgeable	0.27	**0.67**	0.40
Cronbach's Alpha		**0.64**	
Cultural Adaptation			
*I feel the U.S. school culture is different from what I learned before coming to the U.S.	0.14	0.01	**0.88**
*I feel the lack of social life in the U.S.	0.50	0.03	**0.56**
Cronbach's Alpha			**0.36**

Note. The items with * is reversed coded in the statistical process.

Table 4

Participants' Demographic Data, in Percentages

Variable	Percentages
Gender	
Male	48.4
Female	51.6
Classification	
Freshman	21.8
Sophomore	16.9
Junior	22.6
Senior	38.7
Hometown area	
Municipalities	17.7
Provincial capital	44.4
Other urban area	34.7
Suburban area	3.2
Rural area	0
Length of stay(in months)	
$\leqslant$12	28.2
13-24	23.4
25-36	24.2
37-48	19.4
$\geqslant$49	4.8
GPA	
<2.4	7.3
2.5-2.9	16.9
3.0-3.5	43.5
3.6-4.0	32.3
Work	
Full time	1.6
Part time	53.2
No work	45.2
Father's education	
Less than high school	8.1
High school graduate	9.7
Associate degree	4.8
Undergraduate degree	59.7
Graduate degree	17.7
Mother's education	
Less than high school	10.5
High school graduate	16.9
Associate degree	2.4
Undergraduate degree	57.3
Graduate degree	12.9

Table 5
Correlation Matrix of Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.Gender																	
2.GPA	.027																
3.Parents'adv	.095	.122															
4.Friends'adv	-.116	.060	.002														
5.Get better edc	.125	.323**	.056	-.007													
6.Study culture	-.040	.160	.003	.082	.436**												
7.Get better job	.010	-.050	.097	.131	.257**	.310**											
8. Different life	.060	-.049	-.029	-.021	.257**	.336**	.164										
9.Make friends	.093	-.008	-.009	.053	.279**	.401**	.243**	.358**									
10.Eng comfortable	-.098	.043	.190*	-.120	.068	.032	-.046	-.006	.072								
11.Eng ability	.026	.042	.025	-.028	-.073	.184*	.006	.124	.140	.456**							
12.Employment	.008	.008	.055	-.023	-.081	-.105	-.059	-.249*	-.170	.062	.246**						
13.Social adp	-.005	.022	.014	.091	-.158	-.093	-.030	-.179	-.101	.113	.214*	.168					
14.Academic adp	.054	.200*	.066	.025	.074	-.088	.025	-.030	.060	.191*	.127	.170	.000				
15.Cultural adp	.117	.028	.127	-.074	-.064	-.146	.032	.085	-.075	.231*	-.128	.093	.000	.000			
16.Pre attitude	.065	.020	.078	.091	.336**	.355**	.342**	.366**	.190*	.173	.226*	.065	.183*	.130	.021		
17.pose attitude	.095	.201*	.040	-.099	.229*	.181*	.140	.123	.216*	.440**	.386**	.252*	.401**	.275*	.199*	.438**	
18.Parents edc	.065	.050	.151	.079	.022	-.026	-.089	-.012	.124	.064	.074	.074	.047	-.047	.125	.076	.084

Table 6

Regression Coefficients among the Variables and Pre Attitude

	Dependent variable
Independent variables	Pre attitude
Entered Variables	
Have different life experience (Exp 4)	0.65 **
Get better job opportunities (Exp 3)	0.51**
Get better education (Exp 1)	0.50*
Excluded Variables	
Gender	0.02
Parent education	0.06
Parent's advice	0.11
Friends advice	0.07
Study a different culture (Exp 2)	0.14
Make more friends (Exp 5)	0.03
Self determination	0.03

*p<0.05, ** p<0.01

Table 7

*Standardized Effects of Pre Attitude, English Speaking Comfortableness, and English
Proficiency on English Proficiency, Academic Grades, Social Adaptation, Academic
Adaptation, Cultural Adaptation, Employment, and Post Attitude, bases on Model 3.*

Variable	Pre attitude		Eng comfortableness		Eng proficiency	
	Direct	Indirect	Direct	Indirect	Direct	Indirect
Eng proficiency	0.152	0	0.429**	0	0	0
Academic grades	0.009	0.004	0.029	0.011	0.026	0
Social adaptation	0.151	0.026	0.003	0.073	0.169	0
Academic adaptation	0.095	0.002	0.175	0.004	0.031	0.006
Cultural adaptation	0.025	0.005	0.221*	0.013	0.031	0
Employment	0.015	0.041	0.065	0.117	0.272*	0
Post attitude	0.299	0.074	0.277**	0.103	0.081	0.085

*$p<0.05$, ** $p<0.01$

Table 8

*Standardized effects of Academic Grades, Social Adaptation, Academic Adaptation and
Cultural Adaptation on Post Attitude, bases on Model 3.*

Variables	Academic grades	Employment	Social adaptation	Academic adaptation	Cultural adaptation
	Direct effects	Direct effects	Direct effects	Direct effects	Direct effects
Post attitude	0.187*	0.139*	0.269**	0.114	0.118

All the indirect effects in Table 6 are zero.
*$p<0.05$, ** $p<0.01$

APPENDIX A

Email for contacting Chinese undergraduate students

Dear **,

    I am Xiaoyu Jiang, a graduate student pursuing my master's degree in sociology at Iowa State University. I am from China and I am conducting my thesis research on Chinese students' decision to study in the U.S. You are invited to participate. You are being invited to participate in this study because you are a Chinese international undergraduate student, but your participation in this study is completely voluntary. You will be asked to respond to a survey which will take about 10-15 minutes to complete. This questionnaire has a simplified Chinese version and English version; you only need to finish one of them.

    Please consider this request to finish this survey, and I would really appreciate your input!

Simplified Chinese: https://www.surveymonkey.com/s/S9CQ9VN

English: https://www.surveymonkey.com/s/S9GFTF6

    Your contact information was selected from the University Registrar's database of Chinese international students. Records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available. However, federal government regulatory agencies and the

Institutional Review Board (a committee that reviews and approves human subject research studies) may inspect and/or copy your records for quality assurance and data analysis. These records may contain private information.

If you have any question, please contact me.

Your help is greatly appreciated.

Sincerely,

Xiaoyu Jiang

Master's student, Department of Sociology

Iowa State University

411 East Hall, Iowa State University, Ames, IA50011•515-509-0920

twiggyj@iastate.edu

附录 A

与中国留学生联系的邮件

中国本科留学生您好，

我是江笑雨，ISU 社会学系的研究生。

首先非常感谢您同意参与我的毕业论文研究。我在为我的毕业论文收集数据，需要从 ISU 中国本科留学生群体中收集。我的研究课题是关于中国本科留学生对留学美国的决定和态度。

这个问卷只需 10-15 分钟完成，有中文版和英文版，您只需选择其中一种语言版本完成。

中文版：https://www.surveymonkey.com/s/S9CQ9VN

英文版：https://www.surveymonkey.com/s/S9GFTF6

非常感谢您的帮助，您的联系方式和所有回复都将被严格保密。您的参与将对留学生群体的研究很有贡献。

江笑雨

Master's student, Department of Sociology

Iowa State University

411 East Hall, Iowa State University, Ames, IA50011

twiggyj@iastate.edu

APPENDIX B

Questionnaire for decision making and attitudes towards studying in U.S. of Chinese students

Ⅰ. Background Information

This information will be used for statistical analysis only and will remain strictly confidential.

1. Age_____

2. Gender

   1) Male 2) Female

3. Your ISU email_____

4. How long have you been in the United States?

   _____Years _____Months

5. What is your current student classification status at ISU?

   1) English as second language program
   2) Freshman
   3) Sophomore
   4) Junior
   5) Senior
   6) Exchange Student/Non-Degree

6. What is the college of your primary major in ISU?

    1) Agriculture and life Sciences
    2) Business
    3) Design
    4) Engineering
    5) Human Sciences
    6) Liberal arts and Sciences
    7) Veterinary Medicine
    8) Undeclared
    9) Other (please specify: _____)

7. What area of China are you from?

    1) Municipalities (Beijing, Tianjin, Shanghai or Chongqing)
    2) Provincial capital
    3) Urban area but not the capital of the Province
    4) Suburban area
    5) Rural area
    6) Other (please specify: _____)

8. What is your current cumulative GPA at ISU?

    1) Less than 2.4
    2) 2.5-2.9
    3) 3.0-3.5
    4) 3.6-4.0

9. Do you work while studying at ISU?

    1) Yes (Please go to question 10) 2) No (Please go to question 11)

10. Do you work full time or part time?

    1) Full time(work 30 hours or more per week)
    2) Part time(work less than 30 hours per week)

11. What is your father's occupation? _____

12. Does your mother work outside the home?

    1) Yes(Please go to question 13) 2) No

13. What is your mother's occupation? _____

14. What was your family's total income in 2011? _____dollars

15. What is your father's highest level of educational attainment?

    1) Less than high school
    2) High school degree
    3) Undergraduate degree
    4) Graduate degree
    5) Other (Please specify: _____)

16. What is your mother's highest level of educational attainment?

    1) Less than high school
    2) High school degree
    3) Undergraduate degree
    4) Graduate degree
    5) Other (Please specify: _____)

Ⅱ. Decision making about studying in the U.S.

The second set of questions is about how you made the decision to study in the U.S.

17. Which of the following helped you make the decision to study in the U.S.? (You can choose more than one answer to this question. If you choose Media influence, please also answer Question 18)

    1) Professor's recommendation
    2) Parents' advice
    3) Friends' advice
    4) Media information influence (Please go to Question 18)
    5) Other (Please specify:_____)

18. What kind of Media did you use to get the information about study in U.S.?

    1) Newspaper
    2) Book
    3) Magazine
    4) T.V program
    5) Internet
    6) Other_____(Please indicated)

Ⅲ. Feelings before arrived in U.S.

This part of the survey is about you thought before you arrived to study in the U.S.

19. How excited were you about studying in U.S. before you arrive in U.S. ?

    1) Very excited
    2) Excited
    3) Neither excited nor unexcited
    4) Unexcited
    5) Very Unexcited

20. How comfortable did you feel speaking English as a second language before studying in the U.S.?

    1) Very comfortable
    2) Comfortable
    3) Neither comfortable nor not comfortable
    4) Not comfortable
    5) Not comfortable at all

21. How prepared did you feel about the prospect of studying in the U.S. before you arrived in the U.S.?

    1) Well prepared
    2) Prepared
    3) Neither prepared not prepared
    4) Not prepared
    5) Not prepared at all

22. What did you expect to gain from studying in the U.S. before you arrived? (You can choose more than one answer in this question.)

   1) Get a better education
   2) Study a different culture
   3) Have better job opportunities after graduation
   4) Have a different life experience
   5) Make more friends
   6) Nothing special
   7) Other (Please specify: _____)

Ⅳ. Studying in the U.S.

This part of the survey is about your life in the U.S. as a student.

23. How would you rate your overall English ability when you first arrived for your study in the U.S.?

   1) Very good
   2) Good
   3) Average
   4) Poor
   5) Very poor

24. What is your highest TOFEL score _____

25. Generally speaking, how satisfied do you feel about your life while studying in the U.S.?

   1) Very satisfied
   2) Satisfied
   3) Average
   4) Not satisfied
   5) Not satisfied at all

26. How prepared do you feel about the prospect of studying in the U.S. now?
   1) Well prepared
   2) Prepared
   3) Average
   4) Not Prepared
   5) Not prepared at all

27. Using the scale provided, please rate the extent to which you agree or disagree with each of the following questions

Directions: Following are a number of statements about school life in the U.S. Please rate the degree to which you agree or disagree with each statement using the following scale (ranging from 1=Strongly Disagree to 6=Strongly Agree). There are no right or wrong answers.

	Strongly agree	Agree	Mildly agree	Mildly disagree	Disagree	Strongly disagree

1) I feel the .... lack of social life in the U.S.   1   2   3   4   5   6

2) I feel the lack of parents' ...... affection in U.S.   1   2   3   4   5   6

3) I feel the U.S. school culture is different ...... from what I learned before coming to the U.S.   1   2   3   4   5   6

4) Generally speaking, I feel comfortable working with .... American people.   1   2   3   4   5   6

5) I feel most American people are friendly   1   2   3   4   5   6

6) I feel most of the instructors in my class are knowledgeable.......   1   2   3   4   5   6

7) I feel most of my classes are interesting.   1   2   3   4   5   6

Thanks For your cooperation!!!

If you have any additional comments, please use the back page.

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