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Chinese Undergraduate Students' Preference for Chinese TAs and American TAs in the U.S. Context

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Abstract

This study researches and compares Chinese undergraduate students' (N=70) perceptions of and preferences for American TAs and Chinese TAs, and identifies factors that play significant roles in influencing Chinese students' perceptions and preferences. Multiple independent variables were measured, including age; gender; years at Purdue; years in the U.S.; GPA; overall TOEFL score; experiences with Chinese TAs; effectiveness of Chinese TAs; effectiveness of American TAs; English ability of Chinese TAs; and native speaker preference, ethnic identity, and level of acculturation, among which ethnic identity and level of acculturation are the major variables the current study aims to examine. Preference for Chinese TAs and preference for American TAs are the dependent variables. Two validated scales, the Multigroup Measure of Ethnic Identity – Revised (Phinney and Ong, 2006) and the Suinn-Lew Asian Self-Identity Acculturation Scale (Suinn, Rickard-Figueroa, Lew, and Vigil, 1987), were used to measure participants' ethnic identity and level of acculturation respectively. English ability of Chinese TAs and effectiveness of Chinese TAs are found to be positive factors influencing the sample's preference for Chinese TAs. On the other hand, native speaker preference and level of acculturation negatively affect the sample's choice of Chinese TAs. Quite surprisingly, native speaker preference is the only factor that has a significant positive correlation with the sample's preference for American TAs. Contradictory to the existing literature, ethnic identity was not found to be significantly related with either of the dependent variables.

Background

In the United States, many graduate students, including both American and international students, are employed by their universities as teaching assistants (TAs). International teaching assistants (ITAs) are typically required to establish a high level of oral English proficiency before they are allowed to teach. Universities generally require them to get a specific score on the TSE (Test of Spoken English), or to pass a local oral proficiency test designed specifically by the university. Those ITAs who fail the test would need to take preparation courses to improve their oral English skills, and re-take the test until they pass.

Passing TSE test signifies that international students are accepted as teaching assistants by their universities. However, it does not answer the question: Will they also be accepted by their students? It is generally assumed that courses taught by ITAs are not preferred by many undergraduate students due to the ITAs' lack of proficiency in spoken English. As indicated by Plankans (1997), the two most common types of complaints received about ITAs were that their accent is hard to understand, and they could not understand or address students' questions appropriately. Much research has been conducted on this issue to demonstrate that many American undergraduate students hold negative attitudes toward ITAs due to non-linguistic factors, such as cultural stereotypes (Orth, 1983; Bailey, 1983; Brown, 1988; Dalle &Inglis ,1989; Rubin & Smith, 1990; Brown, 1992; Rubin, 1992; Plankans, 1997). This is not something new or surprising. Existing literature on this issue has focused on American undergraduates' attitudes toward ITAs, while international undergraduates' opinions have not been seriously

considered. Now is the time to do so. As described below, the international undergraduate student population continues to grow in the United States. Therefore, for this study, I do not wish to repeat what has already been found about domestic students' attitudes towards ITAs, but I am interested in what has been missing from the literature on international undergraduate students' perceptions of ITAs.

According to the "2013 Open Doors Report on International Educational Exchange," an annual survey of study abroad trends for U.S. and international students, throughout U.S. history, the largest number of international students were welcomed into the country in the 2012-2013 school year, with 819,644 international students enrolled in universities and colleges. China contributed the majority of the increase, with a 21 percent increase overall, and 26 percent increase for the undergraduate student enrollment.

Based on Purdue International Student and Scholar enrollment and statistical reports, by fall 2013, Purdue's international student number now ranks second among universities and colleges nationwide. International student enrollment constitutes 22.4% of the total number of enrollment, and international undergraduate students comprise 16.9% of the total undergraduate student body. 8,702 international students were enrolled at Purdue for the semester of fall 2013, with 3721 graduate students and 4981 undergraduate students. The total number of enrollment for Chinese students was 4323 (49.7% of the total international student enrollment), with 1319 graduate students and 3004 undergraduate students. Due to the tremendous growth of Chinese students, their opinions are of great importance to universities, educators, and researchers. Therefore, this paper focuses particularly on Chinese undergraduate students' opinions.

Because of Chinese students' desire to learn English, it is reasonable to assume they will prefer American TAs over ITAs. However, how will they react to TAs who come from the same country and speak the same language as them? Will they prefer American TAs because they want to learn English and acculturate to the dominant culture, or will they prefer Chinese TAs since they share the same ethnic background? Keeping such questions in mind, the current research aims to study and compare Chinese undergraduates' preferences for Chinese TAs and American TAs. Since there is no literature directly related to my research topic, relevant literature on ITAs will be reviewed and connected to the current study.

Literature Review

Ethnic identity and acculturation

As the population of minority groups increases in the United States, the issue of ethnic identity becomes more important for members of both the dominant group and the minority group. Existing literature points out that in addition to the obvious importance of linguistic ability, any effort to examine undergraduates' perceptions of ITAs must also take ethnic identity into consideration.

The term 'ethnic identity' has sometimes been used interchangeably with the term 'acculturation,' but the two terms are distinct concepts. Acculturation refers to the degree of contact that a minority group individual makes with the dominant culture, contact that accordingly produces changes in this person's cultural attitudes, values, and behaviors. The focus of acculturation is on "how a minority group individual relates to the dominant

society (Phinney, 1990, p. 501)." However, ethnic identity is viewed as one aspect of acculturation, and is specifically "how an individual relates to his or her own group as a subgroup of the dominant society (p. 501)." Ethnic identity is defined as that part of an individual's self-concept that derives from his or her knowledge of membership in a social group together with the value and emotional significance attached to that membership" (Tajfel, 1981, as cited in Phinney, 1992, P. 156). Both acculturation and ethnic identity only exist "when two or more ethnic groups are in contact (Phinney, 1990, p. 501)," with one being the dominant culture and the others minority groups.

Significance of ethnic identity

Many researchers believe that ethnic identify is even more important in determining students' perceptions of ITAs than linguistic factors. Several studies will be reviewed that support this claim. They all demonstrate that the major factor determining American undergraduate students' attitude toward ITAs is ITAs' ethnicity. American undergraduate students generally view ITAs with the same ethnic background as themselves much more positively than ITAs with a different ethnic background. In other words, American students' own ethnic identity is the main element shaping their perceptions of ITAs. Orth (1983) explored this issue by comparing undergraduates' and ESL teachers' perceptions of the same group of ITAs' spoken English proficiency, and found significant differences across the two groups' evaluations. Unlike ESL teachers who evaluated ITAs on the basis of linguistic abilities, undergraduate students evaluated ITAs based on more non-linguistic factors, such as in-class delivery and other factors influencing communication.

Orth concluded that undergraduates' attitudes toward ITAs were determined more by their preexisting social stereotypes than ITAs' English proficiency. Stereotypes were defined by Grant and Holmes as "over generalizations that are applied to any ethnic group member regardless of his or her individual characteristics" (1981, p. 107). People tend to have fixed social stereotypes for people with different ethnic backgrounds, and such pre-determined viewpoints negatively influence how they perceive people from different ethnic backgrounds than themselves.

Dalle and Inglis (1989) conducted a similar study that investigated the correlation between oral proficiency scores received by ITAs and their students' evaluations of them. The SPEAK test (Speaking Proficiency English Assessment Kit), which is a parallel of the Test of Spoken English, was used to assess oral proficiency. As a result, it turned out that undergraduate students' evaluations of their ITAs were actually not related to the ITAs' SPEAK scores, but had more to do with the ethnic backgrounds of the ITAs.

Many researchers used material guise methods to demonstrate that undergraduate students' evaluations of ITAs are more culturally oriented than linguistically oriented (Brown, 1992; Rubin, 1992; Rubin & Smith, 1990). As Edwards (1982) claimed, listeners' attitudes toward speakers "act as a filter that affects perceptions of speakers and their messages (p. 23)." So, the point of guise methods is to see whether students' perceived beliefs come before the fact.

Brown (1988) applied the guide method by having participants listen to one speech sample constantly with changing images of instructors in succession with different ethnic backgrounds, teaching status, and levels of English proficiency. Results showed that

students' beliefs about the instructors' ethnicity greatly influenced their perceptions of the instructors' linguistic and teaching abilities.

Rubin and Smith (1990) also applied the guise method by having a group of American undergraduate students listen to a tape-recorded lecture with photos of either Caucasian or "Oriental" (Asian) instructors presented in front of the students. Although all lectures were actually delivered from native Chinese speakers with similar English proficiency levels, when students saw the guise pictures, they always pointed out that the Caucasian instructor had a lighter accent than the Asian instructor.

Rubin (1992)'s study is an extension of Rubin and Smith (1990). This time, the lecture was given in standard American English with changing photos of a Caucasian female instructor and a Chinese female instructor in succession. The results suggested that American students automatically related a non-existing accent to the Asian instructor just by looking at the photo. Moreover, even the students' listening comprehension was hindered when looking at the photograph of the Asian instructor. Instead of the ITAs' real accent, students' perceived accent of ITAs has influenced students' perceptions of ITAs.

Research Questions

The current study aims compare Chinese undergraduate students' perceptions of Chinese TAs and American TAs, and to identify what factors might have influenced their choices. Existing literature suggests that ITA's ethnic identity, rather than their English proficiency or teaching effectiveness, is the most important factor influencing American

undergraduates' attitudes towards ITAs (Edwards, 1982; Brown, 1988; Brown, 1992; Rubin, 1992; Rubin & Smith, 1990). For the current study, since the sample belongs to a minority group in the U.S., how they subjectively identify themselves is assumed to have an effect on their preferences for TAs. This study aims to identify whether a strong ethnic identity of a Chinese student leads to a stronger preference for Chinese TAs. Thus, ethnic identity is a major variable the current study prepares to measure. The inseparable connection between ethnic identity and acculturation determines that acculturation will be another key variable that this study needs to examine. We know that international students encounter less difficulty both at the levels of social life and academics after they become better acculturated into the target culture, so whether the increase of acculturation level will make Chinese students prefer American TAs more is also a question this study aims to explore. Moreover, the relationship between the two major variables – whether they correlate negatively, positively, or are not related, is also something that will be explored by the study.

Methods

This section includes discussion of the measures, procedure, materials, and participants of this study. First, a brief overview of the study is provided, then historical developments of the adopted scales and model are presented, and then design of the materials, procedure of the study, as well as demographic information of the participants are discussed.

Overview of the Study

Data was collected through a three-part questionnaire. The first section was designed by the author in order to study demographic information and participants' perceptions of and experiences with Chinese and American TAs. The other two sections are two existing scales measuring ethnic identity and acculturation, respectively. Besides the two major independent variables, other independent variables include age, gender, years at Purdue, years in the U.S., GPA, overall TOEFL score, experiences with Chinese TAs, effectiveness of Chinese TAs, effectiveness of American TAs, English ability of Chinese TAs, and native speaker preference. These co-variants will be discussed later in the paper. Preference for Chinese TAs and preference for American TAs are the dependent variables. Data collection is processed in two ways - hard copy and online. Subjects are 70 Chinese undergraduate students in the U.S. and 68 of them are students at Purdue University.

Data were first analyzed through t-test and Pearson's correlation to examine whether any of the independent variables have significant influences on students' preference for TAs. Then linear regression was used to identity a model that can explain the highest percentage of the data, meaning a model that works the most effectively in answering the research question.

Scales and Models:

Historical development and Verification of Multigroup Measure of Ethnic Identity-Revised Scale (MEIM-R)

A number of studies have been reviewed in order to find a justified measurement for ethnic identity. While every ethnic group has its own unique culture and history, all humans share a group identity, or a sense of group belonging. Therefore, shared elements of ethnic identity can be determined by researching those aspects common across ethnic groups (Phiney, 1990, p. 158). Phinney (1990) reviewed a sufficient number of studies examining the types of common factors used across different groups, and identified three elements that are demonstrated to be common across all ethnic groups, including members' self-identification as a group member, a sense of belonging, and attitudes toward one's group. Phinney specifically points out that cultural attitudes play a major role in Asian-American ethnic identity. The following section provides details on the development and reliability of this scale.

Based on Phinney (1990)'s review, Phinney (1992) presented a developmental model of cultural identity for ethnic minorities, the Multigroup Measure of Ethnic Identity (MEIM). This model assumes that ethnic minorities start exploring their ethnic identity when they enter adolescence and finish building their ethnic identity at the end of adolescence (Phinney, 1992). Building upon the Objective Measure of Ego Identity Status (Adams et al., 1987) model, the proposed MEIM scale in Phinney (1992) has been developed over five years. MEIM includes 14 items examining three aspects of ethnic identity: positive ethnic attitudes and sense of belonging (five items, based on social identity theory, Tajfel & Turner, 1986); ethnic identity achievement, including both exploration and resolution of identity issue (7 items, based on the empirical work of Marcia, 1980, as cited in Phinney, 1992); and ethnic behaviors or practices (2 items).

Through examining the four common components of ethnic identity, these 14 items can demonstrate one's self- identification as a group member overall.

A group of high school students and a group of college students participated in Phinney (1992)'s study. Reliability coefficients (Cronbach's alpha) were calculated for each group. Overall reliability of the 14-item scale was .81 for the high school sample and .90 for the college sample. The higher reliability of the college sample over the high school sample indicates a more stable state of ethnic identity for adults than adolescents. Through an exploratory factor analysis, Phinney (1992) demonstrated that the 14 items of the MEIM made up a single factor of ethnic identity. Similarly, a number of studies also suggested a single-factor analysis for this 14-item MEIM (Ponterotto, Gretchen, Utscy, Stracuzzi, & Saya, 2003; Reese, Vera, & Paikoff, 1998; Worrell, 2000).

However, a larger-sized study carried out on 5,423 adolescents by Roberts et al. (1999) strongly demonstrated that the MEIM should include two factors, exploration and commitment. Roberts et al. drew two major conclusions from their study. First, two negatively worded items should be deleted from the model, with 12 items left. Second, the remaining 12 items, with 5 representing exploration and 7 representing commitment, were in agreement with Marcia (1980)'s empirical work. Items representing exploration measure an individual's desires to learn about one's own ethnic group and take part in one's own cultural events. Items representing commitment examine whether an individual values their groups (based on social identity theory, Tajfel & Turner, 1986, as cited in Phinney & Ong, 2007), and is willing to commit to his or her group (Marcia, 1980). Other studies examining adolescents' ethnic identity also demonstrated the

validity of the two factor analysis of MEIM (Spencer et al., 2000, Yancey, Aneshensel, & Driscoll, 2003, Lee & Yoo, 2004).

Due to the stronger argument for the two-factor analysis, Phinney and Ong (2007) presented a revised version of the MEIM. They deleted the two behavioral items, which are being active in ethnic organizations and participating in cultural practices. They pointed out that the key component of ethnic identity is "a sense of self as a group member that develops over time through an active process of investigation, learning, and commitment" (p. 279). Therefore, "although behaviors are typically correlated with ethnic identity, they are conceptually distinct from ethnic identity, which is an internalized sense of self; one can have a strong sense of belonging to a group and yet not be involved in day-to-day ethnic activities" (p. 276). Behaviors related to one's culture or ethnic group were treated as an aspect of acculturation rather than ethnic identity (Berry, Phinney, Sam, & Vedder, 2006, as cited in Phinney & Ong, 2007). The remaining 10 items include 3 items of exploration and 7 items of commitment.

In order create two subscales (exploration and commitment) with the same number of items, ensuring that the two scales were equally weighted, Phinney added two additional items to the exploration factor and deleted two commitment factors that are redundant with existing items. The updated scale includes 10 items based on two subscales with equal numbers.

To test the theoretical foundation of the revised 10-item ethnic identity scale, Phinney and Ong (2006) conducted a further study using exploratory and confirmatory factor analysis. Reliability of the 10-item MEIM resulted in Cronbach's alphas of .83 for

exploration and .89 for commitment, which reveals strong internal consistency. They applied a maximum likelihood factor analysis that also indicated a two-factor structure for the scale. They then gained item-total correlations for the scale and removed items that were found relatively unreliable to measure. This further revision left six items on the scale, with three exploration items and three commitment items. As a result, six items were kept on the final revised version of the MEIM (MEIM-R), with equal numbers of the two factors, exploration and commitment.

They further adopted a confirmatory factor analysis to test the underlying factor structure of the MEIM -R. To test whether the data fit into the hypothesized measurement model, they conducted this analysis on 241 students in a minority-dominant public university. They proposed five models, including Independence model, One factor model, Uncorrelated two-factor model, Correlated two-factor model, and Single second order model. They adopted a number of tests to assess model fit for five models and found that the Correlated two-factor model fit the data the best, yielding an overall correlation of .74, Cronback's alphas of .76 for exploration and .78 for commitment, and .81 for the combined 6- item scale.

The following studies all showed good reliability and are a model fit for the correlated two-factor analysis of the MEIM-R. Phinney and Ong (2007) further pointed out that although exploration and commitment are separate processes contributing to the overall structure of ethnic identity, they are theoretically closely related. One person will not actively explore one's ethnic identity unless one has a certain level of commitment; likewise, a feeling of commitment also leads to interest in exploring one's ethnic identity.

The two factors can be measured separately if a researcher only aims to learn about one process. For overall ethnic identity measurement, the two factors should be combined (p. 278).

Ponterotto and Park-Taylor (2007) reviewed the general process of racial and ethnic identity development and discussed some examples of best practices in measuring racial and ethnic identity. They claimed that the revision of the MEIM was satisfactory and represents "the best practice" (p.287). They commented that the revised MEIM was "a highly efficient, easy-to-incorporate, six-item measure that takes only minutes to complete" (p. 288)." Therefore, "the theoretical clarity and conciseness of the MEIM- R will promote its widespread use internationally and across psychology disciplines" (Ponterotto and Mallinckrodt, p. 222).

Torres and Ong (2010) conducted a study to investigate the influence of discrimination on Latino mental health and explored the situations when ethnic identity has a buffering effect. They adopted the MEIM-R directly to examine the effects of ethnic identity exploration and commitment on buffering Latino adults' received discrimination and depression. Although ethnic identity exploration and commitment showed opposite effects on buffering the influence of discrimination and depression for Latino adults, this study did yield reliability coefficients of .86 for exploration and .91 for commitment, which indicated an even better internal consistency than Phinney and Ong (2007).

Yoon (2011) studied different ethnic groups separately by using the MEIM-R scale. She surveyed 289 counseling students in California with a makeup of European

Americans (34.6%) and minority groups (65.4%), including Latinos, African American, Native American, Asian American/Pacific Islander, and so on. For European Americans and minority students respectively, Cronbach's alphas were reported as .91 and .87 for exploration, .84 and .88 for commitment, and .89 and .88 for the combined six-item scale. She also conducted the confirmatory factor analysis to test the modal fit of the MEIM-R. Both the alternative single factor and the uncorrelated two-factor models for the MEIM-R indicated poor fit for both groups. Results supported the correlated two-factor modal for both European American and minority students.

The findings of the above studies have built a valid foundation for the MEIM-R scale to be used to measure ethnic identity across different ethnic groups. Accordingly, this scale was directly adopted in the current study to measure participants' ethnic identity. Since the current study aims to research Chinese undergraduate students' overall ethnic identity in order to identity the effect of their ethnic identity on their preferences for TAs, all six items of the MEIM-R will be incorporated in the current study.

Historical Development and Verification of the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA)

International students come to the U.S. to pursue higher education, which should make them more competitive in the future. However, in adjusting to a new country, international students face unique challenges that American students do not, and whether such challenges can be overcome may well be determined by one's level of acculturation. Acculturation includes changes on both the personal and sociocultural levels (Berry, 2003; Trimble, 2003). Such changes can be reflected in many ways, including dress, eating

habit, language usage, consumption of popular culture, degree of contact with the host culture, and so on (Berry, 2003). Successful acculturation requires one individual to overcome a number of barriers, and language is one of them. However, language is a less challenging barrier than overall integration into the host culture. It is relatively easy for international students to become familiar with and accept the host culture after living a certain time in the host culture, but becoming part of it requires much more effort. It is quite common that some minorities never truly integrate in the host culture even if they have lived in the U.S. for a majority of their lives.

Few measurements of acculturation of Asian-Americans exist, even though there has been significant attention to Asian-Americans in the research literature. To fill this gap in the literature, Suinn, Rickard-Figueroa, Lew, and Vigil (1987) developed an acculturation scale specifically for Asians that is known as the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA). This scale was extended from the Acculturation Rating Scale for Mexican Americans (Cuellar, Harris, and Jasso, 1980), which not only considered the issue of bicultural development, but also examined cognitive, behavioral, and attitudinal aspects (Suinn, Rickard-Figueroa, Lew, and Vigil, 1987). This scale for Mexican Americans considers acculturation as a "multifaceted phenomenon composed of numerous dimensions, factors, constructs... Values, ideologies, beliefs, and attitudes appear to be important components of acculturation as are cognitive and behavioral characteristics such as language, cultural customs, and practices" (Cuellar, Harris, and Jasso, 1980, p. 290). The multi-dimension characteristic and inclusion of bicultural development made this scale an ideal foundation for the development of the SL-ASIA.

Since the SL-ASIA scale has been based on a successful existing scale, the underlying theoretical rationale can be easily justified. It examines four content areas: language usage, ethnic identity, cultural behaviors, and ethnic interactions. It contains 21 multiple choice questions, including 4 language questions, 4 identity questions, 4 friendship choice questions, 5 behavior questions, 3 generation/geographic questions, and 1 attitude question. Answers for each question range from 1 to 5, with 1 reflecting the lowest acculturation degree and 5 reflecting the highest degree. A total value can be gained by summing up all the scores and then dividing the total value by 21. Using this calculation, the total average score ranges from 1 to 5. The total score can also be interpreted through three levels of acculturation. If respondents get a score of 5, they would be considered "western identified" or "assimilated," indicating their complete or near-complete acculturation in the western society. If respondents score the middle number 3, they would be called "bicultural," which means that they keep characteristics from both cultures. And, if respondents get the lowest score 1, they would be viewed as "Asian-identified," meaning that they are not really acculturated to the western culture (p. 403). Suinn et al. (1987) originally indicated a .88 reliability coefficient of the scale.

The SL-ASIA scale has been demonstrated to be a valid and reliable measurement by many studies of different Asian groups. Below is an overview of the studies that have successfully adopted SL-ASIA. Atkinson and Gim (1989) used the SL-ASIA scale to study attitudes of Asian Americans towards mental health services. They asked three groups of Asian-Americans (Chinese, Japanese, and Korean) to complete three questionnaires, including a demographic questionnaire, a slightly modified version of the

SL-ASIA, and the Attitudes Toward Seeking Professional Psychological Help Scale (ATSPHS).

To reduce the length of the combined questionnaire, they modified the SL-ASIA scale by removing three generation/geographic items, one attitude item, and one behavior item. They also developed three versions of the scale to accommodate the three ethnic groups of respondents. Coefficient alpha reliability was gained for both the combined groups and the three ethnic versions. Alpha for the combined groups was .89, .90, .83, and .89 for the Chinese, Japanese, and Korean ethnic versions (p. 210). They conducted a 3 x 2 x 2 multivariate analysis with independent variables of ethnicity, gender, and level of acculturation, and the four subscales of the ATSPHS as dependent variables, including stigma, need, openness, and confidence. Their analysis yielded a significant F value for acculturation and nonsignificant F values for the other variables. The results showed that more acculturated participants are more willing to accept psychological help, but ethnicity and gender factors were not found to be important factors affecting participants' attitudes towards mental health service.

Suinn, Ahuna, and Khoo (1992) conducted an extensive study of Suinn et. al (1987), and reported .91 internal consistency reliability, which is higher than both Suinn et. al (1987) and Atkinson and Gim (1989). Based on 324 Asian American university students, the concurrent validity reported significant correlation between respondents' SL-ASIA scores and demographic background, including their "total years attending school in the U.S. (r =.61), age upon attending school in the U.S. (r = -.60), years living in the U.S. (r = .56), age upon arriving in the U.S. (r = - .49), years living in a non-Asian neighborhood

(r = .41), and self-rating of acculturation (r = .62) (P. 1042)." A factor analysis method

has also been used to prove the validity of the SL-ASIA. Since the SL-ASIA scale

originated from the acculturation scale for Mexican American (ARSMA) developed by

Cuellar et al. (1980), identified interpretable factors for the two scales were expected to

be similar. Thus, factor analysis was used to compare the two scales. Five factors were

identified for the SL-ASIA, including reading/writing/cultural preference, ethnic

interaction, generational identity, affinity for ethnic identity and pride, as well as food

preference. The first three factors of the SL-AISA overlapped with the four factors

identified for the ARSMA. The fourth factor of ARSMA, language familiarity, was

identified as part of the first factor, reading/writing/cultural preference of the SL-ASIA.

The similarity shared by the two scales is promising for the SL-ASIA, since the ARSMA

has already been proved a validated measure in the literature studying Mexican

Americans. Together with the consistently high internal consistency reliability and the

satisfactory results of concurrent validity, the SL- AISA scale seemed to be a valid

measure for examining Asian Americans' acculturation level.

Tata and Leong (1994) examined a group of Chinese American students' help-

seeking attitudes in a large midwestern university, and included gender, acculturation,

social-network orientation, and individualism as four independent variables, and attitudes

toward seeking psychological help as the dependent variable (p. 282). They adopted four

scales to measure the four independent variables, and the Attitudes Toward Seeking

Professional Psychological Help Scale (ATSPHS) to measure the dependent variable.

The revised SL-ASIA scale used in this study to measure acculturation is nearly identical

to that used by Atkinson and Gim (1989), except that item 20 of the original SL-ASIA was kept in this study. However, the score of this item was not added to the total acculturation scale; instead it was used for validity purposes for the sample participants.

They computed means and standard deviations for each variable in an effort to compare the data of this study with previous studies. They also reported internal consistency reliabilities for each scale to check whether the slight changes they made would affect reliability of those scales. The .87 internal consistency reliability of the revised SL-ASIA scale was found to be almost the same as the .88 alpha indicated by Suinn et al.'s (1987) initial report. The scores gained by the sample on this scale are distributed differently from that of Atkinson and Gim (1989). Compared to the sample in the present study, their sample included more individuals who were highly acculturated (40% vs. 12%) and fewer who were medium (50% vs. 71%) and low (9% vs. 16%) on the acculturation scale

However, this difference is not related to the slight change in the scale for this study, because there was a significant positive correlation ($r = .74$) between participants' scores on Item 20 and acculturation. This item, which asks respondents to identify themselves on a 5-point scale that ranged from very Asian (1) to very Anglicized (5), was also used as a validity item by Suinn et al. (1987). The authors used a multiple regression analysis to examine each independent variable's influence on the dependent variable. The overall regression model yielded a significant F for the dependent variable of attitudes toward seeking professional psychological help (P.284). The results showed that all independent variables, including gender, acculturation, social-network orientation, and

individualism, were significant in determining participants' attitudes toward seeking professional psychological help. Although the sample of this study and that of the Atkinson and Gim's (1989) study have significantly different distribution on acculturation scores, both studies suggested that acculturation is a critical factor influencing Asian American's attitudes towards help seeking in U.S. universities. The same findings of the two studies found SL-ASIA to be a valid measure of acculturation (p. 284).

Some researchers have also translated this scale to accommodate their participants. Yeh (2003) used the scale to measure three Asian groups simultaneously. She studied Chinese, Japanese, and Korean adolescents' mental health status through examining the correlation between age, acculturation, cultural adjustment difficulties, and general mental health symptoms. The SL-ASIA scale has been adopted and translated into Chinese, Japanese, and Korean correspondingly to measure respondents' acculturation levels. Cronbach's alpha for the SL-ASIA was reported .90 for this study. Yeh used hierarchical regression to measure the independent variables' effects on respondents' mental health symptoms. Results showed that all three factors have significant effects on shaping respondents' mental health status.

In addition to the above studies, reliability coefficients have been reported as .79 for Asians and as .88 and .91 for Asian American samples for the SL–ASIA (Liu et al., 1999; Park & Harrison, 1995; Solberg, Choi, Ritsma, & Jolly, 1994; Suinn, Khoo, & Ahuna, 1995;). These findings all demonstrated the validity and reliability of the SL–ASIA. The justified foundation of this scale determined that it would be directly employed in the current study to measure participants' acculturation level.

Models of the relationships between ethnic identity and acculturation

Two distinct models have been developed to describe the relationship between ethnic identity and acculturation. The first one is a linear, bipolar model, which assumes that ethnic identity and acculturation are at opposite ends of a continuum, with strong ethnic identity at one end and strong acculturation at the other (Makabe, 1979; Simic, 1987; Ullah, 1985). The hypothesis is that those at the strong enthnic identity end of the spectrum identify with their own ethnic group, and those at the strong acculturation end acculturate to the dominant culture.

The second model is a two-dimensional process, in which the two relationships with the dominant and minority culture may be independent. In other words, a strong ethnic identity does not necessarily predict a low acculturation level with the dominant culture. Berry, Trimble, and Olmedo (1986) suggested four possible relationships between the dominant group and the minority group. Individuals who have identified strongly with both groups indicates "integration or biculturalism;" identification with neither group is called "marginality;" identification with the dominant group is considered "assimilation," identification with only the ethnic group is known as "separation." Because both models have been adopted in a large number of studies, without sufficient data it is hard to determine which one is more valid. Therefore, another purpose of the current study is to test the validity of the two models.

Co-variates of Acculturation

For international students in the U.S., acculturation includes both adaptations to the host culture and to the classroom environment of the host culture. Several factors seem to coincide with the process of acculturation. Acculturation was found to be positively related to international students' educational satisfaction (Wadsworth, Hecht & Jung, 2008) and achievement (Padilla, 1980). Students who enjoy high educational satisfaction also experience communication satisfaction with their instructor and classmates (Wadsworth, Hecht & Jung, 2008, p. 66). In other words, international students with high educational satisfaction and achievement normally have developed a high level of acculturation, and high level of acculturation in turn might indicate a stronger preference for American TAs than Chinese TAs. Thus, participants' cumulative GPA was studied as a variable.

Moreover, a high level of acculturation typically corresponds with good language ability, so participants' overall TOEFL scores were examined to see whether their English proficiency was related to their preference for TAs. Participants' length of stay at the U.S. and length of stay at Purdue University were solicited to see whether the length of their stay in the dominant culture correlated with a tendency to prefer an American TA. Years in the U.S. and years at Purdue were asked separately in order to learn whether some participants came to the U.S. before college. Age and gender were asked as basic demographic information and were also treated as variables.

Experiences with Chinese TAs is another important variable in this study. Participants were put into two groups based on whether they had been taught by a Chinese TA. By comparing the two groups' preferences for Chinese TAs, it is possible to

indicate whether experiences with Chinese TAs have a more positive or negative effect on their preference. Furthermore, as suggested by the literature, American undergraduate students tend to view ITAs more by ITAs' ethnicity than their teaching ability or English ability, so teaching effectiveness and English ability were both measured to determine whether the results would correspond to the literature.

Lastly, since the participants are Chinese students who have come to the U.S. to acquire higher education, learning English is one of their primary goals during their study in the U.S. Thus, it is reasonable to assume that they might only want to be taught by native English speakers. The "native English speakers" in the current study refers to native speakers of American English. Therefore, the current study also aims to determine whether some students choose American TAs over Chinese TAs because they have a strong preference for native speakers. To summarize, age, gender, years at Purdue, years in the U.S., GPA, overall TOEFL score, experiences with Chinese TA, effectiveness of Chinese TA, effectiveness of American TA, English ability of Chinese TA, native speaker preference, ethnic identity, and acculturation act as the independent variables the current study aims to measure, and preference for Chinese TA and preference for American TA act as dependent variables.

Participants

Participants were 70 Chinese undergraduate students in the U.S., including 40 males and 30 females. 68 are currently enrolled at Purdue University. The sample as a whole was relatively young (M= 20.7, SD=1.726), and the age range was between 18 and

25. All participants were Chinese citizens, and the majority of them came to the United States after finishing high school in China.

Procedure

53% of the data were collected from five classes at Purdue University, including three English 106i classes, one 420i Business Writing class, and one Introductory Sociology course. 27% of the data were collected from a church for Chinese students at Purdue, the Great Lafayette Chinese Alliance Church. All data from Purdue classrooms and the church were collected using hard copy questionnaires. Students were approached and invited to participate in the survey. 60 hard-copy questionnaires were gathered and four were taken out due to ineligibility. 20% of the data were collected from an online survey, the respondents of which were Chinese students attending another church organization called Pleasant Stream Ministry. The survey link was sent out by the director to the mailing list of this church asking undergraduate Chinese students to participate. Thirty-three students took part in the online survey but only 14 of them finished it. Both hard copy and online respondents are anonymous, and no money or course credits were rewarded for participation.

Materials

A three-part questionnaire was developed for use in the current study. The first part includes five sections. Section I includes seven demographic questions (1-7), asking whether respondents are from mainland China, their gender, age, cumulative GPA, overall TOEFL score, years they spent in the U.S., and years spent at Purdue. Since this

study aim to research mainland Chinese citizens only, the first question was asked to make sure that all participants are Chinese citizens. Therefore two participants who are not from mainland China were excluded from the data.

Sections II and III were designed to explore respondents' experiences with Chinese TAs. Section II (Questions 8-13) was for students who have ever been taught by Chinese TAs, and it was emphasized in the survey that they had to be actually taught or partly taught by Chinese TAs. They were asked how many courses they had taken from Chinese TAs, whether they had problems with their Chinese TAs and whether such problems were language related, and what means they had used or would prefer to use to solve such problems. Students who have never been taught by Chinese TAs would need to skip section II and fill out section III (14-16), in which they were first presented with a text asking them to imagine having a Chinese TA teaching them a class, and then asking them the same questions as section II.

Section IV (17-19) was targeted towards learning participants' experiences with American TAs. Participants were asked how many courses they had taken from American TAs, whether they had any problems, and what means they had or would use to deal with such problems. Since the data suggested that every participant had been taught by American TAs, experiences with American TAs were not treated as a variable in the current study. Also, they were not asked whether such problems were language related, since students would not have any language problems with native English speakers.

The last section, VI, only includes three items. Item 20 and 21 examined participants' preferences of TA. Question 20 asked how strongly they would prefer a Chinese TA over an American TA by choosing between 1 and 7 on a seven-point likert scale, with "1: No Chinese TA," and "7: Preference for Chinese TA." Question 21 asked how strongly they would prefer an American TA over a Chinese TA on the same scale. The two questions are the dependent variables this study aims to measure, which are "preference for Chinese TA" and "preference for American TA."

Question 22 includes four statements which were also put on a seven-point likert scale, with "1: strongly disagree" and "7: strongly agree." The first two statements were used to measure teaching effectiveness of Chinese TAs and American TAs. The first statement is "Chinese TAs are more effective instructors than American TAs," and the second statement is "American TAs are more effective instructors than Chinese TAs." The third statement was created to examine Chinese TAs' English ability in students' points of view, which is "Chinese TAs speak good English." The last statement, "I want to have native English speakers as instructors," was designed to identity the degree to which students prefer native English speakers as their instructors.

The second part of the questionnaire contains the MEIM-R scale, which was expended from the original five-point likert scale into a seven-point likert scale, with "1: Strongly disagree" to "7: Strongly disagree." The existing scale was expanded to insure that results would be more widely scattered than in the original five-point scale, since participants usually have a tendency to avoid choosing the end points of a scale. The scores for each student were added and then divided by seven, so each student got a score

between 1 and 7 for ethnic identity, with 1 representing the lowest ethnic identity and 7 indicating the strongest ethnic identity.

The third part of the questionnaire is the SL-ASIA scale, which was presented in the original form of multiple choices. Scores for each student were added and then divided by 21, so a final score between 1 to 5 was gained for one's level of acculturation. The higher the score, the more one has acculturated into the American culture. Since this scale was originally developed to measure the acculturation levels for Asian Americans, the wording was modified in order to be used in the current study. To be specific, for question 3 "How do you identity yourself?", the original choices were "1) Oriental, 2) Asian, 3) Asian-American, 4) Chinese-American, Japanese-American, Korean-American, etc., and 5) American," with 1 representing the highest degree of identification to one's ethnicity and 5 representing the lowest degree of identification to one's ethnicity. In the current study, the five choices had been changed to "1) Chinese, 2) Asian, 3) Chinese-American, 4) Asian-American, 5) American," with 1 still representing the highest degree of identification with one's ethnicity and 5 showing the lowest degree of identification with one's ethnicity. Although the wording was slightly changed, the ranking of acculturation level for each question was kept the same.

Moreover, since all participants in the current study are Chinese citizens and have spent the majority of their lives in China, some items specifically designed for Asian-Americans do not really fit in the study, but they were still kept to insure validity of the scale. The unitive identification for the sample also determined that the average score for acculturation will be relatively low in the current study.

Results

Results were derived in two steps. For dichotomous variables, an independent-samples *t*-test was run on gender and experiences with Chinese TAs. For the rest of the independent variables, a bivariate correlation (Pearson's r) was run to see whether any of the variables have a significant linear relationship with the dependent variables, as well as whether any of the variables are significantly correlated. Second, linear regression was conducted in order to identify a model that works the best for the research question of the current study.

Step I: T-test Results

'Male' was coded as '1' and 'female' was coded as '2' in SPSS. There are 40 males and 30 females in the sample. Based on results of the *t*-test, there was no significant effect for gender (*t* =.749, *n* = 70, *p*=.456 for preference for Chinese TA; *t* =.972, *n* = 70, *p* =.334 for preference for American TA). So, we may say that gender is not a significant factor influencing students' preference for TAs.

Participants having had experiences with a Chinese TA was coded as '1' and participants not having had experiences with Chinese TA was coded as '2'. The majority of the sample (58 out of 70) had been taught by a Chinese TA at some point. Results of the *t*-test showed no significant effect for the experiences with Chinese TA variable in terms of their preference for an American or Chinese TA *(t* = .126, *n* = 70, *p* =.900 for preference for Chinese TA; *t* = -.237, *n* = 70, *p* =.813 for preference for American TA),

and thus we may conclude that there is no significant difference between the two groups of students' choices of TAs.

Pearson's r Correlation Results

Age

Based on the correlation table (see table I in appendix), there were many significant correlations with the age variable, which is not surprising because age can also be a surrogate for time spent in the U.S. or amount of experience in American classrooms. It is possible that more time spent in the U.S. and amount of experiences in American classrooms indicate a higher English proficiency and acculturation level, which in turn contribute to a higher GPA.

First, age is significantly positively correlated with both the years in the U.S. variable ($r = .658$, $n = 70$, $p = .000$) and the years at Purdue variable ($r = .659$, $n = 68$, $p = .000$), which is understandable. Interestingly, there is also a strong, positive correlation between age and GPA ($r = .274$, $n = 69$, $p = .023$), indicating a positive, linear relationship between Chinese undergraduate students' age and their GPAs. Thus, the older the student,, the higher GPA they would have received. Furthermore, age is significantly negatively correlated with the English ability of Chinese TA variable ($r = -.419$, $n = 70$, $p = .000$), meaning that older students in the sample hold more negative attitudes towards Chinese TAs' English ability than younger students.

The correlations between age and the two dependent variables were not significant, but they revealed an interesting pattern. The correlation between age and preference for

Chinese TA is negative ($r = .199$, $n = 70$, $p = .099$), whereas the correlation between age and preference for American TA is positive ($r = .097$, $n = 70$, $p = .425$), which suggests that for Chinese undergraduate students between 18 and 25 years old, younger students tend to prefer a Chinese TA over an American TA, but they tend to prefer an American TA more as they grow older.

Years in the U.S. and Years at Purdue

Obviously, years in the U.S. is strongly positively correlated with years at Purdue ($r = .945$, $n = 68$, $p = .000$). As is the case with the age variable, the years in the U.S. variable and the years at Purdue variable are also negatively and significantly correlated with the Chinese TAs' English ability variable ($r = -.311$, $n = 70$, $p = .009$; $r = -.303$, $n = 68$, $p = .012$), showing that students who have stayed a relatively longer time in the dominant culture tend to have a negative attitudes towards Chinese TAs' English ability. Both variables are not significantly correlated with the dependent variables, yet they did reveal a similar pattern as the age variable. Preference for a Chinese TA is negatively correlated with both variables, whereas preference for an American TA is slightly positively correlated with both variables, suggesting students who have stayed a longer time in the dominant culture tend to prefer American TAs over Chinese TAs.

Together with results of the age variable, we may conclude that Chinese undergraduate students at Purdue tend to prefer American TAs over Chinese TAs as they grow older and spend a longer time in the dominant culture. This might have something to do with students' acculturation levels, because their acculturation levels are expected to improve as they stay a longer time in the dominant culture, and they would normally

prefer American TAs more as they increasingly acculturate into the dominant culture. Also, as they adjust better to the dominant culture and their English abilities improve, they would hold an increasingly negative view of Chinese TAs' English abilities.

GPA and TOEFL

The item measuring participants' GPA was presented in the form of a multiple choice question. The majority of participants' answers were centered on 4 (3.0-3.66) and 5 (3.67-4.0), and a few of them chose 3 (2.0-2.99). However, one student chose 1 (less than 1), a GPA that prevents student status at Purdue University. Thus, this answer was suspected to be an outlier and was removed while testing the GPA variable.

Besides the strong, positive correlation between age and GPA, no significant correlations were found for the GPA or TOEFL variables. Although correlations between the two variables and the dependent variables were small, a trend could be observed. Both GPA and TOEFL are negatively correlated with participants' preference for Chinese TA, but positively correlated with their preference for an American TA, indicating that students with better GPA and TOEFL scores are likely to choose American TAs over Chinese TAs. Especially, the *p*-value for the correlation between TOEFL score and preference for American TA ($r = .233$, $n = 62$, $p = .068$) is close to .05, which shows that students with a higher TOEFL score tend to prefer American TAs over Chinese TAs. This may due to the fact that students with high TOEFL scores typically have a high level of English proficiency, so they are assumed to encounter less difficulty in communicating with native English speakers, compared to students with relatively lower TOEFL scores.

Effectiveness of Chinese TA and Effectiveness of American TA

There is a significant negative correlation (r = -.237, n = 70, p = .048) between the effectiveness of Chinese TA variable and the effectiveness of American TA variable, showing that there is a linear, bipolar relationship between the two variables. It also indicates that students who think Chinese TAs are effective instructors usually hold that American TAs are less effective instructors, and vice versa. The effectiveness of Chinese TA variable is also negatively and significantly correlated with the preference for native speaker variable (r = -.283, n = 70, p =.018), which signifies that students who prefer to be taught by native English speakers normally hold that Chinese TAs are not effective instructors, and students who think that Chinese TAs are more effective instructors than American TAs actually do not care to have native English instructors.

On the other hand, the effectiveness of American TA variable has a strong, positive correlation with the preference for native speaker variable (r = .382, n = 70, p = .001), which indicates that students who want to have native English instructors have always viewed American TAs as more effective instructors than Chinese TAs. However, it is hard to decide which belief comes first. Do students want to be taught only by native English speakers because they think native speakers are effective instructors? Or do they believe American TAs are effective instructors because they are native speakers? This is an interesting topic that is worthy of further research.

Surprisingly, different from the literature that found American students' attitudes towards ITAs influenced more by the ethnicity factor than ITAs' teaching effectiveness, the current study found out that there was a significant positive correlation (r = .252, n =

70, p = .036) between Chinese TAs' teaching effectiveness and students' preference for a Chinese TA. In other words, for Chinese students who believe that Chinese TAs are more effective instructors than American TAs, they actually would like to be taught by Chinese TAs over American TAs. On the other hand, the effectiveness of American TA variable has no significant correlation with either of the two dependent variables, which indicates that students who believe American TAs are more effective instructors might not necessarily prefer to have American TAs.

Ethnic Identity and Acculturation Level

Ethnic identity was found to be an insignificant factor behind students' choice of TAs. Although the correlations of ethnic identity and the two dependent variables are both weak, its correlation with preference for American TA (r = .144, n = 70, p = .235) is actually stronger than its correlation with preference for Chinese TA (r = .010, n = 70, p = .934). This indicates a tendency that Chinese students who identify themselves strongly with their native culture may not necessarily prefer to be taught by a Chinese TA. Instead, some of them chose to have American TAs over Chinese TAs. The small correlations demonstrate that Chinese students' ethnic identity has no influence on their choice of instructors. Such a result is not only surprising but interesting. According to the literature reviewed above, American undergraduate students' attitudes towards ITAs is mainly influenced by the ethnicity factor - they tend to prefer TAs have of the same ethnicity as them over TAs who come from different ethnic backgrounds. The current study showed an opposite phenomenon. This might has something to do with the distinct background of the sample, since they are international students who are in the process of acculturating to

the dominant culture. An analysis of the acculturation variable might be able to unravel this doubt.

Table I revealed a significant negative correlation between students' acculturation level and their preference for Chinese TA (r = -.304, n = 70, p = .011), showing that the more acculturated to the U.S. culture the Chinese students are, the less they tend to prefer Chinese TAs as their instructors. This result corresponds to the hypothesis of the current study. On the other hand, although the correlation between acculturation and preference for American TA is not significant, it did display an opposite trend. Such results showed that Chinese students with high level of acculturation would like to be taught by American TAs more than by Chinese TAs.

The next step is to look at the relationship between ethnic identity and acculturation. According to the table, ethnic identity and acculturation are slightly negatively correlated (r = -.156, n = 70, p = .198), indicating a tendency that students with strong ethnic identity usually have low levels of acculturation, and vice versa. This result seems to correspond to the linear, bipolar model. However, since the correlation is not significant, and the data did show that some respondents have scored high in both ethnic identity and acculturation, the two-dimensional model may seem to be more reasonable. It is therefore impossible to determine the better model based on the limited data of the current study, so a larger sample size is needed to confirm this assumption.

English Ability of Chinese TA and Native Speaker Preference

The English ability of Chinese TAs and native speaker preference variables are discussed together because there is a strong, negative correlation between them (r = -.350, n = 70, p = .003), which points out that students who hold that Chinese TAs speak good English do not care whether or not they are taught by native speakers, and students who prefer to be taught by native speakers generally believe that Chinese TAs don't speak good English. The English ability of a Chinese TA is positively strongly correlated with students' preference for a Chinese TA (r = .313, n = 70, p = .008), demonstrating that Chinese TAs' English ability does have an important effect on students' choice. Once again, such a finding is contrary to the literature. The current study indicates that Chinese students' attitudes toward Chinese TAs are influenced both by Chinese TAs' teaching effectiveness and language ability.

The preference for native speaker variable has significant correlations with both dependent variables. There is a strong, negative correlation between this variable and the preference for a Chinese TA (r = -.369, n = 70, p =.001), showing that students who choose to be taught by native speakers have a strong tendency to not prefer Chinese TAs. On the other hand, there is a strong, positive correlation between the variable and preference for American TA (r = .439, n = 70, p =.000), telling us that students who prefer to be taught by native speakers have an intense desire to choose American TAs over Chinese TAs. However, it is hard to decide which belief comes first. Do these students want to be taught by native English speakers because they think native speakers are effective instructors? Or do they believe American TAs are effective instructors

because they are native speakers? This is an interesting topic that is worthy of further

research.

Surprisingly, native speaker preference is strongly and positively correlated with

ethnic identity (r = .314, n = 70, p =.008), signifying that Chinese students who have a

strong tendency of identifying themselves with the Chinese culture actually do not really

prefer to be taught by Chinese TAs; instead, they are much more willing to have native

English speakers as their instructors. Such a finding is unexpected, but it is in

correspondence with the finding that ethnic identity is not a significant factor behind

students' choice of TAs. Although the correlations are both weak, the stronger positive

correlation between ethnic identity and preference for American TAs over that of ethnic

identity and preference for Chinese TA also indicates a tendency that Chinese students

who identify themselves strongly with their native culture in fact slightly prefer American

TAs over Chinese TAs.

Step II: Linear Regression Results

Statistical models, like linear regression, are used to model the uncertainty, or in

other words, the variation in the data. A model would be treated as "a good model fit" if

it can explain the most portion of the data variation, compared to other alternative models.

"Fit" refers to how much variation of the data can be explained by a model, and R-square

is used to report the fit of a model.

To identify a model that best fit the current study, linear regression was run to do

variable selection, and a statistical consultant at Purdue University was consulted for

advice on presenting results of the regression. Three numbers are important to consider while looking at model fit, R square (R^2), standard error of the estimate (σ_{est}), and p value. First, all the independent variables with the preference for Chinese TA were put together to run linear regression ($R^2 = .343$, $\sigma_{est} = 1.371$, $p = .064$). The R^2 value represents that 34.3% of the data can be explained by this model in the current study, indicating a good model fit for the data. However, since R^2 is based on the sample and might be a positively biased estimate of the proportion of the variance of the dependent variable, an adjusted R^2 value is reported, which corrects positive bias to provide a value that would be expected in the population. The adjusted R^2 value is .157, indicating a moderate model fit.

Since the adjusted R^2 does not look good and the p value is not significant, certain independent variables have to be taken out to seek a better model fit. This process allows us to see which variables are the most important, overall, for explaining most of the factors in a population.

Variables were removed, starting with the least significant correlated variables. According to table I, the gender variable was the first to be taken out, as the results are more satisfying without gender ($R^2 = .342$, adjusted $R^2 = .175$, $\sigma_{est} = 1.357$, $p = .041$). We see that although the R^2 value has not really been changed, the adjusted R^2 has been improved to .175, meaning 17.5% of the population can be explained using this model. The slightly reduced σ_{est} indicates a more accurate prediction of this model. Plus, the p value has become significant at the 0.05 level. All three numbers showed a better model fit without the gender variable. Second, the experiences with Chinese TA variable was removed, and a better model fit was gained ($R^2 = .341$, adjusted $R^2 = .190$, $\sigma_{est} = 1.344$, p

= .026). Third, the ethnic identity variable was removed, which resulted in an even better

model fit (R^2 = .341, adjusted R^2 = .206, σ_{est} = 1.331, p = .015). So far, the adjusted R^2

indicates that over 20% of the population can be explained by using the current model,

which is a good model fit.

Next, years in the U.S. was taken out, resulting in a less satisfying result (R^2 = .294,

adjusted R^2 = .167, σ_{est} = 1.363, p = .029). The reduced R^2 and the adjusted R^2 value

indicated that a smaller percentage of the population could be accounted for by this

model than the previous one, and the increased σ_{est} signified that the prediction has

become less accurate than the previous model. Thus, it is necessary to keep the years at

U.S. variable in the model. The same procedure has been applied to the rest of the

variables, and the best model has been achieved (see table II in the appendix) with the

following eight variables, including age, years in the U.S., years at Purdue, effectiveness

of Chinese TA, effectiveness of American TA, acculturation level, English ability of

Chinese TA, and native speaker preference (R^2 = .343, adjusted R^2 = .252, σ_{est} = 1.258, p

= .001). Such results pointed out that 25.2% of the population could be explained by this

model, indicating a good model fit. The plot of regression also indicates that the data are

normally distributed. Overall, native speaker preference, English ability of Chinese TA,

effectiveness of Chinese TA, as well as acculturation level, were found to be the most

significant variables, since they are mainly responsible for building up the R^2 value.

Without these four variables, a .000 adjusted R^2 will be calculated.

The same variable selection method has been applied to the other dependent

variable. The best model acquired included variables of age, years in the U.S., TOEFL,

effectiveness of American TA, acculturation level, and native speaker preference (see table III in appendix). Gender, experiences with Chinese TA, GPA, years at Purdue, ethnic identity, effectiveness of Chinese TA, and English ability of Chinese TA have been removed. Results of this model (R^2 = .365, adjusted R^2 = .294, σ_{est} = .965, p = .000) contained the biggest adjusted R^2 value, the lowest σ_{est}, and the most significant R value among all alternative models. Also, the regression plot demonstrates that the data are normally distributed. Compared to the model for preference for a Chinese TA, this model yielded a more promising result, which is able to explain 29.4% of the population. During the process of variable selection, the native speaker preference variable was indicated to be the most significant, since the model produced the worst result after taking this variable out (R^2 = .103, adjusted R^2 = .003, σ_{est} = 1.147, p = .414). Such a finding corresponds to the Pearson's correlation results, according to which the native speaker preference is the only variable that is significantly correlated with students' preference for an American TA.

Discussion

Correlation between Chinese TA Preference and Age/Years in U.S./Purdue

The results reveal some interesting findings. The correlation between age and belief about Chinese TAs' English ability, and the correlation between belief about Chinese TAs' English ability and years in the U.S./years at Purdue, together suggest that Chinese students' attitudes towards Chinese TAs' English abilities worsen as they grow older and as they stay longer in the dominant culture. This might be caused by the fact that Chinese students' own English abilities improve as they stay longer in the United States and thus

they find it easier to adjust to American TAs' classrooms, which might in turn cause them to be less appreciative of Chinese TAs' English ability. The strong, positive correlation between age and GPA indicates a similar pattern, that Chinese students generally get a higher GPA as they grow older, and that higher GPA indirectly predicts a higher English proficiency. Such results, together with the slight negative correlation between age and preference for Chinese TA, have revealed a pattern that Chinese undergraduate students at Purdue somehow tend to prefer American TAs over Chinese TAs as they grow older and spend a longer time in the dominant culture.

Importance of Native Speaker Preference

Native speaker preference is the only independent variable that has a strong correlation with both the dependent variables. The significant, negative correlation between native speaker preference and preference for Chinese TA, and the significant, positive correlation between native speaker preference and preference for American TA both show that students who prefer to be taught by native English speakers have a strong tendency to choose American TAs over Chinese TAs. As a Chinese who had accepted the K-12 education in China, I know how important academic achievement means for Chinese students and their parents. Since Chinese students came to the U.S. bearing their parents' earnest expectations, mastering English is a major task they need to accomplish, and thus it is understandable that they would like to have as much access as they can to native English. This might explain why native speaker preference is the most crucial factor influencing students' choice of TA.

Contradictory Findings from the Literature

Both Chinese TAs' teaching effectiveness and Chinese TAs' English ability are strongly and positively correlated with students' preference for Chinese TA, showing that Chinese students do prefer to be taught by Chinese TAs if they hold the view that Chinese TAs are efficient instructors or Chinese TAs speak good English. Such results reveal an trend opposite to the existing literature. Moreover, the most important factor influencing American undergraduate students' perceptions of ITAs as suggested by the literature, ethnic identity, is not significantly correlated with either of the dependent variables. In contrast to the literature suggesting American undergraduate students tend to evaluate ITAs on more intralinguistic factors like ethnicity, rather than TAs' teaching effectiveness and English ability, the current study shows that both Chinese TAs' English ability and teaching effectiveness play important roles in shaping Chinese undergraduate students' perceptions of Chinese TAs.

The different patterns revealed by the current study and the literature might be caused by the different nature of the current study. While existing literature has examined American undergraduate students' perceptions of ITAs, comparing Chinese undergraduate students' preference for American TAs and Chinese TAs is indeed more complicated. It is reasonable for American students to prefer TAs with the same ethnic backgrounds as themselves. As Elliot (1979) states, it is natural for humans to bond with individuals similar to them, which is known as the "homophily" factor. He claims that homophily facilitates students' learning under TAs with the same ethnic backgrounds, and hinders learning under TAs with different ethnic backgrounds. In this particular case, homophily is reflected through ethnic identity. Since American undergraduate students

normally do not have previous experiences dealing with ITAs, the lack of contact or

experiences with ITAs makes them automatically tend to prefer TAs who are similar to

themselves - American TAs. Also, despite their teaching skills, ITAs usually have an

accent that may be hard for American students to understand. Regardless of his or her

level of fluency, it is almost impossible for a non-native speaker to speak English without

an accent. As revealed through findings of guise methods in the literature review section

above, American students even attached a non-existing accent just by looking at the

photo of an Asian instructor (Rubin, 1992). This can also be explained by the homophily

factor, in which people have more positive attitudes towards those of the same ethnic

identity.

Chinese students' preferences for Chinese or American TAs is another story. First,

Chinese students traveled across half of the planet to pursue their education in the U.S.,

and despite different ethnic backgrounds, it is reasonable for them to prefer American

TAs due to their aspirations of learning English and integrating into American culture.

Thus, the ethnic identity factor doesn't apply in this particular situation. Second, unlike

American students, who do not view ITAs on the basis of teaching effectiveness and

English ability, the two factors are important criteria in determining Chinese students'

preference for Chinese TAs. For such students, teaching effectiveness and English ability

are more important qualities of an instructor than access to a native English speaker. Yet,

they don't have the same criteria for American TAs, so it seems that for the Chinese

students who prefer American TAs, being taught by native speakers is the most important

and American TAs' effectiveness does not matter that much as long as they are native

speakers. To conclude, the unique nature of the current study accounts for its different

findings from the literature.

Different Criteria of Viewing Chinese TAs and American TAs

As mentioned above, participating Chinese students have different criteria for

Chinese TAs and American TAs. While the effectiveness of Chinese TA variable

functions as a major factor contributing to students' preferences for a Chinese TA, the

effectiveness of American TA variable has no significant correlation with either of the

two dependent variables, which indicates that students who believe American TAs are

more effective instructors might not prefer to have American TAs. As a matter of fact,

effectiveness of American TAs is slightly negatively correlated with both preference for a

Chinese TA and preference for an American TA, meaning that those students do not

really care about the ethnicity of their TAs even if they believe American TAs are

effective instructors. Why is this the case? Perhaps this group of students has relatively

high English proficiency and acculturation levels and thus they will get good grades

despite their instructors' ethnicity. Regardless, this is an interesting question that can only

be answered through further research, and qualitative data might work better than

quantitative data.

Significance of Acculturation Level

A significant negative correlation was seen between students' acculturation level

and their preference for Chinese TA, showing that students who have acculturated better

in the target culture would prefer Chinese TAs less than American ones. Different from

ethnic identity, the findings regarding acculturation levels is within expectation of the

current study. Thus the study confirms the assumption made in the beginning of this study, that Chinese students do prefer American TAs more as they acculturate better into the dominant culture.

Demonstration of Validity of the Findings from Linear Regression

The linear regression test generated the same results. The best model achieved for the preference for Chinese TA variable included eight independent variables, which are age, years in the U.S., years at Purdue, effectiveness of Chinese TA, effectiveness of American TA, acculturation level, English ability of Chinese TA, and native speakers preference variables (R^2 = .343, adjusted R^2 = .252, σ_{est} = 1.258, p = .001), which could explain 25.2% of the population. Also, native speaker preference, English ability of Chinese TA, effectiveness of Chinese TA, and acculturation level, were found mainly responsible for building up the R^2 value, so they are the most significant independent variables for the preference for Chinese TA model.

The best model acquired for the preference for American TA variable contained six variables, including age, years in the U.S., TOEFL, effectiveness of American TA, acculturation level, and native speaker preference (R^2 = .365, adjusted R^2 = .294, σ_{est} = .965, p = .000), which is able to explain almost 30% of the population. The native speaker preference variable was suggested to be the most important variable maintaining the R^2 value. The same results gained by the Pearson's r correlation test and the linear regression test demonstrated the validity of the findings of the current study.

Limitations

Many limitations exist regarding the design of the questionnaire. First, the effectiveness of Chinese TA and effectiveness of American TA variables were examined through only one question each, which might influence the validity of the data. To improve internal consistency of the data, a number of questions should be developed to examine effectiveness of TAs in different ways, such as "Chinese TAs are more professional with the subject matter than American TAs," "Chinese TAs are more prepared for class than American TAs," and so on. A score gained through measuring different aspects of teaching can truly reflect an instructor's teaching effectiveness.

Second, there is only one question examining participants' opinions about Chinese TAs' English ability, that participants were presented with a statement "Chinese TAs speak good English," and then were asked to place their answers along a seven point likert scale from "strongly disagree" to "strongly agree." Similar to the first limitation, in order to yield more valid and consistent results, a list of questions, rather than one item, should be developed and used to examine participants' opinions.

Third, another important factor was neglected during the design of the questionnaire, which is participants' major of study. Students might have different preferences for TA depending on their majors. One student wrote on the questionnaire "it depends on the course I take." Another student actually wrote with more details that he or she would prefer to have American TA if a course requires lots of writing, and on the contrary he or she would prefer to have a Chinese TA if it's a science class, like mathematics or engineering, and so on. Obviously, this student thinks that native English speakers would be more helpful in improving his or her writing skills, and Chinese TAs

are more trustworthy in the science field. This student is probably not the only one who has such preferences. Thus, if I had asked participants' majors in the questionnaire, I might could have gained a clearer picture of the influence of one's major on his or her TA preference.

Implications for Future Direction

The current study points to a few implications for future research. Results suggest that Chinese students perceive Chinese TAs through the factors of English ability and teaching effectiveness, yet native speaking ability is the only important factor when considering American TAs. Also, it was found that Chinese students with a strong ethnic identity may still prefer to be taught by American TAs. Such findings may be explained by the unique aspects of Chinese culture. Emphasis on successful academic achievement is part of Chinese culture; typical Chinese parents would rather "sacrifice" everything to get their children to receive the best education, so students are always under pressure to behave the best academically. For Chinese students pursuing education in the U.S., learning English is their primary task. This might explain why some students have such a strong preference for native English access and why some students still tend to prefer American TAs even if they have strong ethnic identity. This could also explain why certain students, who believe that Chinese TAs can teach effectively or have good English ability, actually prefer Chinese TAs, because such qualities fulfill the requirements of a good instructor. They believe that effective Chinese TAs, or Chinese TAs with good English ability, will contribute to their academic success more than American TAs. Qualitative data gained from research such as open-ended questions and

interviews would help illuminate the thoughts and beliefs behind Chinese students'

preferences.

Third, results of the linear regression tests were able to indicate the best model for

each dependent variable, and thus the independent variables kept in the best models are

an important area for further research. In the end, the relationship between ethnic identity

and acculturation could not be determined based on the results. The slight negative

correlation between them seems to suggest a linear, bipolar model that minority

individuals' ethnic identity would decrease as they acculturated more into the dominant

culture, and vice versa. However, the fact that some participants had scored high in both

the MEIM-R scale and the SL-ASIA scale tends to support the two-dimension model,

that it is possible for individuals to identify themselves with both the dominant and

minority groups. Since there is not enough ground to support either model, it is not

possible to know which model is more valid on the basis of the current study. A clear

trend may be revealed with a larger sample size.

Conclusion

The research question of the current study — Chinese undergraduate students'

preferences for Chinese TAs and American TAs -- has never been studied before. While

existing literature in this field all focus on American undergraduate students' perceptions

of ITAs, the findings of the current study show that the reasons for Chinese students'

perceptions of TAs is very different from those of American students. For example,

ethnic identity, which has been indicated to be the most important factor influencing

American students' perceptions of ITAs, was not found to be a significant factor affecting

Chinese students' preference for TAs. Also, teaching effectiveness and English ability, which have been demonstrated to be unrelated to American students' views of ITAs, are found to be important variables determining Chinese students' preference for a Chinese TA. Although the different findings may be accounted for by the different nature of the current study, more research on the current topic needs to be conducted in order to know Chinese students' thoughts and beliefs.

A few limitations were found in the current study. First, only one question was designed to examine participants' belief about Chinese TAs' English ability, and only one question was used to measure participants' belief about Chinese TAs' teaching effectiveness. Instead, to improve internal consistency, a list of questions should be developed to measure students' belief about Chinese TAs' teaching effectiveness and English ability, respectively. Second, students' major of study is believed to be an important factor that may influence students' preference for TAs, so it should be included in the questionnaire in future research.

Since the current study is the first to pay attention to Chinese TAs' perceptions of Chinese and American TAs in a U.S. context, more limitations might exist in addition to above identified ones. For example, possible significant variables may be not studied by the current study, and design of the questionnaire may be more problematic than thought, and surely a larger sample size will be useful. Many surprising and interesting findings were revealed, such as the participants do not really prefer to have American TAs even if they believe American TAs are effective instructors, and Chinese students' attitudes

towards Chinese TAs get more negative as they stay longer in the U.S. Hopefully, in the future such findings will be studied in more detail

      To conclude, the current study has added something new to the literature. The findings of the current study may be viewed as unique features of Chinese undergraduate students in the U.S. context. The current study also demonstrates the validity of the concept of acculturation--that Chinese students do feel more comfortable with American TAs as they acculturate better into the dominant culture. Since Chinese students' beliefs and values are of great importance to educators and researchers, the current study could serve as a starting point to attract more attention to the biggest international student body in the United States. Additionally, more research on relevant topics should be conducted to learn about Chinese students, in order to make their transition to the U.S. culture smoother and less burdensome.

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Appendix:

Tables:

Table I: Correlation Table

Correlations

		Age	Years_US	Years_Purdue	GPA	TOEFL	Effectiveness_ChineseTA	Effectiveness_AmericanTA	Ethnic_identity	Acculturation_level	ChineseTA_English_ability	Native_speaker_preference	Preference_ChineseTA	Preference_AmericanTA
Age	Pearson Correlation	1	.658**	.659**	.274*	.111	-.056	-.099	-.084	.183	-.419**	-.017	-.199	.097
	Sig. (2-tailed)		.000	.000	.023	.390	.647	.417	.487	.128	.000	.886	.099	.425
	N	70	70	68	69	62	70	70	70	70	70	70	70	70
Years_US	Pearson Correlation	.658**	1	.945**	.160	.144	-.095	-.067	.017	.090	-.311**	.047	-.042	-.016
	Sig. (2-tailed)	.000		.000	.190	.263	.436	.581	.888	.457	.009	.696	.728	.897
	N	70	70	68	69	62	70	70	70	70	70	70	70	70
Years_Purdue	Pearson Correlation	.659**	.945**	1	.082	.085	-.030	-.079	.040	.081	-.303*	-.029	-.052	.001
	Sig. (2-tailed)	.000	.000		.509	.513	.810	.521	.746	.511	.012	.811	.675	.992
	N	68	68	68	67	61	68	68	68	68	68	68	68	68
GPA	Pearson Correlation	.274*	.160	.082	1	.209	.004	-.080	-.219	.054	-.040	.006	-.145	.006
	Sig. (2-tailed)	.023	.190	.509		.106	.975	.513	.071	.661	.743	.962	.235	.963
	N	69	69	67	69	61	69	69	69	69	69	69	69	69
TOEFL	Pearson Correlation	.111	.144	.085	.209	1	-.172	.125	-.087	.216	-.096	.205	-.200	.233
	Sig. (2-tailed)	.390	.263	.513	.106		.181	.333	.502	.092	.460	.109	.118	.068
	N	62	62	61	61	62	62	62	62	62	62	62	62	62
Effectiveness_ChineseTA	Pearson Correlation	-.056	-.095	-.030	.004	-.172	1	-.237*	.121	-.177	-.068	-.283*	.252*	.001
	Sig. (2-tailed)	.647	.436	.810	.975	.181		.048	.319	.144	.578	.018	.036	.995
	N	70	70	68	69	62	70	70	70	70	70	70	70	70
Effectiveness_AmericanTA	Pearson Correlation	-.099	-.067	-.079	-.080	.125	-.237*	1	.117	.115	-.096	.382**	-.061	-.055
	Sig. (2-tailed)	.417	.581	.521	.513	.333	.048		.336	.341	.427	.001	.614	.649
	N	70	70	68	69	62	70	70	70	70	70	70	70	70
Ethnic_identity	Pearson Correlation	-.084	.017	.040	-.219	-.087	.121	.117	1	-.156	-.226	.314**	.010	.144
	Sig. (2-tailed)	.487	.888	.746	.071	.502	.319	.336		.198	.060	.008	.934	.235

	N	70	70	68	69	62	70	70	70	70	70	70	70	70
Acculturation_level	Pearson Correlation	.183	.090	.081	.054	.216	-.177	.115	-.156	1	-.139	.102	-.304*	.113
	Sig. (2-tailed)	.128	.457	.511	.661	.092	.144	.341	.198		.250	.400	.011	.354
	N	70	70	68	69	62	70	70	70	70	70	70	70	70
ChineseTA_English_ability	Pearson Correlation	-.419**	-.311**	-.303*	-.040	-.096	-.068	-.096	-.226	-.139	1	-.350**	.313**	-.143
	Sig. (2-tailed)	.000	.009	.012	.743	.460	.578	.427	.060	.250		.003	.008	.237
	N	70	70	68	69	62	70	70	70	70	70	70	70	70
Native_speaker_preference	Pearson Correlation	-.017	.047	-.029	.006	.205	-.283*	.382**	.314**	.102	-.350**	1	-.396**	.439**
	Sig. (2-tailed)	.886	.696	.811	.962	.109	.018	.001	.008	.400	.003		.001	.000
	N	70	70	68	69	62	70	70	70	70	70	70	70	70
Preference_ChineseTA	Pearson Correlation	-.199	-.042	-.052	-.145	-.200	.252*	-.061	.010	-.304*	.313**	-.396**	1	-.321**
	Sig. (2-tailed)	.099	.728	.675	.235	.118	.036	.614	.934	.011	.008	.001		.007
	N	70	70	68	69	62	70	70	70	70	70	70	70	70
Preference_AmericanTA	Pearson Correlation	.097	-.016	.001	.006	.233	.001	-.055	.144	.113	-.143	.439**	-.321**	1
	Sig. (2-tailed)	.425	.897	.992	.963	.068	.995	.649	.235	.354	.237	.000	.007	
	N	70	70	68	69	62	70	70	70	70	70	70	70	70

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table II: Model Summary for Preference for Chinese TA

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.586[a]	.343	.252	1.258

a. Predictors: (Constant), Efficiency_AmericanTA, Years_US, Acculturation_Level, Efficiency_ChineseTA, English_ability_ChineseTA, native_speaker_preference, Age, Years_Purdue

b. Dependent Variable: Preference_ChineseTA

Table III: Model Summary for Preference for American TA

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.604[a]	.365	.294	.965

a. Predictors: (Constant), Efficiency_AmericanTA, Years_US, Acculturation_Level, TOEFL, native_speaker_preference, Age

b. Dependent Variable: Preference_AmericanTA

Questionnaires

I. Demographic information

1. Are you a mainland Chinese citizen? (A) Yes   (B) No, please specify _____

2. Your gender: (A) Male   (B) Female

3. Your estimated cumulative grade point average (GPA):
(A) 3.67–4.0 (B) 3.0–3.66 (C) 2.0–2.99 (D) 1.00–1.99 99 (E) less than 1.0

4. Your age: _____

5. Years you've been in the U.S.: _____

6. Years you've been at Purdue: _____

7. Your overall TOEFL score: _____

II . Experiences with Chinese TA (Teaching Assistant)

8. Think back your time at Purdue, have you ever had a class taught or partly taught by a Chinese TA?
(A) Yes   (B) No
How did you know they are Chinese?_____

If yes, please answer the questions 9-13； if not, please go to section III.

9. How many courses taught or partly taught by Chinese TAs have you had?
(A) One (B) Two (C) Three (D) Four (E) Five or more

10. Have you ever have any problems with any of your Chinese TAs?
(A) Yes (B) No

11. If your answer to the previous question was yes, what was the first means you used to work out problems with a Chinese TA? (choose one)

(A) Ask for help from the Chinese TA
(B) Change/drop that section
(C) Seek tutoring help outside of class
(D) Learn the material on my own or with classmate(s)
(E) Other, please explain _____

12. If you never had problems with your Chinese TA, imagine some day you do have problems with a Chinese TA, how would you handle it?

(A) Ask for help from the Chinese TA
(B) Change/drop that section
(C) Seek tutoring help outside of class
(D) Learn the material on my own or with classmate(s)
(E) Other, please explain _____

13. If your answer to question 12 was yes, were those problems related to language?
(A) Yes (B) No

III. Imagine you're having a class (could by any subject, like maths, English, chemistry...), the instructor is a Chinese TA, he or she has the typical Chinese appearance (black hair, black eyes, possibly thin...) and talks with a Chinese accent. Please keep this image in your head and answer the following questions:

14. Do you think you would have any problems with your Chinese TA?
(A) Yes (B) No

15. If your answer to the previous question was yes, what will be the first means you will choose to work out problems with a Chinese TA? (choose one)

(A) Ask for help from the Chinese TA
(B) Change/drop that section
(C) Seek tutoring help outside of class
(D) Learn the material on my own or with classmate(s)
(E) Other, please explain _____

16. If your answer to the previous question was yes, will those problems related to language?
(A) Yes (B) No

IV. Experiences with American TA

17. How many courses taught or partly taught by an American TA have you had?
(A) One (B) Two (C) Three (D) Four (E) Five or more

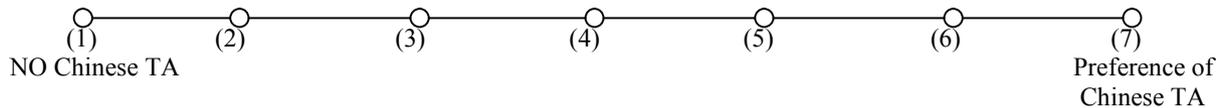18. Did you have any problems with any of your American TAs?
(A) Yes (B) No

19. If your answer to the previous question was yes, what was the first means you used to work out problems with an American TA? (Choose one)
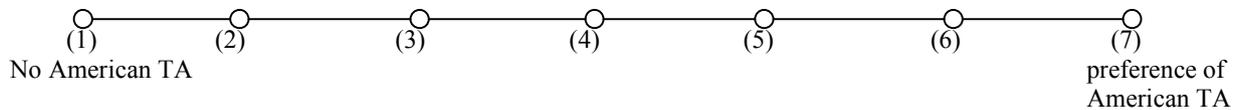
(A) Ask for help from the American TA
(B) Change/drop that section
(C) Seek tutoring help outside of class
(D) Learn the material on my own or with classmate(s)
(E) Other, please explain _____

VI. Comparison of attitudes towards Chinese TA and American TA

20. If you have the freedom to choose your own courses, please indicate how strongly you prefer to have a Chinese TA:
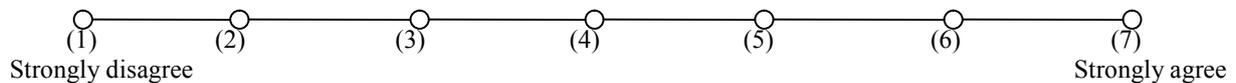
```
O————————O————————O————————O————————O————————O————————O
(1)        (2)        (3)        (4)        (5)        (6)        (7)
NO Chinese TA                                              Preference of
                                                          Chinese TA
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21. If you have the freedom to choose your own courses, please indicate how strongly you prefer to have an American TA:
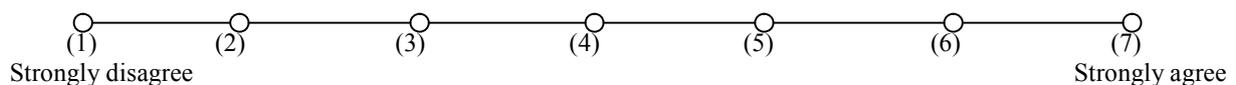
```
O————————O————————O————————O————————O————————O————————O
(1)        (2)        (3)        (4)        (5)        (6)        (7)
No American TA                                             preference of
                                                          American TA
```

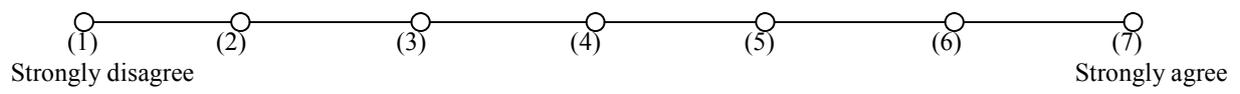22. Indicate how strongly you agree with the following statements.

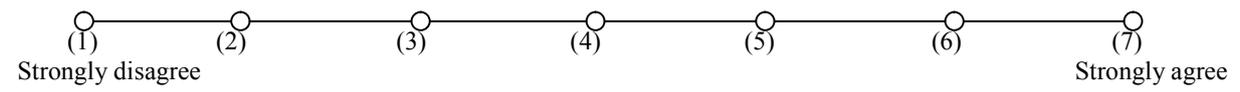a. Chinese TAs are more effective instructors than American TAs.

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O————————O————————O————————O————————O————————O————————O
(1)        (2)        (3)        (4)        (5)        (6)        (7)
Strongly disagree                                         Strongly agree
```

b. American TAs are more effective instructors than Chinese TAs.

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O————————O————————O————————O————————O————————O————————O
(1)        (2)        (3)        (4)        (5)        (6)        (7)
Strongly disagree                                         Strongly agree
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c. Chinese TAs speak good English.

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  O-------O-------O-------O-------O-------O-------O
 (1)     (2)     (3)     (4)     (5)     (6)     (7)
Strongly disagree                          Strongly agree
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d. I want to have native English speaker as instructors.

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  O-------O-------O-------O-------O-------O-------O
 (1)     (2)     (3)     (4)     (5)     (6)     (7)
Strongly disagree                          Strongly agree
```
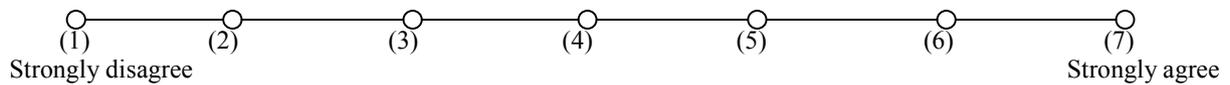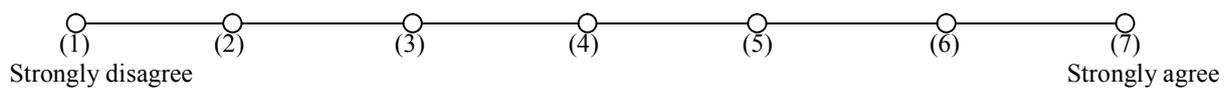
II. Multigroup Ethimc Identity Measure – Revised (Phnniey & Ong, 2007)

1. I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.
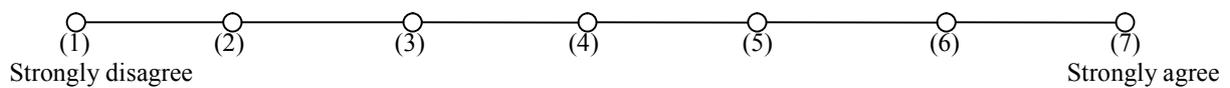
(2)   (2)   (3)   (4)   (5)   (6)   (7)
Strongly disagree   Strongly agree
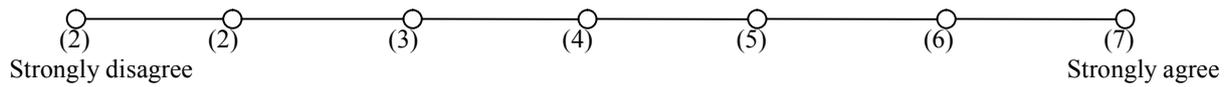
2. I have a strong sense of belonging to my own ethnic group.

(1)   (2)   (3)   (4)   (5)   (6)   (7)
Strongly disagree   Strongly agree

3. I understand pretty well what my ethnic group membership means to me.

(1)   (2)   (3)   (4)   (5)   (6)   (7)
Strongly disagree   Strongly agree

4. I have often done things that will help me understand my ethnic background better.

(1)   (2)   (3)   (4)   (5)   (6)   (7)
Strongly disagree   Strongly agree

5. I have often talked to other people in order to learn more about my ethnic group.

(1)   (2)   (3)   (4)   (5)   (6)   (7)
Strongly disagree   Strongly agree
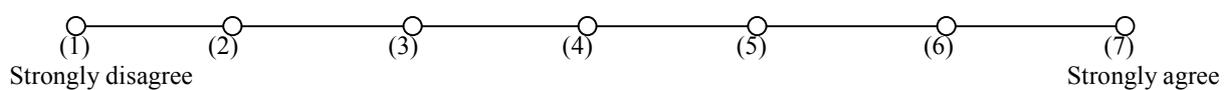
6. I feel a strong attachment towards my own ethnic group.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Strongly disagree						Strongly agree
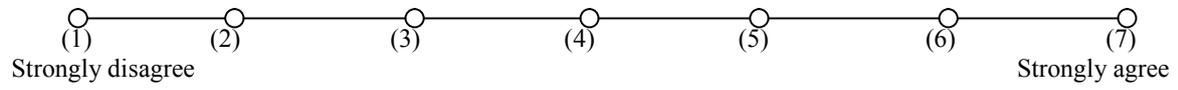
III. The Suinn-Lew Asian Self-Identity Acculturation Scale (Suinn et al., 1987)

1. What language can you speak?
1). Chinese only
2). Mostly Chinese, some English
3). Chinese and English about equally well (bilingual)
4). Mostly English, some Chinese
5.) Only English

2. What language do you prefer?
1). Chinese only
2). Mostly Chinese, some English
3). Chinese and English about equally well (bilingual)
4). Mostly English, some Chinese
5.) Only English

3. How do you identify yourself?
1). Chinese
2). Asian
3). Chinese-American
4). Asian-American
5). American

4. Which identification does (did) your mother use?
1). Chinese
2). Asian
3). Chinese-American
4). Asian-American
5). American

5. Which identification does (did) your father use?
1). Chinese
2). Asian
3). Chinese-American
4). Asian-American
5). American

6. What was the ethnic origin of the friends and peers you had, as a child up to age 6?
1). Almost exclusively Chinese
2). Mostly Chinese

3). About equally Chinese groups and American groups
4). Mostly Americans
5). Almost exclusively Americans

7. What was the ethnic origin of the friends and peers you had, as a child from 6 to 18?
1). Almost exclusively Chinese
2). Mostly Chinese
3). About equally Chinese groups and American groups
4). Mostly Americans
5). Almost exclusively Americans

8. Whom do you now associate with in the community?
1). Almost exclusively Chinese
2). Mostly Chinese
3). About equally Chinese groups and American groups
4). Mostly Americans
5). Almost exclusively Americans

9. If you could pick, whom would you prefer to associate with in the community?
1). Almost exclusively Chinese
2). Mostly Chinese
3). About equally Chinese groups and American groups
4). Mostly Americans
5). Almost exclusively Americans

10. What is your music preference?
1. Only Chinese music
2. Mostly Chinese
3. Equally Chinese and English
4. Mostly English
5. English only

11. What is your movie preference?
1). Chinese-language movies only
2). Chinese-language movies mostly
3). Equally Chinese/English English-language movies
4). Mostly English-language movies only
5). English-language movies only

12. What generation are you? (circle the generation that best applies to you:)

1) 1st Generation = I was born in China or country other than U.S.
2) 2nd Generation = I was born in U.S., either parent was born in China or country other than U.S.
3) 3rd Generation = I was born in U.S., both parents were born in U.S, and all grandparents born in China or country other than U.S.
4) 4th Generation = I was born in U.S., both parents were born in U.S, and at least one grandparent born in China or country other than U.S. and one grandparent born in U.S.
5) 5th Generation = I was born in U.S., both parents were born in U.S., and all grandparents also born in U.S.
6) Don't know what generation best fits since I lack some information.

13. Where were you raised?
1). In China only
2). Mostly in China, some in U.S.
3). Equally in China and U.S.
4). Mostly in U.S., some in China
5). In U.S. only

14. What contact have you had with China?
1). Raised one year or more in China
2). Lived for less than one year in China
3). Occasional visits to China
4). Occasional communications (letters, phone calls, etc.) with people in China
5). No exposure or communications with people in China

15. What is your food preference at home?
1). Exclusively Chinese food
2). Mostly Chinese food, some American
3). About equally Chinese and American
4). Mostly American food
5). Exclusively American food

16. What is your food preference in restaurants?
1). Exclusively Chinese food
2). Mostly Chinese food, some American
3). About equally Chinese and American
4). Mostly American food
5). Exclusively American food

17. Do you
1). Read only the Chinese language?

2). Read the Chinese language better than English?
3). Read both Chinese and English equally well?
4). Read English better than an Chinese language?
5). Read only English?

18. Do you
1). Write only an Asian language?
2). Write an Asian language better than English?
3). Write both Asian and English equally well?
4). Write English better than an Asian language?
5). Write only English?

19. If you consider yourself a member of the Chinese group, how much pride do you have in this group?
1). Extremely proud
2). Moderately proud
3). Little pride
4). No pride but do not feel negative toward group
5). No pride but do feel negative toward group

20. How would you rate yourself?
1). Very Chinese
2). Mostly Chinese
3). Bicultural
4). Mostly Westernized
5). Very Westernized

21. Do you participate in Chinese occasions, holidays, traditions, etc.?
1). Nearly all
2). Most of them
3). Some of them
4). A few of them
5). None at all