The Role of Cultural Identity in Language Learning for International Students

in the United States

By

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Abstract

As the number of international students in the United States increases, more and more

researchers show interest in discovering how international students adapt to the local society

and what factors influence this process. Cultural identity and language, as two important

factors in adaptation, can not be ignored. The purpose of this study was to examine the role of

cultural identity in language learning (including motivation for language learning, language

preference, and self-perceived language proficiency) for international students in the United

States, using a quantitative approach. The results showed that ethnic identification was

negatively related to self-perceived English proficiency, but that this relation was mediated

by extrinsic motivation in learning English. American identification was positively associated

with extrinsic motivation in English language learning, which was inconsistent with the

hypothesis. American identification was also positively associated with using English in daily

life. Further study should reexamine these results with potential applied implications for

creating programs which can facilitate the success and wellbeing of international students.

Keywords: international students, cultural identity, motivation, language learning

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The Role of Cultural Identity in Language Learning for International Students in the United States

Introduction

International students from different parts of the world come to the United States to seek a better education than they would receive in their home countries (Jung, Hecht & Wadsworth, 2007). During the past few decades, the number of international students enrolled in higher education in the United States has increased dramatically. According to the statistics provided by Open Doors Report, which is published by a non-profit educational and cultural exchange organization in the United States--Institute of International Education (IIE), there were about 407,000 international students in the United States in 1990 but increased steadily to nearly 723,000 students in 2010. Recently, during the academic year of 2017-2018, there were approximately 1,100,000 international students in the United States (Institute of international Education, 2018). The Open Doors report showed that nearly 70% of international students studying in the U.S. in 2017-2018 came from Asia, followed by Europe (9%), the Middle East (8%) and Latin American (7%). Because of the increasing numbers of students, understanding the experiences of international students becomes a critical topic which attracts more and more researchers. Although all college students need to adjust to new educational and social environments, this process may be more stressful and painful for international students who often experience a sense of alienation, lack of social

support, language barriers, culture shock and academic difficulties (Misra, Crist & Burant, 2003; Wang, Harrison, Cardullo & Lin, 2018).

Among all these challenges international students face, culture and English difficulty are considered as two of the most significant and prevalent problems for the majority of international students, which often relates to other challenges such as academic difficulties (Mori, 2000; Perry, 2016; Wang et al., 2018). For the culture, international students need to imitate the local behaviors and integrate new cultural values into the existing cultural value system which sometimes contradicts with the home culture. On one hand, they wish to maintain their heritage culture. On the other hand, instructors and peers often hope that students will adapt to American society as quickly as possible and achieve a high level of proficiency in English as their second language. So, how to make a balance between their own culture and American culture is a critical question for their adjustment in the short term. And in the long term, this will impact their self-esteem, academic achievement, and physical as well as psychological well-being (Schwartz, Zamboanga, Weisskirch & Wang, 2010).

For the language, although the majority of international students achieve the minimum score on the Test of English as a Foreign Language (TOEFL) required to study in the U.S., it does not guarantee sufficient English ability of the students to adapt to and succeed in U.S. higher education institutions (Mori,2000; Burdett & Crossman, 2012; Perry, 2016; Wang et al., 2018). Combined with social, cultural, racial and national differences from the students' home countries, native speakers' expressions are sometimes hard to understand without any misconceptions (Lee, 2014). Wang and his colleagues (2018) showed that lack of English

competency is related to feelings of discrimination, homesickness and anxiety for international students in U.S. academic settings. Many studies demonstrated that an unsuccessful adaptation for international students to the new society hampers their daily lives and academic development, which sometimes causes severe problems such as mental disorders (Mori, 2000; Sumer, Poyrazli & Grahame, 2008; Wang, 2006).

As discussed above, the role of language, as one of the key elements in adapting to the new society for international students, cannot be ignored. Many studies showed that a successful cross-cultural adaptation is highly associated with the individual's degree of identification with his or her host and home cultures (e.g., Berry, 2003; Cemalcilar&Falbo,2008). Interestingly, cultural identity plays an important role in language learning too. There is a complex relationship between cultural identity and language learning. Based on research on the relations between identity and language learning, some researchers have argued that "Language and identity should be seen as a single entity, which suffices to identify student membership in a given group" (Barnawi, 2009, p.66). However, limited research has investigated this topic and international students' adaptation to the U.S. academic setting. Understanding the experiences of international students is important since it can help institutions to provide more academic and personal support to promote students' well-being (Sumer et al., 2008). So this study aimed at examining the role of cultural identity in language learning among international students in the United States. To situate this study within the existing research literature, I first discussed the recent studies in language learning especially learning English as a second language (ESL). Then, cultural identity in

international students was introduced in more detail. Third, I provided a literature review of previous studies about interrelationships between cultural identity and language learning.

Then, some research gaps in the recent studies were discussed. In the last section, I designed a study to fill the research gaps and explore the role of cultural identity in language learning for international students, followed by results and discussion.

Literature Review

Language Learning

As I stated above, language is one of the most challenging and important parts of international students' lives. Inadequate language skill is likely to affect international students' academic performance and social relationships, which in turn, affect their adaptation to the new culture (Mori, 2000). For example, language proficiency is related to whether an international student can understand lectures, participate in group discussion and express their own opinions, and complete assignments and examinations on time (Mori, 2000). In addition, lack of English competency makes it hard for international students to make friends with American students and less likely to build strong social networks in the local society, which can exacerbate feelings of loneliness and homesickness (Andrade, 2006). Lots of studies have been done in language learning, especially learning English as a second language. Motivation and investment, as two of the most essential factors in language learning, will be discussed below.

Motivation in language learning. Language learning is a complex process, influenced by multiple factors both within individuals and surroundings. Among those factors, motivation has been recognized as one of the key factors for successful second language learning by researchers in psychology and education (Gardner, 1985; Gardner & Clement, 1990; Noels, Pelletier, Clément & Vallerand, 2000). Motivation is defined as a mental process which instigates and sustains goal-directed activity (Pintrich & Schunk, 1996; Dornyei, 1998). Motivation in language learning has been viewed as "the drive to learn a new

language associated with effort, desire to learn, and positive attitudes toward the language studied" (Ardasheva, Tong & Tretter, 2012, p.474).

During the past decades, motivation in second language (L2) learning has been the target of a great number of research studies (Dornyei, 1998). One of the most well-known theories in motivation is self-determination theory (SDT). This theory pointed out that an individual's action is self-determined and self-motivated (Deci & Ryan, 1985). According to self-determination theory, motivation is divided into two subtypes: intrinsic motivation and extrinsic motivation. Intrinsic motivation means that an individual is motivated to engage in an activity by the activity per se (Noels, Pelletier, Clément & Vallerand, 2003). In other words, the individual enjoys and feels satisfied in participating in that activity. However, extrinsic motivation is contrasted to intrinsic motivation. Individuals with extrinsic motivation aim at achieving instrumental goals, such as earning a reward or avoiding a punishment (Noels et al., 2003). Within the context of language learning, a learner might be internally motivated (e.g., learning English because he or she really enjoys it) or externally motivated (e.g., learning English to get a higher-paying job).

Gardner (1985) pointed out that although language aptitude has a considerable effect on predicting language learning achievement, motivation is at least as important as language aptitude. In the early formulation of motivation for learning a second language, Gardner and Lambert (1959, 1972) brought up two types of orientations: integrative orientation and instrumental orientation. People with integrative orientation want to learn L2 in order to connect with or identify with members from the L2 community (Noels et al., 2003). In other

words, people aim at integrating with the local people and community using language. On the contrary, people with instrumental orientation have a desire to achieve some practical goals using L2, such as more job opportunities or academic achievement.

In order to measure motivation in language learning, many researchers (e.g., Ardasheva et al., 2012; Noels et al., 2000) designed questionnaires which help to distinguish different kinds of motivation in language learning. For example, based on self-determination theory, Language Learning Orientations Scale—Intrinsic Motivation, Extrinsic Motivation, and Amotivation Subscales (LLOS-IEA) asked language learners whether they enjoy learning English per se (intrinsic motivation) or they want to find a good job later (extrinsic motivation) (Noels et al., 2000). It included three factors: amotivation, intrinsic motivation, and external motivation. *Amotivation* refers to individuals have no motivation (either intrinsic or extrinsic) for performing the activity. As mentioned above, *intrinsic motivation* means individuals enjoy learning English. Their behaviors are self-motivated. *External motivation*, individuals learn a language in order to achieve some instrumental goals instead of language per se (Noels et al., 2000; Ardasheva et al., 2012).

Motivation and L2 performance. Many studies found there is a strong relationship between motivation and language learning. For example, Ramage (1990) indicated that compared with discontinuing students, continuing students who persisted in learning an L2 were more intrinsically motivated. It meant that students with more intrinsic motivation were more likely to engage in and sustain language learning. Similarly, Noels (2001) and Wu

(2003) found more self-determined motivational orientations are associated significantly with higher L2 achievement.

Using meta-analysis, a study examined 75 independent samples involving 10,489 participants to investigate the relationship between second language achievement and five attitude/motivation variables from Gardner's socioeducaitonal model (Masgoret&Gardner, 2003). The results demonstrated that the correlations between achievement and motivation are higher than those between achievement and other factors, such as attitudes toward the learning situation. In the study of 329 learners of English at a Chinese university, Wang (2008) found that motivation explained 26% of the variance in student achievement. Similar to the results pointed out above, more intrinsic motivation positively correlated with the final L2 achievement, but extrinsic motivation correlated with the final L2 performance negatively (Wang, 2008). A study of 315 Korean college students found that motivational intensity and self-confidence mediated the impact of intrinsic motivation on L2 achievement (Pae, 2008).

Furthermore, motivation not only influences language learning achievement but also has an impact on language learning process which in turn, influences achievement. For example, Ardasheva et al. (2012) pointed out that "Noels (2001), for example, found that intrinsic motivation predicted motivational intensity, L2 persistence, and positive L2 attitudes." (p.476). What is more, both higher levels of intrinsic and extrinsic motivations were associated with greater strategy use (Vandergrift, 2005). In conclusion, the studies discussed above showed that motivation, especially intrinsic motivation, plays an essential role in language learning.

Investment and identity in language learning. Many studies demonstrate that motivation, especially intrinsic motivation, plays an essential role in language acquisition. However, Norton Peirce (1995) challenged the dominant role of motivation in the field of second language acquisition (SLA). From her perspective, most motivation studies viewed motivation to learn a language as a fixed trait of language learners and hypothesized that learners who failed to learn the target language did not have sufficient motivation or desire to learn that language (Norton & Toohey, 2011). However, a high level of motivation does not promise successful language learning. Norton argued that the construct of motivation is too simple and can not explain the complex process in language learning and its relationship with identity as well as power in the society. Although a learner is highly motivated, she could sometimes be positioned as an unmotivated language learner (Norton & McKinney,2011, p.76;Lee,2014). In other words, motivation fails to explain why some learners are more successful in some situations but unsuccessful in others.

SLA is a complex process, involving not only individuals' characteristics but also multiple environmental factors. According to Norton's research on five immigrant women in Canada, she found that conception of investment rather than motivation is more likely to explain the complex relationship of language learners to the target language and their sometimes ambivalent desire to learn and speak the language (Norton Peirce, 1995).

Compared to the unitary and fixed characteristic in motivation, investment viewed language learners have complex identities, which are organized and reorganized by individuals, which change across time and space, and which individuals struggle for (Norton Peirce, 1995;

Norton & Toohey, 2011). Individuals' investment in the target language is also an investment in their own social identity, which in return, they gain more symbolic and material resources from language learning and interacting with others using the target language (Norton & Toohey, 2011).

Morita's (2004) study of 6 female graduate students from Japan in a Canadian university is a good example to explain why investment is more appropriate than motivation to capture the complex process of language learning. This study used a qualitative approach with multiple case studies. In her study, a participant called Rie, had totally different performances in two graduate seminars in Canadian classrooms, although these courses were similar in content and class size. In course J, she participated in the class actively and meaningfully because she felt she was a valued member in that class and both classmates as well as the instructor appreciated her contribution to the class. But in another course, she sat in silence because she could not understand the course materials and class discussions. What was worse, doctoral students dominated the discussions and the instructor ignored voiceless learners, which exacerbated her marginality and tried to reposition herself. So in this situation, motivation can not explain why an individual sometimes has a high level of engagement in practicing her second language and sometimes not.

Investment and language learning for immigrants and international students.

Language learning should not be viewed as a neutral or simple process. On the contrary, second language (L2) learners experience a complex and even painful process of linguistic and cultural transformation (Pavlenko & Lantolf, 2000), especially for international students.

Learning L2 in order to adapt to the dominant group is different from learning L2 as a member of the dominant group. Norton (2001, 2011) applied "imagined community" to SLA theory and discussed whether second language learners such as international students or immigrants have the right to speak in that community. The concept of "imagined communities" pointed out that people can not only affiliate with the communities they directly contact with but also affiliate with people they have not yet met (Wenger, 1998; Norton & Toohey, 2011). When they learn a language, they may imagine who they might be and who will be in their imagined communities (Norton & Toohey, 2011). Native speakers, who have learned the language since earliest childhood, act as gatekeepers in front of the door of an imagined community where international students and immigrants try to gain access using the language (Norton, 2001; Cervatiuc, 2009). So language learning is a quite complex process and it is influenced by different factors such as the individual learner, the environment, and native speakers.

According to Norton (1997), non-native speakers are not surrounded by supportive native speakers (NS). Instead, they have limited opportunities to interact with native speakers and practice their English because there is actually an unequal power relationship between non-native speakers and NS. In Cervatiuc's (2009) study of adult immigrants as successful language learners in English, he found three strategies: generation of counter-discourse, gaining access to native speakers' social networks, and adhering to an imagined community of multilingual bi-cultural individuals. Immigrants resisted marginalization and generated counter-discourse, such as using thought-reframing techniques: acknowledgement of their

own progress and talents in language instead of comparing with native speakers, first to protect themselves from deficiency in L2. And then they struggled for chances to enter native speakers' world, which is not supplied by native speakers themselves, to practice English in authentic situations. Low proficiency in L2 often leads to less opportunity to gain access to local society, which in turn, damages their self-esteem in language learning. For the third strategy, Cervatiue (2009) pointed out that although the participants were able to achieve high proficiency in English, they did not identify themselves as full members in the "imagined community of NS". Instead, most participants defined themselves as "multilingual, bicultural individuals" who engaged in making a balance between their original culture and the host culture, and merging the original one and the host one into a hybrid identity. As mentioned above, language learning can be a painful and complex process for non-native speakers who are new to the United States, such as international students and immigrants.

In Peirce's (1995) study with five immigrant women in Canada, one of the participants, Eva, struggled for and reorganized her identities again and again from an immigrant to an "illegitimate" speaker of English and finally she viewed herself as a multicultural citizen with the power or the right to speak. Although she was marginalized by others in the beginning, her new identity as a multicultural citizen promoted her language learning and made her become the most successful language learner among 5 immigrants in the study. "...good learners exercise human agency to negotiate their entry into the social networks so they can practice and improve their competence in the target language." (Cervatiuc, 2009, p.256).

Similarly, based on Norton's (2010) investment in language learning, Lee (2004) conducted a longitudinal case study of an international graduate student called Mina. The study has shown how Mina, as a high motivated L2 learner, struggled to learn English as her second language in different contexts. And how her investment influenced her English, learning strategies and identity construction, which helped her become a successful L2 learner and legitimate member of American society finally. These examples indicate that there is a strong relationship between language learning and identity which is complex, changing and reorganized by the individual across time and space.

In conclusion, language learning is complex, involving multiple factors such as individual, power, society and so on. Investment, instead of motivation, is more appropriate to explain this process. Furthermore, identity which is dynamic and changing also plays a significant role. In the past decade, increasing researchers have shown a great interest in discovering the relationship between second-language and identity. Next, I will discuss cultural identity which is one of the most important identities in international students and what kind of role it plays in language learning.

Cultural Identity in International Students

Tajfel (1981) first defined social identity as the knowledge of oneself as a member of a group, one's feelings about group membership, and knowledge of the group's status compared to other groups. As one type of social identity, cultural identity has been viewed as a complex construct of people's awareness of their own cultures and a recognition of the group they belong to (Lee, 2002). It contains three parts: (1) building up an affiliation to a group and its characteristics, (2) the individual's feelings towards the group he or she belongs to, and (3) the individual's belief of the extent to which the group's characteristics are represented in one's self (Ngo & Li, 2016).

For international students in the United States, cultural identity is a feeling of belonging to their own ethnic group, the American group, or both, which influences international students' acculturation, language use, value systems, and other aspects of daily life. In Berry's model of acculturation (1997; 2003), there are four types of acculturation:

Assimilation, in which individuals have low level of home but high host cultural identity;

Integration, in which individuals have high level of host and original identification;

Separation, in which individuals wish to maintain their original culture and at the same time, reject the dominant culture; and *Marginalization*, in which individuals show little interest in or connection to either culture. Although the model of acculturation (Berry, 1997) was initially used to investigate how immigrants adapt to the local society, Smith and Khawaja (2011) found it is applicable to international students. And some studies (e.g., Amiot, Doucerain, Zhou & Ryder, 2018; Cemalcilar & Falbo, 2008; Poyrazli & Lopez, 2007) even

pointed out that international students can be viewed as a specific population of immigrants since they also confront many difficulties such as stress, adjustment, social participation, discrimination and experience identity processes during migrating.

Based on Berry's acculturation model, Ngo & Li (2016) demonstrated two different models in understanding interrelationships between immigrants' identities and adaptation to the local society. The first model, the unidimensional bipolar model, indicates that ethnic identity is contradictory to local identity (Tartakovsky, 2013). As time passes, the immigrant's original identity weakens and local identity increases (Ngo & Li, 2016). The study of 501 immigrants from Mainland China to Hong Kong by Ngo & Li (2016) found the evidence to verify the first model. The results showed that immigrants' cultural identity is significantly associated to their sociocultural adaption and life satisfaction in the local society. Immigrants with local identity were more likely to adapt to the new society and have higher life satisfaction. In contrast, immigrants who maintained Mainland Chinese (heritage) culture or values were more sensitive to stigmatization or discrimination, which in turn hampered their sociocultural adaptation and psychological well-being.

On the contrary, the two-dimensional model believes that two cultural identities can exist at the same time and they are independent of each other (Berry, 1997; Smith, Giannini, Helkama, Maczynski & Stumpf, 2005). In other words, like immigrants, international students can keep their original cultural identity and meanwhile develop their local identity to adapt to a new society, which make them have the ability to change comfortably between their two cultural identities depending on different time and situations. For example, Amiot et

al.(2017) mentioned that when a Russian international student speaks English with Canadian university students, he or she might identify as a Canadian. But in other contexts, such as when eating traditional Russian foods with her Russian friends, she is more likely to identify herself as a Russian. Cemalcilar and Falbo's (2008) study found that international students had stable identification with home cultures, but increased identification with the host culture over time.

There are many studies which show that it is more beneficial for both immigrants and international students to develop a bicultural identity. For example, Berry (2003) demonstrated that people who have a bicultural strategy experience the lowest acculturative stress and have a better adaptation to the host society. Fuller & Coll (2010) pointed out that immigrant children's and adolescents' ethnic identity often contributes to stronger engagement and better performance in school. Another study also showed that people who develop bicultural identity will outperform their monocultural counterparts in both schools and jobs because they have higher self-concept and self-esteem as well as better physical and psychological development (LaFromboise, Coleman & Gerton, 1993). Similarly, Tadmor and colleagues (2009) suggested that biculturalism promotes individuals' integrative complexity. In other words, bicultural identity has a great advantage. Affiliation with their ethnic group provides them with a secure base which can protect them from high risk environments and boost their self-esteem especially when they face stereotypes or discrimination. Meanwhile, local identity gives them a way to gain access to enter the local community, to communicate

and develop social networks with local people, to act in an appropriate way, and providing them more opportunities in the future.

In conclusion, no matter what kind of acculturation international students adopt, cultural identity plays an essential role in their daily life, influencing what they think and how they behave. The past few decades has seen increasing research interest in the relationship between cultural identity and language learning. In the next section, I provide a summary of the previous studies about the interrelationship between cultural identity and language learning.

Cultural Identity and Language Learning

Culture includes norms, values, beliefs, language, art, habits and skills learned by members from a specific group (Lee, 2002). Language, as one of the most important factors in a culture, is used widely within a cultural environment, plays an essential role in group's identity that is passed down from generation to generation, and serves as the main tool to maintain culture and distinguishes one culture from others (Fishman, 1977; Giles & Coupland, 1991; Lee, 2002). Many studies have discussed what kind of role cultural identity plays in language learning. There are multiple views or opinions in this new field. Some researchers found cultural identity has a positive impact in language learning. On the contrary, some researchers believed cultural identity can impede language learning. Others pointed out there is a reciprocal relationship between cultural identity and language learning, meaning that potential links are running in both directions (Trofimovich, 2015). Next, I provide further details of related literature on the relations of cultural identity to language learning in both heritage language, which has been defined as an immigrant, indigenous or ancestral language (Shin, 2010), and L2 learning.

Cultural identity can promote language learning. Many studies found that affiliation to a cultural group promotes heritage language learning. For example, Tse (2000) and Shin (2010) showed that immigrants' attitudes toward the heritage group and its language speakers are related to the individual's language ability and interest in maintaining his or her heritage language. In research with Korean immigrant students, Lee (2002) demonstrated that cultural identity is strongly related to heritage language. Stronger cultural identification with Korean

beliefs or values was associated with higher Korean-language proficiency. Similarly, one participant in Shin (2010) said that her identity as a "Colombian, a Latina" was related to her strong desire to learn Spanish and gain more knowledge in Spanish.

As with heritage language, cultural identity can also predict L2 language learning.

Gardner and Lambert (1972) stated that people with an integrative orientation, who learn a new language in order to connect with local society, were more likely to demonstrate higher motivation in learning an L2, which in turn, promoted their language performance. As discussed above, one of the purposes in individuals with integrative orientation is that they have a desire to identify with members from the L2 community. Schumann (1986) demonstrated that second-language (L2) learners who identify more closely with the L2 group as well as culture, are more likely to acculturate and attain higher proficiency level in their L2. Another study found similar results that stronger affiliation with American culture predicted weaker self-reported or other-perceived accents (Gluszek, Newheiser & Dovidio, 2011). Similarly, immigrants in France and Germany, who identified more strongly with the host country, increased their likelihood to use French or German in daily life and reported higher language proficiency (Ersanilli & Koopmans, 2010).

In other words, cultural identity not only promotes heritage language learning but also plays an accelerative role in second language learning. Affiliation to a cultural group helps language learners to improve their language proficiency, less accent and language usage frequency. However, some studies found a negative role of cultural identity on language learning.

Cultural identity can inhibit language learning. Although cultural identity can promote language learning (as discussed above), other studies have found negative relationships between identity and language performance. Zhang and his colleagues (2013) found heritage-culture cues will activate bicultural immigrants' network of knowledge related to heritage culture as well as language, which will in turn hinder their second-language (L2) processing in communicating. For example, as a Chinese immigrant in the United States, although speaking to a Chinese face triggers more social comfort, it actually reduces speakers' English fluency at the same time (Zhang, Morris, Cheng & Yap, 2013). Similarly, the participant called Mina in Lee's (2014) study pointed out that if an international student thinks that he or she is an alien, the individual cannot understand all the U.S. cultures, which will limit their English improvement. Sometimes, lower L2 performance might be associated with perceived threat or negative attitudes about one's social group (Trofimovich & Turuseva, 2015). For example, immigrants with strong cultural affiliation to an ethnic group are more likely to detect negative stereotypes or discrimination towards their heritage group, which increase the feeling of lack of belonging or even negative emotions towards the local society (Trofimovich et al., 2015). Therefore, it hampers their L2 performance.

Gluszek et al. (2011) also pointed out that the extent of identification predicted other- or self-perceived accent strength. Stronger accent in L2 speech could be contributed by weaker identification with the L2 group, stronger identification with the heritage one (Gluszek et al., 2011; Trofimovich & Turuseva, 2015). "...speakers seem to balance the costs of maintaining loyalty to their group with the rewards associated with native-like L2 ability" (Goldberg &

Noels, 2006; Trofimovich & Turuseva, 2015, p.241). Interestingly, stronger accent, in turn, is related to the feeling of lack of belonging because a L2 speaker with a stronger nonnative accent is more likely to face difficulties in communication. Gradually, a sense of isolation from the community reduces his or her sense of belonging in the United States (Trofimovich & Turuseva, 2015). This is strong evidence for bidirectional relationship.

Bidirectional relationship between cultural identity and language learning. Some scholars have argued that the relationship between cultural identity and language learning is bidirectional, with language performance both resulting from and contributing to cultural identity. A study of 291 Swedish-speaking youth in Finland (Henning-Lindblom & Liebkind, 2007) showed that higher level of proficiency in Finnish (L2) led to more interaction with local people, which in turn, increased identification with the target L2 group. For heritage language, Guardado (2010) pointed out that "...success in developing and maintaining a HL and the possession of a solid ethnic identity can be viewed in light of a dialectical relationship." (p. 331). For example, Cho (2000) found heritage language (HL) is one of the most prominent contributors to cultural identity construction and maintenance. Low proficiency in HL led to a sense of lack of belonging to the heritage community because of more intergenerational conflict in the family (Mu, 2015). Due to language barriers, it is hard for immigrant children to communicate with their family members, heritage peers as well as communities successfully. For example, a participant in Shin (2010) pointed out that because of a lack of a common language with her mother, she felt there was a distance in their relationship. A participant called Suzanne in the same study said that her lack of knowledge

of her heritage language prevented her from considering herself as Chinese. She said "If I had spoken Cantonese, I would have felt more Chinese". Furthermore, some participants in Shin (2010) reported that lack of heritage language learning was associated with multiple negative feelings such as loss, sadness, and bitterness. They felt "a part missing".

According to previous studies, cultural identity is strongly associated with language learning and in turn, language ability can also increase their belongingness to the specific group. After reviewing these articles, I found two main research gaps needed to be explored more. First, there have been numerous studies examining how immigrants' identity change and how immigrants adapt to the local society, but only a few studies has focused specifically on international students. Due to the increase in the number of international students, the need to investigate their adaptation is greater than ever. Second, the majority of studies in this area used qualitative method such as case study. Quantitative study can provide a new perspective on this area.

In order to address the research gaps discussed above, the present study aims at examining the extent to which cultural identity would be associated with ability, motivation, and preference in both heritage language and English among a sample of international students in the United States, using a quantitative approach. The study focused on the research question: Is there a relationship between cultural identity (both heritage and American identity) and language learning motivation, language preference, and language proficiency?

There were six hypotheses:

H1: International students will identify more strongly as a member of their own ethnic group than as American.

H2: International students will have a higher level of self-perceived ethnic language proficiency than English proficiency.

H3: Higher ethnic identification will be associated with lower intrinsic motivation in English learning (H3a), but higher extrinsic motivation in learning English (H3b), lower English proficiency (H3c) and using heritage language more in daily life (H3d).

H4: Higher American identification will be associated with higher intrinsic motivation in English learning (H4a), greater English proficiency (H4b), and using English more in daily life (H4c).

H5: Higher intrinsic and extrinsic motivation will be associated with higher English proficiency.

H6: Motivation in learning English will mediate the effect of cultural identity on English proficiency.

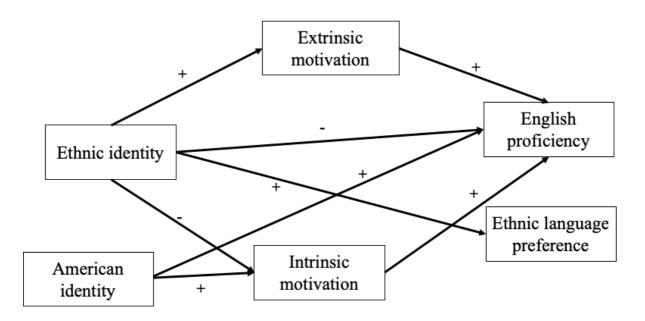


Figure 1. Hypothesized model of relations among selected variables (H3, H4a, H4b, H5, & H6)

Methods

Participants and procedure

Participants were recruited from multiple universities in the United States. Recruitment methods included a participant pool at a large Midwestern university, international student events at the same university, MTURK, and personal contacts (including social media). Only students with international student visas were asked to complete the questionnaire.

Depending on recruitment method, participants completed measures either on paper or through an online survey. Students recruited through the participant pool received course credit for their participation. Students recruited through MTURK were paid \$1.20 for their participation.

A total of 93 responses were collected. Two of them were omitted from the sample due to incomplete information and twenty were discarded because the participants missed two of three attention detecting questions such as "please click disagree here".

The final sample included 71 respondents. The number of undergraduate students was 35 (49.3%) and 32 (45.0%) were graduate students. Four students (5.7%) were students whom were studying English at their university in order to achieve the minimum level of English proficiency required to being formal study at the university; student level (undergraduate versus graduate) is unknown for these participants.

Of the 71 participants, 32 were males (45.1%) and 39 were females (54.9%). In all, 45 participants identified themselves as Asian (63.4%), 11 were white (15.5%), 7 were Latino or Hispanic (9.9%), 3 were Black (4.2%), and 5(7.0%) identified themselves as other. In terms of region of origin, 61.8% were from Asia (e.g. China, India, Korea), 10.2% were from

Africa, 9.8% were from the Middle East (e.g. Afghanistan, Pakistan), 9.8% were from Latin American, and 8.4% were from Europe. Their age ranged from 17 to 39 with the mean of 23.8 years (SD = 4.2).

The length of residence in the United States ranged from 5 months to 10 years (M=2.9 years, SD =2.2 years).

Materials

Participants were asked to complete a questionnaire measuring their cultural identity and language. The 66-item questionnaire included measures of ethnic identity, American identity, motivation in learning English, language use preference, self-rated language competency, as well as demographic items.

Ethnic identity. Ethnic identity was measured by Roberts's (1999) Revised Multigroup Ethnic Identity Measure (R-MEIM) which was adapted from Phinney's (1992) MEIM. It consists of 12 items assessing ethnic identity which is divided into two factors affirmation, belonging, and commitment (7 items) and exploration (5 items) (Roberts et al., 1999). The first factor affirmation, belong, and commitment include items such as "I am happy that I am a member of the group I belong to." The second factor exploration include items such as "To learn more about my ethnic background, I have often talked to other people about my ethnic group." A 5-point scale is used to answer these items, ranging from 1=strongly disagree to 5=strongly agree. The total score is derived by summing across items and obtaining the mean. Phinney (1992) originally used MEIM to measure ethnic identity of high school and

college students. Overall reliability of the Ethnic Identity Scale were higher than .80(Roberts et al., 1999). The results of factor analysis showed the questionnaire has high validity(Roberts et al., 1999). See Appendix for full measure.

American identity. American identity was measured by American Identity Measure (AIM) which was adapted from R-MEIM (Roberts et al., 1999) by Schwartz and his colleagues (2012). In the new questionnaire, they inserted "the United States" or "American" in place of "my ethnic group". Equally, it consists of 12 items assessing American identity which is divided into two factors affirmation (7 items) and exploration (5 items) (Schwartz et al., 2012). Sample item in the first factor *affirmation* include "I have a clear sense of the United States and what being American means for me." The second factor *exploration* include items such as "I have spent time trying to find out more about the United States, such as its history, traditions, and customs." Schwartz et al., (2012) showed AIM is reliable for university students. Cronbach's alphas were .93 for American identity affirmation/commitment and .74 for American identity exploration (Schwartz et al., 2012). See Appendix for full measure.

Motivation in language learning. Motivation was measured by six subscales (except for Amotivation) in Language Learning Orientations Scale—Intrinsic Motivation, Extrinsic Motivation, and Amotivation Subscales (LLOS-IEA) which was adapted from Noels et al.'s (2000). To make the second language more specific, I replaced "the second language" in the original scale with "English". The scale contains eighteen items which can be divided into two factors: intrinsic motivation and external motivation. *Intrinsic motivation*, behavior is

self-motivated. Individuals experience positive feelings in language learning. It included three subscales: Knowledge, Mastery, and Stimulation. For example, "Because I enjoy the feeling of acquiring knowledge about English-speaking community and their way of life." or "For the "high" I feel when hearing English spoken." *External regulation*, individuals are motivated by some instrumental goals such as reward or punishment, not language per se. It included three subscales: External, Introjected, and Identified regulation. For example, "Because I have the impression that it is expected of me." A 7-point response scale is used to answer these questions, ranging from 1=strongly disagree to 7=strongly agree. The questionnaire is both reliable and valid. Noel et al. (2000) showed that the overall Cronbach's alpha coefficient ranged from .67 to .88. See Appendix for full measure.

Language use preference. Language use preference was measured by two subscales adapted from Marin, Otero-Sabogal & Perez-Stable's (1987) Short Acculturation Scale for Hispanics (SASH). The Short Acculturation Scale has been validated for immigrants from different ethnic groups (e.g. Choi & Reed, 2011; Gupta & Yick, 2000). The results showed the scale is high reliable and valid for different ethnic groups. The Cronbach's alpha coefficient for original scale was .92 overall. The coefficient for two subscales I used in this study was .90 and .86 separately. Two subscales contain 8 items which include two factors: language preference (5 items) and Language preferred for media (3 items). Language preference includes for example, "In general, what language(s) do you read and speak?". Language preferred for media includes for example, "In what language(s) are the TV programs you usually watch?". A five-point response scale ranged from 1=Only native

language to 5=Only English, such that higher scores indicate greater preference for English over the participant's native language. See Appendix for full measure.

Language proficiency. Proficiency was measured by 9 self-reported items adapted by Gee, Walsemann & Takeuchi's (2010) separate items in measuring English and heritage language proficiency. Four items ask "How well do you [understand/speak/read/write] English?" Answers ranged from 1=far below average to 5=far above average. The fifth question asks students to report "your ACT (English) or SAT(writing and language test) or GRE(verbal)". The remaining questions ask "How well do you [understand/speak/read/write] your native language?" Many studies have found that self-reported achievement was highly correlated with actual achievement (Anaya, 1999; Cassady, 2001; Cole & Gonyea, 2010; Mu, 2015). Because sometimes the direct testing of language proficiency is difficult, self-reporting is a commonly used approach (Phinney, Irma, Monica & Dan, 2001; Mu, 2015). See Appendix for full measure.

Data Analyses

First, I calculated means for each measure or subscale. In order to test the first and second hypotheses, paired-sample t tests were used to compare the differences between ethnic identity and American identity and between English competency and native language competency. Hypotheses 3, 4 and 5 were tested in multiple regression analyses. Patterns of correlations were also examined (Table 2). Multicollinearity was examined using VIF with

the cutoff of 2.5 and all the VIFs were below 2, so it had little effect on the results.

Hypothesis 6 was tested through bootstrapping method to do mediation analysis.

Results

Comparison between Online and Paper Survey

In the final 71 copies of data, 26 were hard-copies and 45 copies were submitted online. In order to ensure there was no difference between paper and online survey, independent t test was used to test whether there was any difference between the means in each variable from online and paper survey. The results (Table 1) showed that there was no statistically significant difference between the means.

Independent samples Test

		t-test f	t-test for Equality of Means		
			Sig. (2-	Mean	
		t	tailed)	Difference	
Ethnic Identity	Equal variances assumed	.32	.75	.052	
	Equal variances not assumed	.30	.76	.052	
American Identity	Equal variances assumed	1.72	.09	.33	
	Equal variances not assumed	1.70	.096	.33	
Extrinsic Motivation	Equal variances assumed	-1.47	.15	33	
	Equal variances not assumed	-1.50	.14	33	
Intrinsic Motivation	Equal variances assumed	38	.70	12	
	Equal variances not assumed	40	.69	12	
Language Preference	Equal variances assumed	-1.81	.075	31	
	Equal variances not assumed	-1.85	.069	31	
English Proficiency	Equal variances assumed	-1.21	.23	23	
	Equal variances not assumed	-1.20	.24	23	
	Equal variances assumed	-1.74	.087	28	

Native Language	Equal variances not	-1.99	.051	28
Proficiency	assumed			

Table 1. Independent sample t test between the means from online and paper survey

Ethnic and American Cultural Identification

I predicted that international students would identify more strongly with their own ethnic group than with the American identity. The results of a paired-sample t test showed there was a statistically significant difference between international students' ethnic identity and American identity, t(70)=6.48, p<.001. As expected, international students scored higher on ethnic identity than American identity, M=4.03 and 3.33, respectively. The effect size was large, Cohen's d=.76. Descriptive data (Table 2) were shown below.

Ethnic and English Language Proficiency

I predicted that international students would have higher proficiency in their self-perceived ethnic language than in their English language(H2). The results of a paired-sample t test showed self-rated native language proficiency(M=4.56, SD=.68) was significantly higher than English proficiency (M=3.79, SD=.78), t(70)=7.87, p<.001. The effect size was large, Cohen's d=.93.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Ethnic Identity	71	2.17	5.00	4.03	.65
American Identity	71	1.17	4.92	3.33	.79
Extrinsic Motivation	71	2.22	7.00	5.26	.93
Intrinsic Motivation	71	1.00	7.00	4.80	1.28
Language Preference	71	1.25	3.88	2.47	.71
English Proficiency	71	2.00	5.00	3.79	.78
Native Language	71	2.00	5.00	4.56	.68
Proficiency					
Length of Residence	71	.5	10.0	2.88	2.16
Valid N(listwise)					

Table 2. Descriptive data among all variables

Correlations Among Variables

The correlation results (Table 3) showed that the relationship between ethnic identity and intrinsic motivation, r(71)=.34, p<.01, and ethnic identity and extrinsic motivation, r(71)=.31, p<.01, were both significant and positive. Similarly, the correlations between American identity and extrinsic motivation, r(71)=.47, p<.001, and American identity and language preference, r(71)=.41, p<.01, were significant and positive. And the correlations between extrinsic motivation and language preference, r(71)=.41, p<.01, and extrinsic motivation and English proficiency were also significant and positive, r(71)=.31, p<.05, but there was not a statistically significant relationship between intrinsic motivation and English proficiency. For length of residence, since it did not have statistically significant correlation with other variables, it was omitted for the final data analyses.

1					
.20	1				
.31**	.47**	1			
.34**	.22	.35**	1		
087	.41**	.31**	079	1	
13	.18	.29*	.14	.42**	1
	.31** .34** 087	.31** .47** .34** .22087 .41**	.31** .47** 1 .34** .22 .35**087 .41** .31**	.31** .47** 1 .34** .22 .35** 1087 .41** .31**079	.31** .47** 1 .34** .22 .35** 1087 .41** .31**079 1

Correlations ((Continued)
Corrections	Contitution

	1	2	3	4	5	6	7	8
7.Native Language Proficiency	078	.11	.35**	-0.57	.09	.36**	1	
8. Length of Residence	005	.14	20	14	.18	002	.23	1

Table 3. Correlations among the variables

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

Cultural Identity and Language Learning Motivation

I predicted that ethnic identity would be negatively associated with intrinsic motivation but positively associated with extrinsic motivation (H3a&b) and American identity would be positively associated with intrinsic motivation but there would be no relationship between American identity and extrinsic motivation (H4a). First, to examine the relationship between cultural identity and extrinsic motivation in learning English, extrinsic motivation was regressed on ethnic identity and American identity. The overall multiple regression was statistically significant ($R^2 = .27$, F[2,68] = 12.39, p < .001), and two explanatory variables

(ethnic identity and American identity) accounted for 27% of the variance in extrinsic motivation. Both ethnic identity and American identity had statistically significant effects on extrinsic motivation. The unstandardized regression coefficient (*b*) for ethnic identity was .32 (t [68] = 2.11, p < .05, β = .22). And the unstandardized regression coefficient (*b*) for American identity was .50 (t [68] = 3.99, p < .001, β = .43).

Second, intrinsic motivation was regressed on ethnic identity and American identity. The overall multiple regression was statistically significant (R^2 = .14, F[2,68]= 5.41, p <.01), and two explanatory variables (ethnic identity and American identity) accounted for 14% of the variance in intrinsic motivation. Only ethnic identity had statistically significant effect on intrinsic motivation. The unstandardized regression coefficient (b) for ethnic identity was .60 (t [68] = 2.63, p <.05, β = .30). And the unstandardized regression coefficient (b) for American identity was .26 (t [68] = 1.40, p >.05, β = .16).

Cultural Identity, Motivation, and English Proficiency

I predicted that ethnic identity would be negatively associated with self-perceived English proficiency (H3c), but American identity, intrinsic motivation, and extrinsic motivation would be associated with English proficiency positively (H4b&H5). To investigate the relationship between motivation, identity and English proficiency, self-rated English proficiency were regressed on ethnic, American identity and two types of motivation: intrinsic and extrinsic, using simultaneous regression. The overall multiple regression was statistically significant ($R^2 = .15$, F[4,66] = 2.99, p = .03 < .05), and four explanatory variables

(ethnic identity, American identity, intrinsic motivation, and extrinsic motivation) accounted for 15% of the variance in English proficiency. In the four independent variables, both ethnic identity and extrinsic motivation had statistically significant effects on English proficiency but American identity and intrinsic motivation were not. The unstandardized regression coefficient (*b*) for ethnic identity was -.34 (t [66] = -2.26, p <.05, β = -.28). In contrast, the unstandardized regression coefficient (*b*) for extrinsic motivation was .26 (t [66] =2.23, p < .05, β = .30). However, the unstandardized regression coefficients (*b*) for American identity was .071 (t [66] =.56, p >.05, β = .07), for intrinsic motivation was .07 (t [66] =.87, p >.05, β = .11), meaning that both American identity and intrinsic motivation had no statistically significant effect on English proficiency.

Cultural Identity and Language Preference

I predicted that stronger ethnic identity would be associated with using heritage language more (H3d) and stronger American identity would be associated with using English more in daily life (H4c). In order to investigate the relationship between identity and language preference, language preference was regressed on ethnic identity and American identity, using simultaneous regression. Multicollinearity was examined with the cutoff of 2.5 and found to have little effect on the results. The overall multiple regression was statistically significant ($R^2 = .19$, F[2,68] = 8.16, p < .01), and two explanatory variables (ethnic identity and American identity) accounted for 19% of the variance in language preference. American

identity had a statistically significant relation with language preference but ethnic identity did not (see Table 4).

Coefficients

		Unstandardized		Standardized		
		Co	efficients	Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	1.94	.54		3.58	.001
	Ethnic Identity	19	.12	18	-1.58	.12
	American Identity	.40	.10	.44	3.96	.000

a. Dependent Variable: LanPreALL

Table 4. Regression between cultural identity and language preference

Motivation Mediation Effect

I predicted that motivation would mediate the relationship between cultural identity and language learning. In order to test hypothesis 6 to examine whether motivation in learning English mediated the effect of cultural identity on English learning, bootstrapping method was used to do mediation analysis. I used bootstrapping instead of other approaches such as Sobel test(Sobel, 1982) since many studies confirmed that bootstrapping is the most powerful and reasonable method to detect mediation effect (e.g., Briggs, 2006; Preacher & Hayes, 2008; Williams & Mackinnon, 2008), without inflation of Type I error. In the present study, the 95% confidence interval of the indirect effects was obtained with 5000 bootstrap resamples (Preacher & Hayes, 2008). First, I tested whether two types of motivation mediated the effect of ethnic identity on English learning. The results showed that there was a statistically significant indirect effect of ethnic identity on English proficiency through

extrinsic motivation (ab=.13, BCa CI =[.024, .30]), but there was no significant indirect effect of ethnic identity on English proficiency through intrinsic motivation(ab=.046, BCa CI =[-.049, .18]). Figure 2 below displays the results.

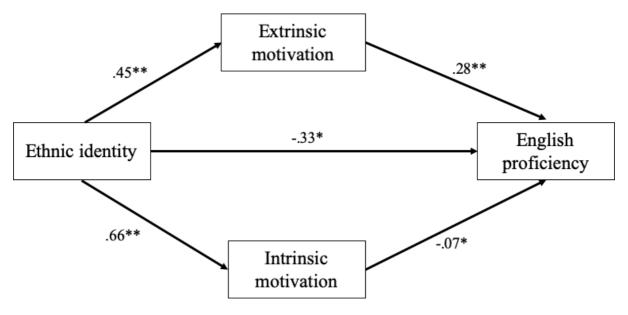


Figure 2. Indirect effect of Ethnic identity on English proficiency through two types of motivations.

Note: *
$$p < .05$$
, ** $p < .01$, *** $p < .001$

Second, I tested whether two types of motivation mediated the effect of American identity on English learning. There was no significant indirect effect of American identity on English proficiency through extrinsic motivation (ab=.12, BCa CI =[-.008, .28]), and intrinsic motivation(ab=.009, BCa CI =[-.053, .081]). Figure 3 below displays the results.

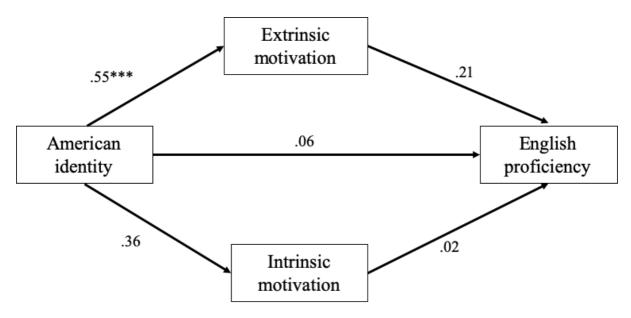


Figure 3. Indirect effect of American identity on English proficiency through two types of motivations.

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

In summary, the results displayed below (Figure 4):

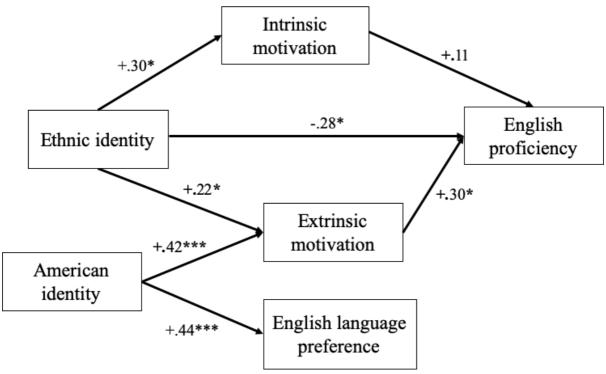


Figure 4. Effects of cultural identity on motivation, language proficiency and language preference (betas from several regression models)

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

Discussion

The present study examined the relationship between cultural identity, motivation, and language learning among international students in the United States. The results showed that international students had a stronger attachment to their own ethnic group instead of the host society. Furthermore, several participants indicated that some questions (e.g. I am happy that I am an American) in the American Identity Measure did not apply to them since they could not identify themselves as an American. The participants believed they had a stronger competence in their native language, compared to English.

This study also found results consistent with the previous literature (e.g. Trofimovich et al., 2015; Zhang et al., 2013) that there was a negative relationship between ethnic identity and second language proficiency. In other words, international students with stronger ethnic identity reported that they had a lower level of English proficiency. However, the results found there was no effect of American identity on English proficiency, which was contrasted to previous literature that the host cultural identification can promote the second language learning (e.g. Ersanilli & Koopmans, 2010).

Unlike previous studies, extrinsic motivation explained L2 achievement positively. It meant that international students who had a stronger extrinsic motivation in learning L2 had a higher competency in English. Intrinsic motivation was unrelated to English proficiency in general, contrary to previous studies that found intrinsic motivation promoted the second language learning (Wang, 2008).

The present study further examined the role of cultural identity in two types of motivation in learning English. The results suggested that both ethnic identity and American

identity explained extrinsic motivation, but intrinsic motivation was explained by ethnic identity only. I found that international students with stronger ethnic identity and stronger American identity had higher extrinsic motivation in learning English as their second language, which partly confirmed my hypothesis. However, international students with stronger ethnic identity had higher intrinsic motivation in learning English, which was contrasted to previous hypothesis. And no relation was found between American identity and intrinsic motivation.

Further, I found that American identity explained language preference in daily life. In other words, international students who had stronger American identity were more likely to use English instead of their native language. For example, they would like to think more in English, and watch more TV programs in English. However, there was no relation between ethnic identity and language preference.

Another interesting finding of the present study was that extrinsic motivation mediated the effect of ethnic identity on English proficiency. As mentioned above, ethnic identity was negatively related to English proficiency, but extrinsic motivation could buffer this effect and then promote English learning. But there was no mediation effect of both intrinsic and extrinsic motivation between American identity and English proficiency.

In relation to the six hypotheses I mentioned in the beginning of the study, my findings are concluded in six main points (also see Figure 4):

C1: International students identified themselves as a member of their own ethnic group more strongly than as American.

C2: International students had a higher level of self-perceived ethnic language proficiency than English proficiency.

C3: Higher ethnic identification was associated with higher intrinsic and extrinsic motivation in learning English, but lower English proficiency.

C4: Higher American identification was associated with higher extrinsic motivation in English learning and using English more in daily life.

C5: Higher extrinsic motivation was associated with higher English proficiency.

C6: Extrinsic motivation in learning English mediated the effect of ethnic identity on English proficiency.

This study also involved several limitations. First, the sample size was relatively small, only 71 participants, so the statistical power was limited. The results needs to be re-examined with a larger sample. Second, approximately 60% participants were from Asia. So the results may not be generalized to all the international students in the United States since people from different regions of the world or from other types of educational institutions may lead to different results. Third, this study used self-reported language proficiency instead of actual language examination, so there might be a difference between self-reported achievement and actual achievement although previous studies showed they were highly correlated (e.g., Anaya, 1999; Cassady, 2001).

In conclusion, this study provided a new perspective in the relationship between cultural identity and language learning among international students, using a quantitative method. It found cultural identity has relations with motivation in learning a second language, language

preference, and language proficiency significantly. Strong ethnic identity may inhibit English proficiency, but extrinsic motivation in learning English can buffer this effect and facilitate better English achievement. International students with strong American identity are more likely to use English in their daily life. Furthermore, this study had a significant implication to universities for how to facilitate international students' learning experiences in the United States. For example, universities can provide many support services, such as English classes or activities, or programs, such as global partner or home-visit, to boost international students' motivation in learning English and getting to know more about American cultures which can facilitate them to identify themselves as part of American in the future.

There are three suggestions for the future study. First, as mentioned above, identity is dynamic and changing across time and space, so longitudinal design is needed to further explore the processes of identity change. Second, in order to examine whether there is any difference between immigrants' student and international students, more comparison studies are needed. Third, in my study, intrinsic motivation and extrinsic motivation were correlated positively, future studies should explore whether they interact with each other and how that interaction might impact English proficiency. In summary, further research should replicate these findings since understanding international students' experiences has important implications for creating programs that help international students to adapt to the host society more quickly and facilitate the success as well as wellbeing of millions of international students now around the world and in the future.

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Appendix

Questionnaire 1: The Revised Multigroup Ethnic Identity Measure (R-MEIM) (5-point Likert scale ranged from 1=Strongly disagree to 5=Strongly agree)

- 1. I have spent time trying to find out more about my own ethnic group, such as its history, traditions, and customs.
- 2. I am active in organizations or social groups that include mostly members of my own ethnic group.
- 3. I have a clear sense of my ethnic background and what it means for me.
- 4. I think a lot about how my life will be affected by my ethnic group membership.
- 5. I am happy that I am a member of the group I belong to.
- 6. I have a strong sense of belonging to my own ethnic group.
- 7. I understand pretty well that my ethnic group membership means to me, in terms of how to relate to my own group and other groups.
- 8. To learn more about my ethnic background, I have often talked to other people about my ethnic group.
- 9. I have a lot of pride in my ethnic group and its accomplishments.
- 10. I participate in cultural practices of my own group, such as special food, music, or customs.
- 11. I feel a strong attachment towards my own ethnic groups.
- 12. I feel good about my cultural or ethnic background.

Questionnaire 2: American Identity Measure (AIM) (5-point Likert scale ranged from 1=Strongly disagree to 5=Strongly agree)

- 1. I have spent time trying to find out more about the United States, such as its history, traditions, and customs.
- 2. I am active in organizations or social groups that include mostly Americans.
- 3. I have a clear sense of the United States and what being American means for me.
- 4. I think a lot about how my life will be affected by being American.
- 5. I am happy that I am an American.
- 6. I have a strong sense of belonging to the United States.
- 7. I understand pretty well what being American means to me.
- 8. In order to learn more about being American, I have often talked to other people about the United States.
- 9. I have a lot of pride in the United States.
- 10. I participate in cultural practices of the United States, such as special food, music, or customs.
- 11. I feel a strong attachment towards the United States.
- 12. I feel good about being American.

Questionnaire 3: Part of English Learning Orientations Scale—Intrinsic motivation, Extrinsic motivation, and Amotivation Subscales (LLOS-IEA) (7-point Likert scale ranged from 1=Strongly disagree to 7=Strongly agree)

- 1. Because I have the impression that it is expected of me.
- 2. In order to get a more prestigious job later on.
- 3. In order to have a better salary later on.
- 4. To show myself that I am a good citizen because I can speak English.
- 5. Because I would feel ashamed if I couldn't speak to my friends from English-speaking community in their native tongue.
- 6. Because I would feel guilty if I didn't know English.
- 7. Because I choose to be the kind of person who can speak more than one language.
- 8. Because I think it is good for my personal development.
- 9. Because I choose to be the kind of person who can speak English.
- 10. For the pleasure that I experience in knowing more about the literature of English-speaking group.
- 11. For the satisfied feeling I get in finding out new things.
- 12. Because I enjoy the feeling of acquiring knowledge about English-speaking community and their way of life.
- 13. For the pleasure I experience when surpassing myself in English studies.
- 14. For the enjoyment I experience when I grasp a difficult construct in English.
- 15. For the satisfaction I feel when I am in the process of accomplishing difficult exercises in English.
- 16. For the "high" I feel when hearing English spoken.
- 17. For the "high" feeling that I experience while speaking in English.
- 18. For the pleasure I get from hearing English spoken by native English speakers.

Questionnaire 4: Language use preference (Short acculturation scale for Hispanic: Marin)—subscales

- 1. Only native language
- 2. More native language than English
- 3. Both equally
- 4. More English than native language
- 5. Only English

Language preference

- 1. In what language do you think?
- 2. In general, what language(s) do you read and speak?
- 3. What was the language(s) you used as a child?
- 4. What language(s) do you usually speak at home now (with parents)?

5. What language(s)do you usually speak with your friends?

Language preferred for media

- 6. In what language(s) are the TV programs you usually watch?
- 7. In what language(s) are the radio programs you usually listen to?
- 8. In general, in what languages are the movies, TV, and radio programs you prefer to watch and listen to?

Questionnaire 5: Language proficiency (self-reported) range from 1=far below average to 5=far above average)

- 1. How well do you speak English?
- 2. How well do you understand when you hear people speak in English?
- 3. How well do you write English?
- 4. How well do you read English?
- 5. Could you report your ACT (English) or SAT(writing and language test) or GRE(verbal)

6. How well do you speak native language?

- 7. How well do you understand when you hear people speak in your native language?
- 8. How well do you write native language?
- 9. How well do you read native language?