

Functions of the Common Ingroup Identity Model and Acculturation Strategies in Intercultural Communication: American Host Nationals' Communication with Chinese International Students

By

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Abstract

Identities of social groups have been considered as the fundamental factors which influence communication practices (e.g., Harwood, Giles, & Palomares, 2005). Guided by the Intergroup Contact Hypothesis (Allport, 1954; Brown & Hewstone, 2005), the Common Ingroup Identity Model (CIIM; Gaertner, Rust, Dovidio, Bachman, & Anastasio, 1994), and the acculturation framework (Berry, 1980), this experimental study examined American host nationals' perceptions of Chinese international students' cultural adaptation strategies and the effects of the strategies on American host nationals' willingness to communicate with the Chinese students. In addition, the current study also examined the indirect effects of the adaptation strategies through American host nationals' perceptions of anxiety in communicating with and social attractiveness of the Chinese students on willingness to communicate with the Chinese students.

Four scenarios describing Chinese international students' cultural adaptation strategies (i.e., assimilation, integration, separation, and marginalization) were developed based on CIIM and the acculturation framework. Prior to the main study, two pilot studies ($N = 113$ in pilot 1, $N = 60$ in pilot 2) were conducted to examine the validity of the manipulation of the four strategies along two conceptual dimensions: identification with home culture (i.e., Chinese culture) and identification with the host culture (i.e., American culture). In the main study, European American participants ($N = 284$) were asked to report their demographic information, strength of identification with American culture, and attitudes toward Chinese people in general. Then, they were randomly assigned to one of the four experimental conditions in which they read a scenario describing a Chinese international student's cultural adaptation strategy. After reading the scenario, participants answered questions measuring their perceptions of the cultural adaptation

strategy used by the Chinese international student described in the scenario. Then, they reported their perceptions of willingness to communicate with, social attractiveness of, and interpersonal communication anxiety with the Chinese student.

Hypothesis 1 predicted that participants' perceptions of willingness to communicate with the Chinese international student would vary with the experimental conditions. Partially supporting Hypothesis 1, univariate analysis of variance results revealed that participants were more willing to communicate with the assimilated and integrated Chinese students than with the separated and marginalized students. Hypothesis 2 predicted that participants' judgments of the Chinese international student would vary depending on the experimental conditions. Partially supporting Hypothesis 2, multivariate analysis of variance results revealed that the assimilated and integrated Chinese students were judged more positively than the separated or marginalized Chinese student. Guided by the prior literature on intervening variables in intergroup contact research (Pettigrew & Tropp, 2008; Stephan & Stephan, 1985; Voci & Hewstone, 2003), Hypothesis 3 further predicted the indirect effects of the experimental conditions on American host nationals' willingness to communicate through two mediator variables (i.e., interpersonal communication anxiety and social attractiveness). Results of nonparametric bootstrapping procedures revealed that intercultural adaptation strategies had indirect effects on willingness to communicate through both interpersonal communication anxiety and social attractiveness.

Results of this study provide several theoretical and practical implications for the growing body of intergroup contact research in an intercultural context. By incorporating the acculturation framework, for example, findings from the current study provided empirical support for a critical role played by a common ingroup identity in an intercultural context. In addition, this study challenged the taken-for-granted intervening function of anxiety in

intergroup contact literature and demonstrated an imperative role of a positive intervening variable. Moreover, on a practical note, findings from this study provide insightful suggestions for the communities and education institutions in the host culture to develop effective intercultural communication training programs and strategies to cope with intercultural communication anxiety and uncertainty. Results are discussed in light of prior literature and theories of intergroup, intercultural, and interpersonal communication.

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CHAPTER ONE

INTRODUCTION

Communication is no longer restricted by cultural and geographic boundaries as advancements in communication technology and transportation have contributed to growing opportunities for intercultural encounters and diversity in the world (Abrams & Hogg, 2004). In a diverse society, improvement of intergroup relations has significant implications in a variety of contexts ranging from, but not limited to, quality of life to international relations, all leading to the betterment of human experience. Traditionally, intergroup scholars have sought solutions for improved intergroup relations in individuals' contact experiences with people from different social groups (Allport, 1954; Brown & Hewstone, 2005). In his original work, Allport (1954) examined racial conflict in the United States and concluded that positive interpersonal contact experiences are essential to cooperative interethnic and interracial relations. Specifically, Allport (1954) suggested that positive interpersonal contact experiences between individuals from different social groups, when the four optimal conditions (i.e., equal status, cooperative interdependence, common goal, and normative appropriate context) are met, have a positive influence on the group level outcomes such as one's attitudes toward members of different social groups (see also Brown & Hewstone, 2005).

Guided by Allport's (1954) Contact Hypothesis, intergroup research has gone beyond the basic idea that direct contact influences intergroup outcomes (e.g., intergroup attitudes) and has begun to investigate how contact conditions (e.g., quality and quantity of contact) indirectly influence intergroup outcomes through the individual level intervening factors, such as perceptions of communication (e.g., self disclosure, contact counterpart's accommodation, and perceived communication anxiety) and relational outcomes (e.g., relational solidarity) in various

contexts (Harwood, Hewstone, Paolini, & Voci, 2005; Imamura, Zhang, & Harwood, 2011; Nier, Gaertner, Dovidio, Banker, Ward, & Rust, 2001; see also Brown & Hewstone, 2005). The interpersonal and intergroup consequences of the positive contact experiences that individuals have with members of different social groups can be theoretically explained by the Common Ingroup Identity Model (CIIM; Gaertner, Rust, Dovidio, Bachman, & Anastasio, 1994). Developed from the theories of social identity, such as Social Identity Theory (SIT; Tajfel & Turner, 1979) and Self-Categorization Theory (SCT; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), CIIM provides a parsimonious explanation of the Intergroup Contact Hypothesis. Specifically, CIIM explains how a shift in an individual's perception of a contact counterpart from an outgroup (e.g., belonging to a different racial group) to a more inclusive ingroup (e.g., sharing a group identity) cultivates a positive interpersonal relationship (Gaertner et al., 1994). In short, research guided by CIIM has demonstrated that contact conditions which emphasize an inclusive ingroup identity shared with a contact counterpart can improve one's perception of the contact counterpart and consequently one's attitudes toward the contact counterpart's social group (Gaertner & Dovidio, 2000; Gaertner et al., 1994; Nier et al., 2001).

A considerable amount of prior CIIM research has been conducted in interethnic/interracial, interreligious, and intergenerational contexts within the same cultural group (Harwood et al., 2005; Islam & Hewstone, 1993; Voci & Hewstone, 2003; cf. Greenland & Brown, 1999). Expanding the theoretical scope of CIIM into an intercultural context, a growing number of scholars (Brown, 2000; Gaertner & Dovidio, 2000; van Oudenhoven, Ward, & Masgoret, 2006) have suggested advantages of simultaneously examining CIIM along with the acculturation framework (Berry, 1980). Brown (2000) argued that prior CIIM research has predominantly utilized a context specific categorization (e.g., university affiliation) as a way to

promote an inclusive common ingroup identity and that CIIM alone has not yet been able to identify a contact condition capable of promoting an inclusive common ingroup identity across situations. Brown (2000) considered the status differences between the host nationals (i.e., majority status) and immigrants and sojourners (i.e., minority status) discussed in the acculturation literature as benefits for the advancement of CIIM. In fact, majority-minority status is a useful categorization in CIIM. Every individual is a part of the majority group in one's own culture, yet is a part of a minority status group in another culture (Hornsey, 2008). Therefore, integration of CIIM and the acculturation framework provides optimal contact conditions applicable to situations where status differences are observed between contact counterparts.

In the contexts of intercultural encounters, the culture of host nationals is considered as mainstream, and thus it adheres to the majority status. The culture that immigrants and sojourners bring into the host nation is, as a consequence, of minority status. According to the acculturation framework, the degree to which immigrants and sojourners identify with the host and home cultures indicate which cultural adaptation strategy is used. Specifically, sojourners and immigrants who identify strongly with the host culture are considered to be assimilated, while those who identify strongly with the home culture are considered to be separated. Sojourners and immigrants who identify strongly with both host and home cultures are considered to be integrated. Finally, those who identify weakly with both host and home culture are considered to be marginalized.

From the CIIM perspective, immigrants and sojourners who are successfully assimilated or integrated into their host culture achieve a common ingroup identity shared with host nationals (Brown, 2000). The positive function of a common ingroup identity based on the perceived strength of identification with the majority and minority status groups is relevant in any cross-

cultural context. In short, by incorporating the acculturation framework in CIIM, stable and widely applicable contact conditions which uphold inclusive categorizations of contact counterparts can be explored. Thus, the major goal of the current study is to extend the theoretical scope of CIIM by incorporating cultural identification into the model to better understand intercultural encounters between Chinese international students and American host nationals.

Examination of theories of intergroup contact in an intercultural context is particularly important in the United States. The United States has long been considered as a multicultural environment (van Oudenhoven et al., 2006). Higher education institutions in the U.S. are often where cultural diversity is observed. In the academic year of 2009/10, over 690,000 international students were enrolled in higher education institutions in the U.S. (Institute of International Education, 2010). Among all, Asians are the fastest growing population and currently the third largest minority group in the U.S. (Suinn, 2010; Zhang, 2010). In addition, an increasing number of sojourners from East Asian countries come to the U.S. each year. For example, China alone has sent over 127,600 international students to higher education institutions in the U.S. in the academic year of 2009/10, showing a 29.9% increase from the previous academic year (Institute of International Education, 2010). In addition, from the economic standpoint, China is currently the second largest trading partner of the U.S. (Morrison, 2010). Given these facts, encounters with Chinese international students and sojourners are almost inevitable for American host nationals on many US campuses and beyond. Hence, this study focuses on American-Chinese intercultural contact.

These international students studying in the U.S. have an ambassadorial mission. Extended intercultural contact with American host nationals could decrease misperceptions about

different cultural groups and increase cultural understanding (Shupe, 2007; see also Brown & Hewstone, 2005 for the Intergroup Contact Hypothesis). Each encounter with an international student provides American host nationals with an opportunity to interact with culturally different individuals, which consequently leads to establishment of interpersonal relationships beyond cultural boundaries. Consistent with the prior intergroup contact literature, interpersonal relationships developed based on intercultural communication experiences are promising factors leading to enhanced intergroup attitudes (Imamura et al., 2011). However, what leads to the first step (i.e., willingness to communicate) in establishing meaningful interpersonal relationships and improved intergroup relations remains unexamined. Hence, guided by the Intergroup Contact Hypothesis and prior literature on intervening factors (Imamura et al., 2011; Islam & Hewstone, 1993; Pettigrew & Tropp, 2008; Stephan & Stephan, 1985; Voci & Hewstone, 2003), the overarching goal of the current study is to investigate American host nationals' perceptions of willingness to communicate with Chinese international students by exploring mediating roles of American host nationals' perceptions of interpersonal communication anxiety with and social attractiveness of the Chinese students.

The exploration of the factors which lead to the motivation to engage in communication with international students from the American host nationals' perspective has several practical and theoretical implications. First, on a practical note, it takes more incentives for host nationals to engage in communication with international students than vice versa. In particular, Lu and Hsu (2008) argued that research on willingness to communicate in an American-Chinese context is scarce despite the growing need to understand ways to facilitate interpersonal and intergroup relations between these two cultural groups. Second, host nationals' communicative engagement plays a critical role in international students' cultural adaptation. Essentially, communication is

central to learning a new language, getting accustomed to communication practices, and developing relationships. Third, on a theoretical note, inclusion of both negative (i.e., interpersonal communication anxiety) and positive (i.e., social attractiveness) intervening factors contributes to the literature and theoretical development by examining the mechanisms underlying the effects of contact on the outcome variable. Finally, exploring the majority status group's behavioral responses (i.e., willingness to communicate) to international students with different cultural adaptation strategies contributes to the advancement of the CIIM literature.

In reality, many international students report that they are unable to establish as many interpersonal relationships (e.g., friends) with American host nationals as they had hoped (Gareis, 1995). From the host nationals' perspective, limited intercultural communication experience hinders their understanding of cultural differences and empathic attitudes toward international students (Brislin, 1994). Providing explanations for these phenomena, Dunne's (2009) study indicated that host nationals are generally in less need of intercultural communication opportunities or interpersonal relationships with international students than vice versa. Specifically, Dunne's (2009) qualitative study exploring host nationals' perspectives of intercultural contact in an Irish context revealed that host nationals reported that their experiences of intercultural contact were less rewarding than contact with their cultural peers. In addition, intercultural communication may be experienced as requiring more effort and creating more anxiety compared to intracultural communication (Gudykunst & Kim, 2003).

The scarcity of interpersonal relationships and communication experiences is particularly prevalent in the American-East Asian context (Nesdale & Mak, 2003), for communication between Americans and East Asians is especially challenging due to the prominent cultural and linguistic barriers in American and East Asian cultures (Hall, 1976; Hofstede, 2001; Lu & Hsu,

2008). For example, Nesdale and Mak's (2003) study focusing on immigrants in Australia demonstrated that immigrants from Asian cultures (e.g., Hong Kong and Vietnam) were more likely to stay within their own ethnic and cultural community than immigrants from a Western culture such as New Zealand, suggesting limited communication experiences with host nationals for immigrants from Asian cultures.

East Asian international students, in comparison to international students from the Western cultures, more often experience distress due to the differences in the Western and East Asian values and customs. As a result, they tend to experience maladjustment in Western cultures (Nesdale & Mak, 2003; Shim & Schwartz, 2007; Yeh & Inose, 2003). Distress and maladjustment in a new environment are often observed in the forms of separation from the host culture or marginalization from both host and home cultures. They can lead to problematic behavioral consequences, such as smoking and alcohol use, psychological health problems, such as depression and anxiety, and sociocultural adaptation problems, such as social isolation in the new environment (Suinn, 2010; see also Sumer, Poyrazli, & Grahame, 2008; Wang & Mallinckrodt, 2006; Yeh & Inose, 2003). By comparison, those who have successfully adapted to the host culture (i.e., assimilation and integration) obtain positive experiences in the new environment (Hendrickson, Rosen, & Aune, 2010).

Successful, positive, and pleasant experiences in the new environment can be best achieved through communication with host nationals (Zhang & Goodson, 2011). In short, communication is central to smooth transitions between cultures. For example, Zhang and Goodson's (2011) study examining Chinese international students' cultural adaptation in the U.S. found that Chinese students who had more frequent and in-depth communication with American host nationals showed low levels of depression compared to those with less frequent and in-depth

communication experiences. Similarly, Lacina (2002) pointed out that American host nationals' impatience when communicating with international students (e.g., unsupportive communicative behaviors and unwillingness to communicate) hinders international students' quality of life in American culture.

Prior literature focusing on the central function of communication in cultural adaptation suggests that successful adaptation is not the outcome of the sole effort of international students, but rather it requires a joint effort between international students and host nationals (Lacina, 2002; Yeh & Inose, 2003; Zhang & Goodson, 2011). Likewise, van Oudenhoven, Prins, and Buunk (1998) argued that the majority status group's (i.e., host nationals') perspective is equally important to that of sojourners in the cultural adaptation processes. Hence, on practical grounds, exploring the effects of Chinese international students' cultural adaptation strategies on American host nationals' willingness to communicate with the Chinese students is beneficial for both international students from China and other countries.

Contributing to theory, this study examines the mechanisms through which the contact conditions (i.e., adaptation strategies) lead to greater willingness to communicate. One's willingness to engage in communication in general is driven by multiple factors, such as anticipation of negative consequences in communicating with contact counterparts (i.e., anxiety) or liking of the contact counterparts (i.e., attractiveness). Conventionally, the intergroup contact literature has paid exclusive attention to the functions of negative intervening factors, such as communication anxiety, in mediating the relationship between contact and its outcome (Islam & Hewstone, 1993; Stephan & Stephan, 1985; Voci & Hewstone, 2003). In recent years, scholars have argued for inclusion of positive intervening factors as well (Pettigrew & Tropp, 2008; see

also Imamura et al., 2011). By including both negative and positive intervening factors, this study contributes to the advancement of intergroup contact theories.

Finally, prior research has demonstrated different patterns of the effects of contact for the members of majority and minority status groups (Tropp & Pettigrew, 2005b). Yet, little is known regarding the majority status group members' communicative, psychological, and cognitive responses to individuals who vary in their identification with their home and host cultures. That is to say, previous studies mainly focused on the ascribed identity (i.e., one's perception of the other's group membership) in laboratory experiments (e.g., Eller & Abrams, 2004; Nier et al., 2001) with minimum attention paid to the effect that the avowed identity (i.e., group membership others claim for themselves) has on interpersonal or intergroup outcomes. In this regard, examination of the majority status group's responses to their contact counterparts with different levels of identification with the home and host cultures advances research on CIIM.

Furthermore, in order to prevent confounding effects associated with participants' racial/ethnic group membership and status in American society, this study focuses exclusively on the European American racial/ethnic group as the majority status group's perspective. The European American population is considered to be the majority status group in American culture because of its size (i.e., 68% of the population is of European origins) and advantaged position in the social hierarchy (van Oudenhoven et al., 2006). Because of their status, other racial groups, such as African, Latino, and Asian American populations, may have different perceptions of and identification with American culture. Specifically, members of minority status groups are more aware of their ethnic and linguistic differences from the majority status group (Gudykunst & Kim, 2003), and they tend to acknowledge their group's disadvantaged status and lower position in society (Operario & Fiske, 2003).

In summary, as outlined in this introductory chapter, the primary goal of this study is to make theoretical contributions to the growing body of literature on CIIM and the acculturation framework. Specifically, this experimental study examines the effects of the Chinese student's adaptation strategies on American host nationals' willingness to communicate with them, as well as the extent to which those effects are mediated by the Americans' interpersonal communication anxiety with and their perceptions of the social attractiveness of the Chinese student. The second chapter reviews the theories of intergroup (i.e., the Intergroup Contact Hypothesis and CIIM) and intercultural (i.e., the acculturation framework) communication research as well as the relevant literature on interpersonal outcomes of contact (i.e., willingness to communicate, social attractiveness, and interpersonal communication anxiety). The third chapter describes the methodology employed in this study followed by the fourth chapter presenting the results. Finally, the fifth chapter discusses the findings of this study in light with intercultural communication from intergroup and interpersonal perspectives.

CHAPTER TWO

LITERATURE REVIEW

Investigation of one's motivation to communicate has received limited scholarly attention. However, its influence on the development and maintenance of interpersonal relationships is considerably large in any contexts. Experiences of positive interpersonal relationships, such as friendships developed in intercultural contexts, are meaningful not only for personal well being but also for intergroup relations (Christian & Lapinski, 2003; Pettigrew & Tropp, 2006). However, both host nationals and immigrants and sojourners tend to experience few interpersonal relationships beyond the cultural divide (Brislin, 1994; Dunne, 2009; Gareis, 1995). In a broad picture, the current study seeks solutions for lack of intercultural relationships developed between host nationals and immigrants and sojourners in one's motivation to engage in interactions with culturally different others. Specifically, willingness to communicate is a necessary step toward building an interpersonal relationship.

From the intergroup perspective, communication is influenced by social identities of cultural, ethnic, racial, religious, and age groups (Harwood, Giles, & Palomares, 2005). In this sense, cultural identification of immigrants and sojourners with their host culture reflects the amount and quality of communication immigrants and sojourners have with host nationals. In intercultural contexts, conjunction of CIIM and the acculturation framework, thus, provides a parsimonious explanation for the relationship between willingness to communicate and the contact conditions marked by different degrees of identification with the host and home cultures. These different degrees of cultural identification in turn conceptualize the four primary cultural adaptation strategies as specified by Berry's (1980) acculturation framework. Furthermore, one's willingness to communicate is also influenced by other psychological factors, such as anxiety in

communicating with and perceived interpersonal attraction of the contact counterparts (Gudykunst, 1988; Pettigrew & Tropp, 2008). Hence, the current study examines the effects of four cultural adaptation strategies on American host nationals' willingness to communicate with Chinese international students and its association through American host nationals' perceptions of their communication anxiety with and social attractiveness of the Chinese students.

In this chapter, the review of literature focuses on the major guiding theories of the current study (i.e., Intergroup Contact Hypothesis, CIIM, acculturation framework, and Anxiety/Uncertainty Management Theory) and relevant prior intergroup contact and acculturation research. First, the Intergroup Contact Hypothesis (Brown & Hewstone, 2005) is introduced in line with the importance to investigate willingness to communicate in the American-Chinese intercultural context. Second, the three major variables in the current study, willingness to communicate, interpersonal communication, and social attractiveness are discussed. Third, this chapter reviews prior CIIM and acculturation research followed by the discussion of the benefits of integrating CIIM and the acculturation framework. Finally, three hypotheses are posed.

Interpersonal Consequences of Intergroup Contact in Intercultural Contexts

Intergroup contact researchers (Allport, 1954; Brown & Hewstone, 2005; Gaertner & Dovidio, 2000) have long explored the factors that influence intergroup attitudes with hopes to cultivate cooperative and supportive environments where intergroup discord and negative biases are minimized. One promising way to enhance intergroup relations is to improve attitudes individuals have toward other social groups. Developed from Allport's (1954) Contact Hypothesis, the Intergroup Contact Hypothesis (Brown & Hewstone, 2005; Hewstone & Brown, 1986) postulates that ignorance, unfamiliarity, categorization, and competition promote

stereotypes and negative perceptions of outgroups, whereas mutual knowledge and cooperation should reduce intergroup biases (see also Brewer & Miller, 1996; Zanna & Rempel, 1988).

Prior intergroup research guided by the Intergroup Contact Hypothesis has revealed the relationship between individuals' positive contact experiences with members of a different social group and intergroup attitudes toward that group (e.g., Islam & Hewstone, 1993; Voci & Hewstone, 2003). In essence, the more positive information individuals obtain about another social group through their positive contact experiences, the more positive intergroup attitudes can be expected. Regardless of the context (e.g., intergenerational, intercultural, and interethnic), this association between quality of contact and intergroup attitudes has been empirically supported by numerous studies (Pettigrew & Tropp, 2006). For example, Islam and Hewstone's (1993) study examining the effects of contact quantity and quality in the context of Hindus and Muslim encounter in Bangladesh found that quality of contact (e.g., voluntary, cooperative, and equal status) was a positive predictor of intergroup attitudes. Supporting Islam and Hewstone's (1993) study, Wolsko, Park, Judd, and Bachelor's (2003) experimental study in an interracial context found that the cooperative contact condition (e.g., quality of contact) led to Caucasians' positive evaluations of Latinos. Furthermore, in an intercultural context, Voci and Hewstone's (2003) study examining contact between Italians and immigrants from Africa found that favorability toward outgroup was affected by quality of contact (e.g., voluntary, cooperative, and equal status).

Specifying the type of interpersonal relationship that contributes to the improved quality of contact, a study examining attitudes toward Muslims after the 9.11 attacks indicated that American high school students who had Muslim friends were more positive about Muslims as a group than those who had no contact with Muslim individuals (Christian & Lapinski, 2003).

Similarly, Eller and Abrams' (2004) two longitudinal studies in Anglo-French and American-Mexican contexts demonstrated the importance of friendship for reduced intergroup anxiety and increased affective ties with outgroup members. Moreover, a recent study found that the interpersonal solidarity Japanese sojourners had with their most frequent American contact had positive associations with their attitudes toward Americans (Imamura et al., 2011). Findings from these studies emphasizing the central role of contact quality demonstrate the importance of interpersonal relationship quality in improved intergroup attitudes.

Contact quality (e.g., friendship) has traditionally received scholarly interests because it has a function to break down group boundaries, allowing individuals to perceive their contact counterparts as a part of their own social network (Brislin, 1986; see also Geartner & Dovidio, 2000). The conceptualization and operationalization of contact quality, however, vary across studies. On the one hand, contact quality has been conceptualized in accord with Allport's optimal contact conditions (e.g., Islam & Hewstone, 1993; Voci & Hewstone, 2003). That being said, the majority of contact research has repeatedly applied status equality, cooperation, and intimacy as indicators of contact quality without much consideration for the characteristics of intercultural contact situations. In intercultural contexts, Allport's optimal conditions are almost unrealistic to meet due to the inevitable power dynamic between two cultural groups (i.e., the majority and minority status groups).

On the other hand, previous studies have considered friendship as a promising indicator of increased quality of contact (e.g., Christian & Lapinski, 2003; Eller & Abrams, 2004). However, scholars have pointed out the scarcity of intercultural friendships experienced from both sojourners' and host nationals' perspectives (Brislin, 1994; Gareis, 1995; Kudo & Shimkin, 2003). That is to say, little research has identified the contact conditions which actually enhance

the quality of an interpersonal relationship and contribute to intergroup attitudes in an intercultural context. Hence, scholarly attention should be paid to more specific communicative elements that lead to enhanced interpersonal relationships (Schofield, Hausmann, Ye, & Woods, 2010; West, Pearson, Dovidio, Shelton, & Trail, 2009).

Communication is a fundamental need of human beings because it has a function to provide us pleasure, affection, inclusion, and relaxation (Barbato, Graham, & Perse, 1997). Specifically, interpersonal relationship development and maintenance are the outcomes of communicative processes across cultures (Duck, 1988; Kim, 2002; Sias et al., 2008). For example, Sias et al.'s (2008) qualitative study exploring intercultural friendship formation demonstrated the central role communication plays in hindering and enabling intercultural friendship development from the American host nationals' perspective. In addition, a study examining Japanese sojourners' contact with American host nationals found that positive communication experiences were positively associated with relational solidarity (Imamura et al., 2011). Findings from these studies have revealed that communication is an essential tool to obtain information about others, and thus it is a vital component of interpersonal relationship development.

In a stranger-to-stranger context, willingness to communicate with an unfamiliar outgroup member offers the potential for development of a meaningful interpersonal relationship, which could result in improved attitudes toward that outgroup in general. Given the facts that every relationship begins with motivation to communicate (Duck, 1988; Sias et al., 2008) and that host nationals are less motivated to communicate with international students than with their cultural peers (Dunne, 2009), this study considers willingness to communicate as a vital outcome variable of contact in intercultural contexts. In particular, examination of the cultural adaptation

strategies that are more or less likely to motivate American host nationals to engage in communication with an international student provides theoretical and practical contributions to the growing body of intergroup contact literature in an intercultural context.

An effective way to examine cultural adaptation strategies which improve or hinder interpersonal communication consequences is to consider the strategies as contact conditions as delineated in the Common Ingroup Identity Model (CIIM; Gaertner & Dovidio, 2000; Gaertner et al., 1994). In intercultural contexts, contact conditions specified by CIIM adhere to the characteristics of cultural adaptation strategies identified by the acculturation framework (Brown, 2000). In essence, both CIIM's contact conditions and cultural adaptation strategies take one's group membership in the majority and/or minority status groups into account. Specifically, cultural identification is the theoretically unifying force between CIIM and the acculturation framework. Hence, the current study considers that CIIM's contact conditions are manifested in the cultural adaptation strategies in intercultural encounters.

Among the research guided by CIIM (e.g., Gaertner et al., 1994; Hornsey & Hogg, 2000), the majority has explored group level consequences (e.g., intergroup attitudes) of various contact conditions (i.e., one group, two sub-groups in one group, two groups, and separate individuals), even though the categorization of contact counterparts has more immediate impact at an interpersonal level than at an intergroup level (e.g., Crisp, Walsh, & Hewstone, 2006; Nier et al., 2001). The importance of interpersonal consequences is generally overridden by the group level outcomes (c.f., Nier et al., 2001). In addition, limited amount of acculturation research has examined behavioral consequences of cultural adaptation strategies. Therefore, the overarching goals of this study are to investigate the CIIM's contact conditions which positively associate with willingness to communicate, to explore the mechanisms of the contact-outcome link, and to

examine the intersection of CIIM and the acculturation framework in an American-Chinese contact context.

Willingness to Communicate

By definition, willingness to communicate is the probability that an individual will choose to communicate, specifically to talk, when free to do so (McCroskey, 1992). In intercultural contexts, willingness to communicate, which is often defined as a personality tendency to communicate with others in various contexts rather than one's willingness to communicate with a specific person (Barracough, Christopiell, & McCroskey, 1988; Kassing, 1997; Lu & Hsu, 2008), has been examined primarily in the field of second language acquisition from the minority status groups' accounts (MacIntyre, Baker, Clement, & Conrod, 2001). From the intergroup communication perspective, what determines one's willingness to communicate goes beyond an overall personality tendency. Intergroup encounters are where social identities of ethnic, cultural, religious, and age groups influence interpersonal communication behaviors (Harwood et al., 2005). Specifically, willingness to communicate is a behavioral manifestation of perceived identity shared between interlocutors. As a consequence, individuals are typically more motivated to communicate with their cultural peers than with culturally different others (Kassing, 1977; Nesdale & Mak, 2003) because a perceived common ingroup identity encourages greater willingness to communicate compared to situations where contact counterparts are perceived to be a part of a different cultural group.

Prior intergroup research most closely related to willingness to communicate has examined the group level behavioral consequence of intergroup contact experiences (Gaertner & Dovidio, 2000). In general, studies have found that individuals are more motivated to communicate with and accept their contact counterparts' cultural peers when their contact

counterparts are perceived in a positive light (Gaertner & Dovidio, 2000). That being said, limited amount of intergroup contact research has examined an individual level of communicative behavioral consequences of contact. Likewise, prior acculturation literature also provides scarce empirical support for the association between cultural adaptation strategies and willingness to communicate. Likewise, limited amount of acculturation research has examined a communicative behavioral consequence of adaptation strategies. Hence, this study examines American host nationals' willingness to communicate with Chinese international students using different adaptation strategies in the U.S. In particular, a Chinese international student's cultural adaptation strategy would influence the degree to which American host nationals are willingness to interact with the Chinese individual.

With the endeavor to explore the processes through which the schematic information about a contact counterpart (e.g., perceived common ingroup identity) transcends to a behavioral outcome (i.e., willingness to communicate), prior research have investigated multiple intervening factors. In general, contact conditions activate certain affective responses (i.e., anxiety and liking) toward the contact counterparts, which consequently predict willingness to communicate with the counterparts (Greenland & Brown, 1999; Lin & Rancer, 2003; Weiss & Houser, 2007). Traditionally, intergroup research has paid exclusive attention to a negative intervening factor, such as anxiety (Greenland & Brown, 1999; Islam & Hewstone, 1993; Stephan & Stephan, 1985; cf. Pettigrew & Tropp, 2008). Research findings and theoretical delineations of communication anxiety (i.e., Anxiety/Uncertainty Management Theory; Gudykunst 1988) provide a solid foundation to pursue the examination of the mediating role played by interpersonal communication anxiety in the context of this study.

Communication anxiety is one of the major obstacles of motivation to communicate, communication effectiveness, interpersonal relationship development, and intergroup relations (Gudykunst, 1988; Levin, van Laar, & Sidanius, 2003; Stephan & Stephan, 1985). Anxiety is an affective response to the anticipation of negative consequences, and it is related to the feelings of uneasiness, tension, and worry (Stephan & Stephan, 1985; Stephan, Stephan, & Gudykunst, 1999). Higher degrees of communication anxiety are typically experienced in intergroup encounters than in intragroup encounters for various reasons (Gudykunst & Shapiro, 1996). Moreover, higher degrees of communication anxiety consequently lead to decreased willingness to communicate.

How individuals perceive and categorize their contact counterparts influence the level of anxiety experienced in encounters. Anxiety/Uncertainty Management Theory (AUM; Gudykunst, 1988, 1993) explains that categorization of strangers based on social identity influences one's ability to manage anxiety (see also Stephan et al., 1999). Gudykunst and Shapiro's (1996) study found that American participants in an *intra*racial group setting reported less anxiety in communicating with their counterpart than those who were in an *inter*racial group setting. In addition, prior intergroup contact research focusing on the functions of contact conditions (i.e., interpersonal vs. intergroup condition) revealed that participants who perceived their contact counterpart to be an individual rather than a member of an outgroup reported less anxiety compared to participants who perceived their contact counterpart to be a member of an outgroup in the contexts of Japanese-British contact (Greenland & Brown, 1999) and Muslim-Hindu contact (Islam & Hewstone, 1993). Greenland and Brown's (1999) and Islam and Hewstone's (1993) studies suggest that increased communication anxiety is expected when individuals identify their contact counterparts to be a part of a different social group.

Moreover, intercultural communication contexts as a subset of intergroup communication is often where high degrees of anxiety are experienced due to unfamiliarity with the conversation partner's culture, communication style, and language (Dunne, 2009). Dunne (2009) found that host nationals, despite their advantaged status, have strong and persistent feelings of anxiety when interacting with people from different cultural backgrounds. Consistently, Gudykunst and Shapiro (1996) found that American participants in an intracultural context experienced less communication anxiety than those who in an intercultural context.

In the American-Chinese contact context in particular, the fundamental differences in communication practices in East Asian (i.e., Chinese) and the Western (i.e., American) cultures create even higher degrees of anxiety and barriers in communication than other intercultural contexts in which individuals share similar value and communication systems (Kim, 2002). For example, the individualism-collectivism cultural framework (Hofstede, 2001) and high- and low-context communication modes (Hall, 1976) describe and explain differences in communication explicitness in East Asian (i.e., Chinese) and the Western (i.e., American) cultures. Individualistic cultural tendency is tied to more explicit and direct forms of communication, whereas collectivistic cultural tendency is tied to more implicit and indirect forms of communication (Gudykunst & Kim, 2003). The differences in communication practices between American and Chinese cultures result in a greater potential for misunderstanding and anticipation of negative consequences. Hence, communication in the American-Chinese context may trigger greater anxiety than other cross-cultural contexts.

Anxiety as a mediator of contact and its outcome has received consistent empirical support in intergroup contact research (Stephan, Dias-Loving, & Duran, 2000; Voci & Hewstone, 2003). For example, Stephan et al.'s (2000) path analysis showed that both amount and quality of

intergroup contact between Americans and Mexicans were significant negative predictors of intergroup anxiety, which also positively predicted the Americans' negative attitude toward Mexicans. In addition, Voci and Hewstone (2003) also found that intergroup anxiety mediated the relationship between contact and intergroup attitudes in the Italian-African immigrants contact context. Findings from these two studies demonstrated that positive contact experiences with an outgroup member influence the levels of anxiety individuals feel when communicating with members of that group, which consequently predicts intergroup attitudes. However, less is known regarding the intervening function of interpersonal communication anxiety in the relationship between contact and its communicative outcome.

Providing a theoretical explanation for the association between anxiety and willingness to communicate, AUM states that high degrees of anxiety often lead to communication avoidance (Gudykunst, 1993; Stephan et al., 1999). Therefore, communication anxiety is considered to be a critical predictor of willingness to communicate. In fact, Lin and Rancer's study (2003) examining the relationship between American college students' intercultural communication apprehension and willingness to communicate found that communication apprehension was a significant negative predictor of willingness to communicate. Altogether, theoretical delineations of AUM and findings from previous studies provide sufficient support to examine the mediating role of anxiety in the relationship between the contact condition and willingness to communicate. Hence, the current study also examines indirect effects of the contact conditions on willingness to communicate through interpersonal communication anxiety.

In recent years, intergroup scholars have begun to suggest inclusion of positive intervening factors, such as interpersonal attraction (Anderson, Adams, & Plaut, 2008; Pettigrew & Tropp, 2008; Schug, Yuki, Horikawa, & Takemura, 2009). Prior intergroup contact research

has provided sufficient knowledge about the functions of negative intervening factors, while little empirical evidence is given to explain how a positive intervening factor carries the effects of the contact condition to an outcome. Conversely, from the interpersonal perspective, what leads to perceived social attractiveness and how social attractiveness is associated with communicative outcomes have intrigued scholastic curiosity for quite some time (Rogers & Bhowmik, 1971; West et al., 2009). This study aims to advance the intergroup contact theories by including both positive and negative intervening factors. Specifically, the current study examines the influences of the contact conditions on interpersonal communication anxiety and social attractiveness. Further testing the mediating effects, this study examines indirect effects of the contact conditions on willingness to communicate through interpersonal communication anxiety and social attractiveness.

Interpersonal attraction in general refers to the evaluation of another person or symbol of the person in a positive way (Berscheid & Walster, 1978). The majority of research has accepted the tri-dimensional conceptualization of interpersonal attraction: physical, task, and social attractiveness (McCroskey, McCroskey, & Richmond, 2006; see also McCroskey & McCain, 1974). Although a number of studies have examined physical attractiveness in cross-sex friendship and romantic relationship development (e.g., Anderson et al., 2008), a nonphysical aspect of interpersonal attractiveness, social attractiveness, is a common evaluative criterion of interaction partners (Walther, van der Heide, Kim, Westerman, & Tong, 2008).

Social attractiveness is typically defined at two levels: the degree to which a person is liked and the degree to which a person is seen as good fit to one's social circle (McCroskey & McCain, 1974). The evaluation of a contact counterpart regarding social attractiveness is, thus, determined not only by liking but also by how well a contact counterpart is perceived to fit into

one's friend networks. Perceived similarity and ease in socializing with a contact counterpart lead to increased perceptions of the goodness-of-fit to one's friend networks when evaluating the contact counterpart. For example, Verbrugge's (1977) study examining factors which influence friendship formation in adulthood revealed the importance of perceived similarity. A more recent cross-cultural study (Schug et al., 2009) also demonstrated that individuals preferred their friends to be similar to themselves in both American and Japanese cultures. Schug et al. (2009) argued the goodness-of-fit to one's friend networks due to the increased similarity is important in assessing social attractiveness (Brewer & Yuki, 2007; Yuki, 2003). In addition, highlighting the function of common ingroup identity, a study guided by CIIM in an interracial context revealed that roommate dyads who perceived high common ingroup identity reported high levels of friendship compared to those who perceived low common ingroup identity (West et al., 2009). West et al.'s (2009) findings suggest the importance of group membership in the development of a close interpersonal relationship.

Findings from these studies imply that perceived similarity and common ingroup identity enhance feelings of liking which consequently contribute to interpersonal relationship formation and maintenance. Hence, perceived similarity is a leading factor of social attractiveness. In the context of the current study, American host nationals would express greater liking of Chinese international students when they perceive common ingroup identity shared with the Chinese students. In short, the current study examines the influences of the contact conditions on social attractiveness.

The empirically supported association among a perceived common ingroup identity, social attractiveness, and interpersonal relationship development can be further broken down to explore its mechanisms. In fact, interpersonal relationship development is a result of one's

willingness to communicate with a socially attractive contact counterpart (Duck, 1988; Rogers & Bhowmik, 1971; Sias et al., 2008). Specifically, social attractiveness further relates to communication motivation in a way that those who perceive similarity and liking toward each other are more likely to willingly engage in communication (Rogers & Bhowmik, 1971). In a student-teacher context, Weiss and Houser (2007) found a positive association between students' interpersonal attraction to their teachers and their willingness to communicate with their teachers. Their findings suggest that individuals tend to envision upcoming communication to be positive, enjoyable, and satisfying when they perceive their contact counterparts to be socially attractive. The positive association between social attractiveness and willingness to communicate should remain true to the American-Chinese context in the current study. Hence, this study examines indirect effects of the contact conditions on willingness to communicate through social attractiveness.

Synthesizing CIIM and the Acculturation Framework

The Common Ingroup Identity Model (CIIM). With hopes to identify the most effective contact conditions for positive interpersonal consequences, intergroup scholars have incorporated CIIM (Gaertner & Dovidio, 2000; Gaertner et al., 1994) in intergroup contact research as the major psychological theoretical framework. CIIM is a parsimonious model which highlights the function of a shared ingroup identity derived from a cognitive shift from two distinctive groups to one common group when perceiving others (Gaertner et al., 1994). A cognitive shift in categorizing a contact counterpart from an outgroup member to an ingroup member comes from the assumptions of SIT (Tajfel & Turner, 1979) in that our mental structure of categorization based on group membership, especially a sense of belongingness to one common group, reduces intergroup bias and conflict (Gaertner et al., 1994). Once members of an

outgroup are perceived as a part of ingroup by shifting the focal point of reference in categorization (e.g., from racially different others to members of the same university), ingroup favoritism activates positive perceptions of those individuals (Gaertner & Dovidio, 2000; see also Tajfel & Turner, 1979). In short, individuals treat their ingroup members more favorably than outgroup members (Gaertner & Dovidio, 2000).

Based on SCT (Hornsey & Hogg, 2000), CIIM has identified four types of categorization when identifying contact counterparts. In essence, how a contact counterpart is categorized depends on which segment of identity becomes salient. Therefore, by shifting the focal point of reference in categorizing others, individuals are able to make cognitive adjustments in perceiving others. According to SCT, various identities, such as identities based on cultural, gender, religious, and age groups, are inherent nature of human beings (Dovidio, Gaertner, & Saguy, 2007). In addition, different identities become salient in different contact contexts (Dovidio et al., 2007). In intercultural contexts where cultural group membership is inevitably predominant, individuals tend to categorize their contact counterparts as a part of different cultural groups. At the same time, individuals are capable of categorizing their contact counterparts as a part of their own ingroup when a more inclusive shared group membership becomes salient. In short, the contact conditions specified by CIIM point to the direction to which individuals apply different dimensions of identities as guidance to categorizing others.

Specifically, CIIM distinguishes four contact conditions which lead to individual and group level outcomes (Gaertner & Dovidio, 2000; see also Dovidio et al., 2007). These conditions include *one group* (i.e., superordinate categorization, re-categorization), *two sub-groups in one group* (i.e., dual identity or re-categorization), *two groups* (i.e., categorization), and *separate individuals* (i.e., de-categorization). When individuals categorize their contact

counterparts as a part of their social group by highlighting a shared group membership (i.e., “we”), *one group* identification is observed. When individuals categorize their contact counterparts as a subgroup under one shared group membership (i.e., “us + them = we”), *two sub-groups in one group* identification is observed. When individuals categorize their contact counterparts as a part of a different social group (i.e., “we”/“they”), *two groups* identification is observed. Finally, when individuals do not apply group level categorization (i.e., “me”/“you”), *separate individuals* identification is observed.

According to prior research guided by CIIM, a shared common ingroup identity (i.e., *one group* identification and *two sub-groups in one group* identification) plays a critical positive role in interpersonal and intergroup relations. For example, Eller and Abrams (2004) found that dual-identity (i.e., *two sub-groups in one group*) and superordinate identity (i.e., *one group*) had the strongest influence on intergroup outcomes (e.g., reduced intergroup anxiety and increased evaluation of the outgroup) in the Mexican-American contact context. Supporting the positive functions of dual-identity, Crisp et al. (2006) found that children who were in the dual-identity condition perceived their contact counterpart (i.e., refugees) in the most positive light. Similarly, Gaertner et al.’s (1994) study investigating the function of CIIM revealed that the *one group* condition was positively associated with contact quality and intergroup attitudes. In addition, Nier et al.’s (2001) study demonstrated that White participants evaluated the Black confederate more positively under the *one group* condition compared to other conditions.

Differentiating the effect of *one group* identification from that of *two sub-groups in one group* identification, prior studies have found the influence of status differences on outcomes. Status difference is tied to the group size, and the group with a larger size has power over economic security, politics, and opportunity for social advancement (Dovidio et al., 2007). Due

to the power difference, members of the majority and minority status groups have different motivations for and perceptions of intergroup relations (Dovidio et al., 2007). CIIM research has shown that the influence of *one group* identification is particularly strong for the members of the majority status group, whereas dual identity (i.e., *two sub-groups in one group* identification) is preferred among the members of minority groups (Dovidio et al., 2007). From the perspectives of minority status groups, identifying with the majority status group may threaten the existing social identities that juxtapose the mainstream group. In fact, Gonzalez and Brown's (2006) study found that dual identity was the most effective for reducing intergroup bias when participants experienced threat with their social identity.

In summary, *one group* identification has the strongest influence followed by *two sub-groups in one group* identification from the host nationals' perspective. Distinguishing the *two groups* identification and *separate individuals* identification, prior research has demonstrated that the *separate individuals* identification has more positive influence on interpersonal relationships than the *two groups* identification (Eller & Abrams, 2004; Greenland & Brown, 1999). Greenland and Brown (1999) found that participants who perceived their contact counterparts at an interpersonal level reported less anxiety compared to participants who perceived their contact counterparts as a part of a different cultural group. Consistently, Eller and Abrams' (2004) study also revealed that *two groups* identification significantly increased intergroup anxiety, whereas perceiving the contact counterpart to be an individual reduced intergroup anxiety. Dovidio, Gaertner, and Kafati (2000) pointed out that the interpersonal level of encounter promotes helping and cooperation toward the contact counterpart. Findings from previous studies suggest that the *separate individuals* identification brings better interpersonal outcomes than the *two groups* identification does.

In short, prior experimental research guided by CIIM has established the causal link between the four contact conditions and their interpersonal and intergroup consequences. However, CIIM alone does not provide a practical solution to enhance interpersonal and intergroup relations for two reasons in intercultural contexts. First, the criteria to meet the contact conditions become more complex in an intercultural context than in other intergroup contexts within the same cultural framework. Once culture is introduced as a group marker which draws psychological distance from the contact counterparts, every contact condition is, to some degree, influenced by the cultural group membership. Cultural boundaries, thus, make it nearly impossible to remove cultural group membership identification. Second, the majority of CIIM research has created a superordinate common identity by emphasizing affiliation to the same university or a common goal in task completion. Brown (2000) pointed out the difficulty of finding a meaningful superordinate unit (i.e., common ingroup identity) and of implementing a temporally ordered unit in educational or work-place settings. As a solution, intergroup scholars have suggested combining the acculturation framework in CIIM so that meaningful contact conditions based on the majority-minority relations can be investigated more effectively (Brown, 2000; Dovidio, Gaertner, Niemann, & Snider, 2001; Gaertner & Dovidio, 2000).

Acculturation framework. Acculturation literature (Berry, 1980) has offered a way to describe how sojourners and immigrants adapt to a new environment. Within new environments, “difference in climate, language, work habits, religion, and dress are examples of changes for the immigrant to which response is required” (Berry, 1992, p.272). In order to adapt to the new environment, acculturation scholars (Berry, 1997; Wang & Mallinckrodt, 2006; Ward & Kennedy, 1999) argued that immigrants and sojourners go through the processes of psychological adjustment (e.g., sense of well being and self-esteem) and sociocultural adaptation

(e.g., communication competence in the new environment, social networks, etc.). In the processes of cultural adaptation, immigrants and sojourners seek ways to balance their cognitive, behavioral, and affective ties with their home and host cultures.

The majority of acculturation research has been guided by Berry's (1980) framework which assumes the orthogonality of identification with the host and home cultures (Tadmor, Tetlock, & Peng, 2009). The bi-dimensional model with each dimension indicating the strength of identification with the host or home culture has been accepted as a conceptual map of the acculturation framework (Berry, 1997). According to the model, sojourners and immigrants use various cultural adaptation strategies, such as assimilation, integration, separation, and marginalization in a new environment. When individuals give up their original cultural identity and seek social life predominantly within the host culture, they use the *assimilation* strategy. When individuals maintain their cultural identity and social life within the home culture while developing a sense of belongingness to the host culture, they use the *integration* strategy. When individuals hold on to their original culture with minimum contact with members of the host culture, they use the *separation* strategy. Finally, when individuals have little interest in maintaining the original culture or developing a sense of belongingness to the host culture, they use the *marginalization* strategy.

The motivations of sojourners and immigrants for taking each strategy vary across time and contexts. Individuals can switch from one strategy to another over time or depending on contexts (van Oudenhoven et al., 2006). In general, the *assimilation* and *integration* strategies are perceived as successful cultural adaptation strategies, while the *separation* and *marginalization* strategies are perceived to be unsuccessful adaptation strategies. For example, Kosic, Mannetti, and Sam's (2005) study examining host nationals' perspective in the Italian

context revealed that Italians reported more positive attitudes toward the *assimilated* and *integrated* sojourners, whereas negative attitudes were reported toward the *separated* and *marginalized* individuals. Similarly, Piontkowski, Florack, Hoelker, and Obdrzalek (2000) considered Germans, Swiss, and Slovaks as the dominant groups against Turks, former Yugoslavians, and Hungarians and found that the dominant group members reported anticipation of negative outcomes for those who used the *separation* or *marginalization* strategies.

From the perspective of majority-minority relations, prior research has found that the *assimilation* strategy is preferred by host nationals (i.e., the majority status group), where as the *integration* strategy is preferred by sojourners and immigrants (i.e., minority status group). For example, van Oudenhoven et al. (1998) found that the Dutch (i.e., majority status group) had the most positive attitudes toward the *assimilated* and some positivity toward the *integrated* Moroccan and Turkish immigrants. In the same study, van Oudenhoven et al. (1998) found that Moroccan and Turkish immigrants preferred the *integration strategy*. The research trend seems to demonstrate that acculturation literature has begun to show overlapping interests with CIIM in that both lines of research examine the influence of the majority-minority status differences on interpersonal and intergroup consequences.

Intersection of CIIM and acculturation framework. Intergroup contact research focusing on the majority-minority relations have recently begun to explore a more solid overarching common ingroup identity that does not fracture depending on contexts (Dovidio et al., 2001). Although a considerable amount of CIIM research has used school affiliation as a superordinate categorization in which two ethnically or racially different individuals find a common identification (Hornsey & Hogg, 2000; Nier et al., 2001), this type of categorization cannot be applied to all contexts. Categorization based on a more stable identity such as

identification with a cultural group or the majority-minority status groups, on the contrary, offers broader application of CIIM in various contexts. As SIT suggests, a status difference in the social hierarchy is an inevitable element of human relations, and one's belongingness to the advantaged (i.e., the majority status) group or to a disadvantaged (i.e., minority status) group is fluid. In short, membership to majority and minority status groups is something everyone can experience.

Hence, finding a way to enhance the sense of identification with a superordinate category by focusing on the cultural majority-minority status groups is an effective strategy to find a common ingroup identity applicable to various contexts.

The acculturation framework maps out how members of a minority status group (e.g., immigrants and sojourners) identify with their own cultural group and with the culture of the majority status group. Dovidio et al. (2001) claimed that the four cultural adaptation strategies are the embodiment of host-home cultural relations reflected in the immigrants' and sojourners' identification with each cultural group. In short, the concept of identification with different social groups in intergroup research guided by CIIM is essentially the identification with different cultural groups in an intercultural context. Specifically, *one group* identification in CIIM aligns with the *assimilation* strategy in that individuals have strong sense of identification with the main stream cultural group. Second, *two sub-groups in one group* identification in CIIM aligns with the *integration* strategy in that individuals identify with both cultural groups. Third, *two groups* identification in CIIM aligns with the *separation* strategy in that individuals identify strongly only with their original culture making the group boundary distinct. Finally, *separate individuals* identification in CIIM aligns with the *marginalization* strategy in that individuals consider themselves primarily as individual beings and identify little with both cultural categories. Hence,

in short, in the current study, CIIM's four contact conditions overlap with or are reflected in the four strategies specified by the acculturation framework.

These two lines of research (i.e., CIIM and the acculturation framework) have also demonstrated similar patterns of findings (e.g., Dovidio et al., 2001). The status difference in preferred identification/adaptation strategy has been observed in both acculturation literature and CIIM. Research in an interracial context has found that identifying racially different others as a part of one's own group (i.e., *one group identification/assimilation*) improves interpersonal and intergroup relations from the majority status group's perspective, whereas identifying dual-identity (i.e., *two sub-groups in one group/integration*) in racially different others improves interpersonal and intergroup relations from the minority status groups' perspectives (Dovidio et al., 2007; van Oudenhoven et al., 1998). In addition, prior research (e.g., Eller & Abrams, 2004; Kosic et al., 2005) demonstrated that low identification with the mainstream culture (i.e., *two groups identification/separation* and *individuals identification/marginalization*) was perceived negatively by members of the majority status group.

Based on CIIM and the acculturation framework as well as the argument to combine these two frameworks (Brown, 2000; Dovidio et al., 2001), four experimental conditions were created representing the four adaptation strategies for the current study. The first experimental condition is *assimilation* strategy (i.e., *one group identification*) in which a Chinese international student is described as a part of American culture. The second experimental condition is *integration* strategy (i.e., *two sub-groups in one group identification*) in which a Chinese international student is described as a part of both Chinese and American cultures. The third experimental condition is *separation* strategy (i.e., *two groups identification*) in which a Chinese international student is described as a part of Chinese culture. The fourth experimental condition

is *marginalization* strategy (i.e., *individuals identification*) in which a Chinese international student is described as separate from Chinese and American culture.

Guided by prior research on CIIM (e.g., Eller & Abrams, 2004; Nier et al., 2001) and the acculturation framework (Kosic, et al., 2005; van Oudenhoven et al., 1998) exploring interpersonal consequences of contact, the current study hypothesizes that the *assimilation* (i.e., *one group*) strategy will have the most positive interpersonal consequences followed by the *integration* (i.e., *two sub-groups in one group*) strategy. Based on the findings from Greenland and Brown's (1999) and Eller and Abrams' (2004) studies, this study further hypothesizes that the *marginalization* (i.e., *separate individuals*) strategy will have better interpersonal consequences than the *separation* (i.e., *two groups*) strategy.

In summary, this study examines the effects of the acculturation strategies through two mediators, American host nationals' perceptions of social attractiveness of and interpersonal communication anxiety with Chinese international students, on their willingness to communicate with the Chinese students. In hypothesizing the effects of the adaptation strategies, two specific preexisting conditions (i.e., participants' strength of identification with American culture and their attitudes toward Chinese) as well as the basic demographic information (i.e., age, sex, and years of education) were taken into account as covariates.

In order to determine whether identification with American culture serves as a common ingroup identity shared between American host nationals and assimilated and integrated Chinese international students, it is necessary to investigate the strength of identification American host nationals have with American culture (i.e., superordinate category). Without an adequate degree of belongingness to the superordinate category, the positive effect expected from the *assimilation* and *integration* conditions may diminish. The majority of laboratory experimental studies guided

by CIIM have examined participants' identification to a superordinate category by directly asking whether they felt like they belonged to the same group as their contact counterpart (Hornsey & Hogg, 2000). Although a sense of belongingness to a social group is the fundamental human need, different degrees of desire have been observed (DeCremer & Leonardelli, 2003; Gonzalez & Brown, 2006). Hence, this study focuses on the strength of identification and incorporates it as a covariate.

In addition, intercultural encounters are where stereotypes, prior cultural knowledge, and direct and indirect intercultural experiences influence the perceptions of the contact counterparts. In general, limited personal information about a contact counterpart results in more reliance on affective response to the social or cultural group the contact counterpart is from. Affective attitudes, such as warmth, positivity, and liking, are generally formed by prior direct and indirect experiences (Schofield et al., 2010; Zanna & Rampel, 1988). For example, Schofield et al. (2010) found that the number of indirect interracial contact affected the number of interracial friendships. Schofield et al.'s (2010) study suggests that general socializing experiences with people from different cultures play critical roles in developing interpersonal relationships in an intercultural context. Similarly, Binder et al.'s (2009) study found that prejudiced feelings influenced the number of intergroup friendships. Binder et al.'s (2009) study particularly points out the influence of negative affective feelings on interpersonal relationship development. By analogy, affective attitudes toward Chinese in general would also influence one's motivation to communicate with a person from that cultural group. Hence, this study also considers participants' affective attitudes toward Chinese as a covariate.

Hypotheses

The Intergroup Contact Hypothesis and relevant literature (Allport, 1954; Brown & Hewstone, 2005; Pettigrew & Tropp, 2008; Stephan & Stephan, 1985) provide the basic foundation to test the effects of the contact conditions through interpersonal communication anxiety and social attractiveness on willingness to communicate. The contact conditions in the current study are created based on CIIM (Gaertner et al., 1994) and the acculturation framework (Berry, 1980). In the following hypotheses, the basic information about participants (i.e., age, sex, years of education, participants' strength of identification with American culture, and their attitudes toward Chinese) are controlled as covariates.

Hypothesis 1: Participants' willingness to communicate with Chinese international students will vary depending on Chinese international students' adaptation strategies.

Specifically, participants will be most willing to communicate with the assimilated student followed by the integrated, marginalized, and separated students.

Hypothesis 2: Participants' judgments of Chinese international students will vary depending on Chinese international students' adaptation strategies. Specifically, participants will perceive the assimilated student to be the most socially attractive followed by the integrated, marginalized, and separated students. Similarly, participants will perceive the least anxiety in communicating with the assimilated student followed by the integrated, marginalized, and separated students.

Hypothesis 3: The adaptation strategies will have indirect effects on participants' willingness to communicate through two mediators, social attractiveness and interpersonal communication anxiety.

Summary

Extending the scope of the prior intergroup contact research, this study seeks the optimal contact conditions applicable to a variety of intercultural contexts by simultaneously examining CIIM and the acculturation framework. Specifically, this study investigates the effects of the cultural adaptation strategies through American host nationals' perceptions of interpersonal communication anxiety with and social attractiveness of Chinese international students on their willingness to communicate with the Chinese students. Hypothesis 1 and 2 predicted that the assimilated Chinese international students to be judged in the most positive light followed by the integrated, marginalized, and separated student. Hypothesis 3 predicted the mediating roles of interpersonal communication anxiety and social attractiveness in the relationship between the contact conditions and willingness to communicate.

CHAPTER THREE

METHOD

This study employed an experimental design to examine the effects of Chinese international students' cultural adaptation strategies (i.e., experimental conditions) on the European American participants' willingness to communicate with them. In addition, the indirect effects of the cultural adaptation strategies on willingness to communicate with the Chinese international students through two mediators, American participants' perceptions of interpersonal communication anxiety with and social attractiveness of Chinese students, were examined. Prior to the main study, two pilot studies were conducted to ensure the validity of manipulation of the four scenarios. In the main study, Confirmatory Factor Analyses (i.e., CFA) at a measurement level using LISREL 8.80 were conducted for the major variables (i.e., willingness to communicate, social attractiveness, and interpersonal communication anxiety) and preexisting condition variables (i.e., participants' identification with American culture and their affective attitudes toward Chinese) as control variables. This chapter provides the detailed procedures of pilot 1, pilot 2 and the main study.

Pilot 1

Participants

Participants included 113 European American undergraduate students ($M_{age} = 20.06$, $SD = 3.74$, range = 18-54) attending a medium-sized Midwestern university. Participants were recruited from the basic communication course and received partial course credit for their participation. Of the participants, 62 were male (i.e., 54.9%) and 51 were female (i.e., 45.1%). Twenty-eight were freshmen (i.e., 24.8%), 56 were sophomores (i.e., 49.6%), 17 were juniors (i.e., 15%), and 12 were seniors (i.e., 10.6%).

Procedures

Participants were randomly assigned to one of the four experimental conditions (i.e., scenarios describing cultural adaptation strategies). In assigning the participants, sex of the featured target was manipulated so that each participant received a same-sex counterpart. An approximately equal number of participants read each scenario: 29 (i.e., 25.7%) participants in the assimilation (i.e., one group) condition, 29 (i.e., 25.7%) in the integration (i.e., two sub-groups in one group) condition, 29 (i.e., 25.7%) in the separation (i.e., two groups) condition, and 26 (i.e., 23%) in the marginalization (i.e., separate individuals) condition. After reading the assigned scenario, participants answered a manipulation check questionnaire.

Materials

Scenarios. Four scenarios (see Appendix A) describing a Chinese international student's acculturation strategy (i.e., assimilation, integration, separation, and marginalization) were created. Four conditions specified by CIIM (i.e., one group, two sub-groups in one group, two groups, and separate individuals) were embedded in the contents of the four scenarios by clarifying which culture(s) the featured Chinese student more or less strongly identified with.

All scenarios began with an introduction, which described the number of Chinese immigrants and sojourners in the United States as well as the number of Chinese international students attending the university. A Chinese international student, Mei-Lin or Chen, was introduced following the instructions. Two typical Chinese names were chosen, Mei-Lin for a female and Chen for a male. Mei-Lin/Chen was described as an undergraduate international student who came to the United States three years ago. The introduction was kept constant across conditions.

In all experimental conditions, the scenarios generally illustrated Mei-Lin/Chen's cultural adaptation strategy. Overall, each scenario reflected two aspects of acculturation, psychological adjustment and sociocultural adaptation, suggested in recent years by Ward and Kennedy (1999) and Wang and Mallinckrodt (2006). Specifically, the scenarios described Mei-Lin/Chen's daily activity, social life, school life, linguistic adjustment, and identification with Chinese and American cultures in detail. Each scenario featured Mei-Lin/Chen's affiliation to the university (i.e., Jayhawk) as a specific way to show identification with American culture. Although the focus of the current study is to show cultural identification beyond school affiliation, campus life is a predominant part of international students' daily life in the United States.

Contents of each scenario were developed from the literature on acculturation and cultural adaptation (e.g., Berry, 1997, 1980) and studies examining cultural adaptation strategies (Bakker, van der Zee, van Oudenhoven, 2006; van Oudenhoven et al., 1998). Bakker et al. (2006) and van Oudenhoven et al. (1998) argued that cultural adaptation strategies can appear in the amount and frequency of contact that sojourners have with people from the home and host cultures. In addition, linguistic components were included because linguistic adjustment plays a critical role in cultural adaptation. Furthermore, considering Tsai, Ying, and Lee's (2000) suggestion, Mei-Lin/Chen's exposure to media and food preferences were included in the scenarios.

In each scenario, details of Mei-Lin/Chen's daily life, motivations for her/his cultural adaptation, and reasons behind her/his social conduct were presented. The *assimilation* (i.e., one group) condition portrayed Mei-Lin/Chen as a part of American culture and thus primed participants to perceive her/him to be a part of their cultural group. Mei-Lin/Chen was featured

as someone who enjoys the American lifestyle, has many American friends and little contact with Chinese, speaks English as the primary language, and prefers American food and TV shows. Mei-Lin/Chen's American name, Jennifer/John, was also introduced. The *integration* (i.e., two sub-groups in one group) condition portrayed Mei-Lin/Chen as a part of both American and Chinese cultures and thus primed participants to perceive her/him to be a part of a sub-group (i.e., Chinese) within a common group (i.e., American culture). Mei-Lin/Chen was featured as someone who enjoys both the American and Chinese lifestyles, has many American and Chinese friends, speaks both English and Chinese equally, and likes both American and Chinese food and TV shows. Mei-Lin/Chen's American name was also included. The *separation* (i.e., two groups) condition portrayed Mei-Lin/Chen as a part of Chinese culture and thus primed participants to perceive her/him to be apart from their cultural group. Mei-Lin/Chen was featured as someone who enjoys the Chinese lifestyle, has many Chinese friends and little contact with Americans, speaks Chinese as the primary language, and prefers Chinese food and TV shows. The *marginalized* (i.e., separate individuals) condition portrayed Mei-Lin/Chen to have low identification with Chinese and American cultures. Mei-Lin/Chen was featured as someone who has little contact with Chinese or Americans, has lost interest in engaging in the Chinese or American lifestyle, and is disconnected from both cultures.

Manipulation check. Eighteen items were used to check manipulation of the four conditions (overall $M = 4.92$, $SD = 1.06$, $\alpha = .93$; see Appendix B for the questionnaire). Acculturation is a bidimensional construct with each dimension varying the strength of the identification with the host and original cultures (e.g., Berry, 1997; van Oudenhoven et al., 1998). Therefore, 12 items ($M = 4.74$, $SD = 1.4$, $\alpha = .97$) assessed the participants' perceptions regarding the levels of Mei-Lin/Chen's identification with American culture (e.g., Mei-Lin/Chen

is a part of American culture; Mei-Lin/Chen likes the student lifestyle at KU; Mei-Lin/Chen communicates with many Americans on daily basis) on 7-point Likert scales (1 = strongly disagree and 7 = strongly agree). Six items ($M = 5.24$, $SD = 1.3$, $\alpha = .94$) were used to measure participants' perceptions regarding Mei-Lin/Chen's identification with Chinese culture (e.g., Mei-Lin/Chen is a part of Chinese culture; Mei-Lin/Chen likes the Chinese lifestyle; Mei-Lin/Chen communicates with many Chinese on daily basis). Items were developed from Bakker et al. (2006).

Results of Pilot 1

The validity of the four scenarios was examined by conducting a multivariate analysis of variance with the four experimental conditions as between-subjects factor on two dependent variables (i.e., identification with American culture and identification with Chinese culture). Results revealed a significant multivariate composite effect of the four conditions, $F(6, 216) = 22.29$, $p < .001$, $\eta_p^2 = .38$. The univariate tests for both dimensions of identification were significant, $F(3, 109) = 27.17$, $p < .001$, $\eta_p^2 = .43$ for American cultural identification and $F(3, 109) = 12.36$, $p < .001$, $\eta_p^2 = .25$ for Chinese cultural identification.

Using Tukey's HSD post hoc procedures, pairwise comparisons were conducted for each dimension. On the American cultural identification dimension, results revealed that the mean score for the assimilation condition ($M = 5.63$, $SD = 1.13$) was significantly higher than the mean scores for the marginalization condition ($M = 4.30$, $SD = .97$) and for the separation condition ($M = 3.48$, $SD = 1.09$), but did not differ from the mean score for the integration condition ($M = 5.57$, $SD = 1.09$). Similarly, the mean score for the integration condition was significantly higher than the mean scores for the marginalization condition and for the separation condition. These results demonstrated theoretical consistency of the scenarios with the acculturation literature on the

dimension assessing the identification with the host culture. However, the mean score for the marginalization condition was significantly higher than that for the separation condition, suggesting inconsistency with the acculturation literature. Results are presented in Table 1.

On the Chinese cultural identification dimension, post hoc analysis revealed that the mean score for the assimilation condition ($M = 4.66$, $SD = 1.26$) was significantly lower than the mean scores for the integration condition ($M = 5.68$, $SD = 1.07$) and for the separation condition ($M = 6.03$, $SD = 1.08$), but did not differ from the mean score for the marginalization condition ($M = 4.52$, $SD = 1.1$). Similarly, the mean score for the marginalization condition was significantly lower than the mean scores for the integration condition and for the separation condition. In addition, the mean score for the integration condition did not differ from that for the separation condition. These results demonstrated theoretical consistency with the acculturation literature on the dimension assessing the identification with the home culture, validating the successful manipulation of the scenarios. Results are presented in Table 1.

Table 1

Results from Pilot 1: Comparison of Means and Standard Deviations for Identification with American Culture and Identification with Chinese Culture across Four Conditions.

	Conditions							
	Assimilation (One Group)		Integration (Two Sub-Groups in One Group)		Separation (Two Groups)		Marginalization (Separate Individuals)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Identification with American Culture	5.63 ^a	1.13	5.57 ^a	1.09	3.48 ^c	1.09	4.30 ^b	.97
Identification with Chinese Culture	4.66 ^b	1.26	5.68 ^a	1.07	6.03 ^a	1.08	4.52 ^b	1.10

Note: Means with different superscripts in rows differ significantly at $p < .05$.

Furthermore, in order to compare the mean scores for the identification with the host and home cultures for each condition, a paired samples t-test with the scores for the identification with American culture as pre-test and the scores for the identification with Chinese culture as post-test was performed. Results indicated that the mean scores for the assimilation condition had significant difference between the identification with American culture and with Chinese culture, $t(28) = 3.53, p < .001$, suggesting that the mean score for assimilation in American cultural identification was significantly higher than in Chinese cultural identification. Likewise, the mean scores for the separation condition were significantly different between the identification with American culture and with Chinese culture, $t(28) = -7.35, p < .001$, suggesting that the mean score for separation in Chinese cultural identification was significantly higher than that in American cultural identification. Paired samples t-test results demonstrated consistency with the acculturation literature. Results are presented in Table 2

Table 2

Paired Samples t-test Results from Pilot 1: Comparisons of Means and Standard Deviations for Identification with American Culture and Identification with Chinese Culture for Each Condition.

	Identification Scores for Host and Home Cultures			
	Identification with American Culture		Identification with Chinese Culture	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Assimilation (One Group)	5.63 ^a	1.13	4.66 ^b	1.26
Integration (Two Sub-Groups in One Group)	5.57 ^a	1.09	5.68 ^a	1.07
Separation (Two Groups)	3.48 ^b	1.09	6.03 ^a	1.08
Marginalization (Separate Individuals)	4.30 ^a	.97	4.52 ^a	1.10

Note: Means with different superscripts in rows differ significantly at $p < .05$.

Discussion of Pilot 1

The MANOVA results from pilot 1 demonstrated theoretical consistency of the scenarios with the acculturation literature on the dimension assessing the identification with Chinese culture. However, results showed some theoretical inconsistency on the dimension assessing the identification with American culture. On the former dimension, participants who read the integration scenario perceived Mei-Lin/Chen's identification with Chinese culture to be as strong as those who read the separation scenario. Similarly, participants who read the assimilation scenario perceived Mei-Lin/Chen's identification with Chinese culture to be as weak as those who read the marginalization scenario. In addition, the scenarios which showed high identification with Chinese culture (i.e., integration and separation) and the scenarios which showed low identification with Chinese culture (i.e., assimilation and marginalization) demonstrated significant differences from each other.

On the latter dimension, participants who read the assimilation scenario reported Mei-Lin/Chen's identification with American culture to be significantly higher compared to the separation scenario and the marginalization scenario. Likewise, participants who read the integration scenario reported Mei-Lin/Chen's identification with American culture to be significantly higher compared to the separation scenario and the marginalization scenario. Participants who read the assimilation scenario reported Mei-Lin/Chen's identification with American culture to be as strong as those who read the integration scenario. However, contradictory to the acculturation literature, participants who read the separation scenario reported that Mei-Lin/Chen identified with American culture significantly lower than those who read the marginalization scenario. That is to say, American participants perceived that marginalized international students identified with their host culture more strongly than

international students who were separated from their host culture. According to the acculturation literature, those who are marginalized from both host and home cultures ought to have as low identification with their host culture as those who are separated from their host culture. Hence, some modifications in the contents of scenarios were necessary to further validate the manipulation of acculturation strategies.

In addition, the paired samples t-test results also demonstrated theoretical consistency of the scenarios with the acculturation literature. Specifically, participants who read the integration scenario perceived Mei-Lin/Chen as identifying with American culture as strongly as with Chinese culture. Likewise, participants who read the marginalization scenario perceived Mei-Lin/Chen as identifying with American culture as weakly as with Chinese culture. On the contrary, participants who read the assimilation scenario perceived Mei-Lin/Chen as identifying more strongly with American culture than with Chinese culture. Participants who read the separation scenario perceived Mei-Lin/Chen as identifying more strongly with Chinese culture than with American culture.

In summary, pilot 1 highlighted some problems with the contents of the scenarios. Marginalized international students should be perceived to have as low identification with their host culture as those who are separated. Hence, pilot 2 was conducted.

Pilot 2

Participants

Participants included 60 students ($M_{age} = 22.32$, $SD = 4.92$, range = 19-50) attending a medium-sized Midwestern university. Participants were volunteers from communication courses and received partial course credit. Of the participants, 25 were male (i.e., 41.7%), and 35 were female (i.e., 58.3%). Seven were sophomores (i.e., 11.7%), 27 were juniors (i.e., 45%), 25 were

seniors (i.e., 41.7%), and one participant was a graduate student (i.e., 1.7%). Due to a small sample size, pilot 2 included participants with various racial background: 53 (i.e., 88.3%) European Americans, three (i.e., 5%) Asian Americans, two (i.e., 3.3%) African Americans, one (i.e., 1.7%) Latino American, and one participant (i.e., 1.7%) who identified with another racial group.

Procedures

Procedures in pilot 2 followed pilot 1. Participants were randomly assigned to one of the four experimental conditions and received the same-sex counterpart. Approximately an equal number of participants read each scenario: 16 (i.e., 26.7%) participants in the assimilation condition, 15 (i.e., 25%) in the integration condition, 15 (i.e., 25%) participants in the separation condition, and 14 (i.e., 23.3%) participants in the marginalization condition. After reading the scenario, participants answered four simple open-ended questions (e.g., what is the name of the Chinese international student?) to ensure that they had carefully read the scenario. They, then, completed the manipulation check questionnaire (i.e., manipulation check, realism of the scenario, and identification question of the acculturation strategy described in the scenario).

Materials

Scenarios. While the major structure was kept the same as in pilot 1, the contents of the four scenarios were simplified (see Appendix C). Instead of detailing Mei-Lin/Chen's motivations and daily activities, her/his psychological adjustment and sociocultural adaptation were described broadly. Each scenario also clarified which culture(s) Mei-Lin/Chen strongly identified with.

Manipulation check. Twelve items from pilot 1 assessing the identification with American culture and Chinese culture were used to check the manipulation of the four scenarios

(overall $M = 4.9$, $SD = 1.36$, $\alpha = .89$). However, one item was deleted from the identification with Chinese cultural dimension due to a low loading to the factor which resulted in overall Cronbach alpha reliability value below .6 (identification with American culture dimension $M = 4.59$, $SD = 1.89$, $\alpha = .97$; identification with Chinese culture dimension $M = 5.26$, $SD = 1.73$, $\alpha = .96$; see Appendix D). In addition, participants were asked to read descriptions of the four acculturation strategies. After reading the descriptions, they were asked to identify which of the described strategies would best represent the scenario they have read (see Appendix D). All the participants successfully identified the acculturation strategy described in the scenario.

Realism. Two items were used (see Appendix D) to assess the realism of the scenarios (overall $M = 5.39$, $SD = 1.19$, $r = .77$; assimilation condition $M = 5.00$, $SD = 1.41$, $r = .78$; integration condition $M = 5.83$, $SD = .86$, $r = .74$; separation condition $M = 5.63$, $SD = 1.03$, $r = .71$; marginalization condition $M = 5.11$, $SD = 1.26$, $r = .78$). Participants evaluated how realistic and reasonable the scenario was on 7-point semantic-differential scales. Items were developed based on Zhang, Harwood, and Hummert (2005).

Results of Pilot 2

The validity of the four scenarios was examined by conducting a multivariate analysis of variance with the four experimental conditions as between-subjects factor on two dependent variables (i.e., identification with American culture and identification with Chinese culture). Results revealed a significant multivariate composite effect of the four conditions, $F(6, 110) = 24.64$, $p < .001$, $\eta_p^2 = .57$. The univariate tests for both dimensions of identification were significant, $F(3, 56) = 26.13$, $p < .001$, $\eta_p^2 = .58$ for the American cultural identification and $F(3, 56) = 22.75$, $p < .001$, $\eta_p^2 = .55$ for the Chinese cultural identification.

Using Tukey's HSD post hoc procedures, pairwise comparisons were conducted for each dimension. On the American cultural identification dimension, the mean score for the assimilation condition ($M = 5.77, SD = 1.57$) was significantly higher than the mean scores for the marginalization condition ($M = 2.79, SD = 1.22$) and for the separation condition ($M = 3.47, SD = .96$), but did not differ from the mean score for the integration condition ($M = 6.14, SD = 1.13$). Similarly, the mean score for the integration condition was significantly higher than the mean scores for the marginalization condition and the separation condition. The mean score for the marginalization condition did not differ from that for the separation condition. These results demonstrated theoretical consistency with the acculturation strategy on the dimension assessing the identification with the host culture, validating the successful manipulation of the scenarios. Results are presented in Table 3.

On the Chinese cultural identification dimension, post hoc analysis revealed that the mean score for the assimilation condition ($M = 3.88, SD = 1.45$) was significantly lower than the mean scores for the integration condition ($M = 6.37, SD = 1.05$) and for the separation condition ($M = 6.68, SD = .62$), but did not differ from the mean score for the marginalization condition ($M = 4.14, SD = 1.45$). Similarly, the mean score for the marginalization condition was significantly lower than the mean scores for the integration condition and the separation condition. In addition, the mean score for the integration condition did not differ from that for the separation condition. These results demonstrated theoretical consistency with the acculturation literature on the dimension assessing the identification with the home culture, validating the successful manipulation of the scenarios. Results are presented in Table 3.

Table 3

Results from Pilot 2: Comparison of Means and Standard Deviations for Identification with American Culture and Identification with Chinese Culture across Four Conditions.

	Conditions							
	Assimilation (One Group)		Integration (Two Sub-Groups in One Group)		Separation (Two Groups)		Marginalization (Separate Individuals)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Identification with American Culture	5.77 ^a	1.57	6.14 ^a	1.13	3.47 ^b	.96	2.79 ^b	1.22
Identification with Chinese Culture	3.88 ^b	1.45	6.37 ^a	1.05	6.68 ^a	.62	4.14 ^b	1.45

Note: Means with different superscripts in rows differ significantly at $p < .05$.

Furthermore, in order to compare the mean scores for the identification with the host and home cultures for each condition, a paired samples t-test with the scores for the identification with American culture as pre-test and the scores for the identification with Chinese culture as post-test was performed. Results indicated that the mean scores for the assimilation condition had significant difference between the identification with American culture and with Chinese culture, $t(15) = 3.28$, $p < .01$, suggesting that the mean score for assimilation in the American cultural identification was significantly higher than that in the Chinese cultural identification. Likewise, the mean scores for the separation condition had significant difference between the identification with American culture and with Chinese culture, $t(14) = -8.81$, $p < .001$, suggesting that the mean score for separation in the Chinese cultural identification was significantly higher than that in the American cultural identification. These results demonstrated consistency with the acculturation literature. However, the mean score in the marginalization condition differed

significantly from identification with American culture for the mean identification with Chinese culture, $t(13) = -3.95, p < .01$. Results are presented in Table 4.

Table 4

Paired Samples t-test Results from Pilot 2: Comparisons of Means and Standard Deviations for Identification with American Culture and Identification with Chinese Culture for Each Condition.

	Identification Scores for Host and Home Cultures			
	Identification with American Culture		Identification with Chinese Culture	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Assimilation (One Group)	5.77 ^a	1.57	3.88 ^b	1.45
Integration (Two Sub-Groups in One Group)	6.14 ^a	1.13	6.37 ^a	1.05
Separation (Two Groups)	3.47 ^b	.96	6.68 ^a	.62
Marginalization (Separate Individuals)	2.79 ^b	1.22	4.14 ^a	1.45

Note: Means with different superscripts in rows differ significantly at $p < .05$.

Finally, in order to check the realism of each scenario, a univariate analysis of variance with the scenarios as between-subjects factor and realism as the dependent variable was performed. Results indicated that the conditions did not affect the realism, $F(3, 56) = 1.82, p > .05$. The means ranged from 5.00 to 5.83.

Discussion of Pilot 2

The MANOVA results from pilot 2 demonstrated theoretical consistency of the scenarios with the acculturation literature on both dimensions. On the home cultural identification dimension, participants who read the integration scenario reported Mei-Lin/Chen's identification with Chinese culture as strongly as those who read the separation scenario. Similarly, participants who read the assimilation scenario reported Mei-Lin/Chen's identification with

Chinese culture as weakly as those who read the marginalization scenario. In addition, the scenarios which showed high identification with Chinese culture (i.e., integration and separation) and the scenarios which showed low identification with Chinese culture (i.e., assimilation and marginalization) demonstrated significant difference from each other. On the host cultural identification dimension, participants who read the assimilation scenario perceived Mei-Lin/Chen's identification with American culture to be as strong as those who read the integration scenario. Similarly, participants who read the separation scenario perceived Mei-Lin/Chen's identification with American culture to be as weak as those who read the marginalization scenario. In addition, the scenarios which showed high identification with American culture (i.e., assimilation and integration) and the scenarios which showed low identification with American culture (i.e., separation and marginalization) demonstrated significant differences from each other.

The paired samples t-test results generally demonstrated theoretical consistency of the scenarios with the acculturation literature. Specifically, participants who read the integration scenario perceived Mei-Lin/Chen as identifying with American culture as strongly as with Chinese culture. On the contrary, participants who read the assimilation scenario perceived Mei-Lin/Chen as identifying more strongly with American culture than with Chinese culture. Likewise, participants who read the separation scenario perceived Mei-Lin/Chen as identifying more strongly with Chinese culture than with American culture. However, participants who read the marginalization scenario perceived Mei-Lin/Chen as identifying more strongly with Chinese culture than with American culture. Considering the nature of intercultural encounter wherein culture cannot be diminished, it is natural that participants evaluated Mei-Lin/Chen to have higher identification with Chinese culture than with American culture. As a solution, the

marginalization scenario should include some statements indicating Mei-Lin/Chen's association with American culture.

In summary, the MANOVA results illustrated successful manipulation of the four conditions. Hence, the scenarios in the assimilation, integration, and separation conditions were kept the same for the main study. One sentence indicating Mei-Lin/Chen's daily mundane participation in American culture (i.e., attend classes) was added in the marginalization condition for the main study.

Main Study

Participants

Two hundred and ninety-nine participants were recruited for this study. To ensure the normality of distributions on the preexisting condition variables (i.e., participants' identification with American culture and their attitudes toward Chinese) and the major variables (i.e., willingness to communicate, social attractiveness, and interpersonal communication anxiety), skewness and kurtosis values were considered. Skewness and kurtosis values for the preexisting conditions were examined across four experimental conditions, and these values for the major variables were examined by condition. As a general guideline, skewness values between ± 0.5 and 0 (e.g., between ± 1 and ± 0.5 is moderately skewed) and kurtosis values between ± 3 and 0 indicate the normality of distributions (Brown, 2011). For the variables with skewed distributions (i.e., greater than ± 0.5), each outlier case was examined by its z score value. Cases scored more than three standard deviations away from the mean were deleted, because cases with values beyond $z = \pm 3$ are typically nonrepresentative of the population (Cohen, 2001).

Participants included in the analysis were 284 European American undergraduate and graduate students (M age = 20.23, SD = 2.04, range = 17-29) attending a medium-sized

Midwestern university in the United States. Of the participants, 111 (i.e., 39.1%) were male, and 173 (i.e., 60.9%) were female. Participants received 14.64 years of education on average ($SD = 1.78$). One hundred and three were freshmen (i.e., 36.3%), 67 were sophomores (i.e., 23.6%), 54 were juniors (i.e., 19%), 53 were seniors (i.e., 18.7%), five were graduate students (i.e., 1.8%), and two were non degree-seeking students (i.e., .8%). The majority of participants (i.e., 216; 76.1%) reported that they did not speak any other language besides English. Of the participants who reported that they spoke a second language, 41 (i.e., 14.4%) reported that they spoke some Spanish, and 26 (i.e., 9.2%) reported that they spoke some other language, such as French, German, and Italian. Most of the participants had some overseas traveling experiences, up to a total length of two years.

The majority of participants (i.e., $n = 187$; 65.8%) were students enrolled in a public speaking course or a business communication course. The remaining (i.e., 34.2%) was recruited from intercultural communication courses. All participants received partial course credit for their participation. In order to ensure that the exposure to the contents in intercultural communication courses did not interfere with the effect of the experimental conditions on the outcome variables, independent samples t-tests on the major variables (i.e., participants' strength of identification with American culture, affective attitudes toward Chinese, willingness to communicate, social attractiveness, and interpersonal communication anxiety) were conducted comparing students who were concurrently enrolled in intercultural communication courses and those who were not. Results showed that there were no significant differences between participants with intercultural communication courses and participants without intercultural communication courses on any of the major variables.

Procedures

The current study had two sections (i.e., a section prior to and after assigning participants to an experimental condition). The first section consisted of basic information about participants (i.e., age, sex, racial/ethnic background, school year, years of education, major, foreign language acquisition, and overseas experiences) and items assessing the preexisting condition variables (i.e., participants' strength of the identification with American culture and their affective attitudes toward Chinese in general). See Appendix E for the complete questionnaire.

After completing the first section, participants were randomly assigned to one of the four experimental conditions. In each condition, participants read a scenario developed from pilot 1 and 2 (i.e., assimilation, integration, separation, or marginalization). When assigning the participants into conditions, sex of the Chinese international students in the scenarios was manipulated so that each participant received a same-sex counterpart. Approximately an equal number of participants read each scenario: 67 (i.e., 23.6%; M age = 20.96, SD = 2.63, range = 18-29; 40.3% male) participants in the assimilation condition, 71 (i.e., 25%; M age = 19.81, SD = 1.65, range = 18-27; 39.4% male) in the integration condition, 72 (i.e., 25.4%; M age = 20.13, SD = 1.97, range = 18-29; 39.9% male) participants in the separation condition, and 74 (i.e., 26.1%; M age = 20.07, SD = 1.70, range = 17-26; 38.7% male) participants in the marginalization condition. After reading the scenario, participants answered four simple open-ended questions (e.g., what is the name of the Chinese international student?) to ensure that they have carefully read the scenario followed by the manipulation check questionnaire (i.e., Mei-Lin/Chen's identification with American and Chinese cultures). After the manipulation check, participants completed questions on willingness to communicate, social attractiveness, interpersonal communication anxiety, and realism of the scenario. See Appendix F for the

scenarios in the main study, Appendix G for the manipulation check and realism questions, and Appendix H for the complete questionnaire for the major variables.

Measurements for Manipulation Check

Manipulation check. Twelve items from pilot 2 assessing Mei-Lin/Chen's identification with American culture and Chinese culture were used ($\alpha = .91$; overall $M = 4.88$, $SD = 1.33$) to check the manipulation of the four scenarios. Six items assessed participants' perceptions of Mei-Lin/Chen's identification with American culture (overall $M = 4.63$, $SD = 1.78$, $\alpha = .97$; Assimilation condition $M = 6.24$, $SD = .67$, $\alpha = .88$; Integration condition $M = 6.09$, $SD = .62$, $\alpha = .90$; Separation condition $M = 3.33$, $SD = 1.35$, $\alpha = .90$; Marginalization condition $M = 3.05$, $SD = 1.01$, $\alpha = .84$), and six items assessed participants' perceptions of Mei-Lin/Chen's identification with Chinese culture (overall $M = 5.12$, $SD = 1.68$, $\alpha = .96$; Assimilation condition $M = 4.20$, $SD = 1.54$, $\alpha = .94$; Integration condition $M = 6.34$, $SD = .49$, $\alpha = .82$; Separation condition $M = 6.50$, $SD = .56$, $\alpha = .85$; Marginalization condition $M = 3.44$, $SD = 1.12$, $\alpha = .88$).

Realism. Two items (i.e., How realistic do you think the scenario/story about Mei-Lin/Chen's experience in the U.S. is?; How reasonable do you think the scenario/story about Mei-Lin/Chen's experience in the U.S. is?) used in pilot 2 assessed the realism of the scenarios on 7-point semantic differential scales (overall $M = 5.33$, $SD = 1.20$, $r = .83$; Assimilation condition $M = 4.93$, $SD = 1.33$, $r = .85$; Integration condition $M = 5.75$, $SD = .99$, $r = .91$; Separation condition $M = 5.74$, $SD = 1.04$, $r = .79$; Marginalization condition $M = 4.91$, $SD = 1.15$, $r = .74$).

Measurements for the Major Variables

Reliability and validity of each measurement for the major variables were tested by conducting confirmatory factor analyses (i.e., CFA) at the measurement item level using

LISREL 8.80. Traditionally, Cronbach's alpha has been the only assessment of measurement reliability in the field of communication. However, in recent years, scholars have argued for the application of CFA as a more sophisticated and rigorous way to assess reliability and validity of a measurement than solely reporting Cronbach's alpha (Crothers, Schreiber, Field, & Kolbert, 2009; Kline, 2005; Levine, 2005). Hence, CFA was conducted on the measurements for the major variables, and only the items which passed the requirements for the fit statistics were utilized in this study. Specifically, each measurement was tested for its model fit using RMSEA, NNFI, and CFI values (Kline, 2005; Schreiber, Stage, King, Nora, & Barlow, 2006). RMSEA values below .08 and NNFI/CFI values above .90 indicate acceptable fit (Kline, 2005; Schreiber et al., 2006). In order to reach the acceptable RMSEA, NNFI, and CFI values, each item's lambda loading to the construct and correlations between residuals were considered for the treatment of items to improve the fit statistics (e.g., Hardy, Roberts, Thomas, & Murphy, 2010).

Affective attitudes toward Chinese. Three items were used to assess participants' affective attitudes ($\chi^2/df = 0$, RMSEA = 0, NNFI = 0, CFI = 0; $\alpha = .94$, $M = 5.09$, $SD = 1.36$). Participants reported their feelings toward Chinese culture in general (i.e., cold-warm, negative-positive, and hostile-friendly) on 7-point semantic differential scales. Items were adapted from Tropp and Pettigrew's (2005a) favorability and liking scale.

Strength of identification with American culture. Six items were used to assess participants' strength of the identification with American culture ($\chi^2/df = 2.52$, RMSEA = .075, NNFI = .989, CFI = .99; $\alpha = .994$, $M = 6.20$, $SD = .97$). Participants reported how strongly they identified themselves with American culture (e.g., I feel like a member of American culture; I often think of myself as an American; I am proud to be an American) on 7-point Likert scales (1

= strongly disagree and 7 = strongly agree). Items were based on Cadinu and Reggiori's (2002) level of identification measurement (see also Costarelli, 2007).

Willingness to communicate. Four items were used to assess intention for future communication ($\chi^2/df = 2.07$, RMSEA = .060, NNFI = .994, CFI = .998; Overall $\alpha = .95$, $M = 5.13$, $SD = 1.22$; Assimilation condition $\alpha = .96$, $M = 5.53$, $SD = 1.30$; Integration condition $\alpha = .93$, $M = 5.43$, $SD = 1.00$; Separation condition $\alpha = .93$, $M = 4.87$, $SD = 1.20$; Marginalization condition $\alpha = .93$, $M = 4.73$, $SD = 1.17$). Participants reported how willing or unwilling they would be to interact with Mei-Lin/Chen (e.g., To what extent are you willing to initiate conversations with Mei-Lin/Chen?; To what extent are you willing to talk to Mei-Lin/Chen?; To what extent are you willing to chat with Mei-Lin/Chen?) on 7-point Likert scales (1 = not willing to and 7 = extremely willing to). Items were developed from McCroskey & Richmond's (1987) willingness to communicate (i.e., WTC) scale which identified general willingness of engaging in conversations (i.e., willing to talk to people) in various contexts.

Social attractiveness. Six items were used to assess social attractiveness of Mei-Lin/Chen ($\chi^2/df = 2.14$, RMSEA = .065, NNFI = .987, CFI = .992; Overall $\alpha = .88$, $M = 4.47$, $SD = 1.07$; Assimilation condition $\alpha = .90$, $M = 5.14$, $SD = 1.05$; Integration condition $\alpha = .79$, $M = 4.89$, $SD = .85$; Separation condition $\alpha = .86$, $M = 3.98$, $SD = 1.04$; Marginalization condition $\alpha = .75$, $M = 3.94$, $SD = .78$). Participants reported their perceptions about socializing with Mei-Lin/Chen (e.g., I think Mei-Lin/Chen could be a friend of mine; Mei-Lin/Chen would be sociable with me; Mei-Lin/Chen would be easy to get along with) on 7-point Likert scales (1 = strongly disagree and 7 = strongly agree). Items were based on McCroskey et al.'s (2006) interpersonal social attraction scale (see also McCroskey & McCain, 1974).

Interpersonal communication anxiety. Five items were used to assess participants' anxiety in communicating with Mei-Lin/Chen ($\chi^2/df = 2.11$, RMSEA = .065, NNFI = .986, CFI = .993; Overall $\alpha = .83$, $M = 3.01$, $SD = 1.04$; Assimilation condition $\alpha = .88$, $M = 2.67$, $SD = 1.05$; Integration condition $\alpha = .83$, $M = 2.69$, $SD = .98$; Separation condition $\alpha = .74$, $M = 3.42$, $SD = .98$; Marginalization condition $\alpha = .80$, $M = 3.21$, $SD = .97$). Participants reported how they would feel given an opportunity to interact with Mei-Lin/Chen (e.g., I would be self-conscious; I would be irritated; I would be careful) on 7-point Likert scales (1 = strongly disagree and 7 = strongly agree). Items were based on Stephan and Stephan's (1985) anxiety scale commonly used in intergroup research (see also Voci & Hewstone, 2003).

Summary

The purpose of this experimental study is to examine the functions of the cultural adaptation strategies (i.e., experimental conditions) developed based on the theoretical delineations of CIIM and acculturation framework on American host nationals' willingness to communicate with Chinese international students. Each of the four realistic scenarios described the levels of a Chinese international student's identification with the host and home cultures. Results from pilot 1 and 2 demonstrated theoretical consistency of the scenarios, confirming successful manipulation of the conditions.

In the main study, participants ($N = 284$) answered questions on demographic information, their strength of identification with American culture, and attitudes toward Chinese in general. After being randomly assigned to one of the four experimental conditions and reading the scenario, participants responded to the manipulation check items and answered questions on willingness to communicate with, social attractiveness of, and interpersonal anxiety in

communicating with the Chinese international student featured in the scenario. CFA results and Cronbach's alphas ensured the reliability and validity of the major measurements.

CHAPTER FOUR

RESULTS

This experimental study examined the effects of the cultural adaptation strategies (i.e., assimilation, integration, separation, and marginalization) on how willing American participants would be to communicate with Chinese international students. Manipulation of the strategies was tested by conducting a multivariate analysis of variance with Tukey's HSD post hoc procedures. In addition, realism of each scenario was examined by an analysis of variance as well as one sample t-tests.

Hypothesis 1 predicting the effects of the cultural adaptation strategies on willingness to communicate was examined by conducting a univariate analysis of variance with LSD post hoc procedures. Results showed that Hypothesis 1 was partially supported. Hypothesis 2 predicting the effects of the cultural adaptation strategies on social attractiveness and interpersonal anxiety was examined by a multivariate analysis of variance with Tukey's HSD post hoc procedures. Results showed that Hypothesis 2 was partially supported. Hypothesis 3 predicting indirect effects of the cultural adaptation strategies on willingness to communicate via two mediators, social attractiveness and interpersonal communication anxiety, was examined by conducting nonparametric bootstrapping procedures (Preacher & Hayes, 2004) for all possible pairwise comparisons (i.e., four conditions resulted in six comparisons in total). Results demonstrated that both social attractiveness and communication anxiety mediated the effects of the experimental conditions on willingness to communicate for the most comparisons except for two comparisons (i.e., assimilation-integration and separation-marginalization). Hence, Hypothesis 3 was partially supported. Correlations among the major variables are presented in Tables 5 and 6 for across conditions and by condition respectively.

Table 5

Means, Standard Deviations, and Correlations among the Major Variables across Conditions.

Variable	<i>M</i>	<i>SD</i>	1	2	3	4
1. Strength of Identification with American Culture	6.20	.97				
2. Affective Attitudes	5.09	1.36	.10			
3. Willingness to Communicate	5.13	1.22	-.03	.21***		
4. Social Attractiveness	4.47	1.07	-.06	.10	.68***	
5. Communication Anxiety	3.01	1.04	.01	-.09	-.51***	-.55***

*** $p < .001$

Table 6.

Means, Standard Deviations, and Correlations among the Major Variables by Condition.

	Variable	<i>M</i>	<i>SD</i>	1	2	3	4
Assimilation	1. Strength of Identification with American Culture	6.00	1.20				
	2. Affective Attitudes	4.79	1.56	.25*			
	3. Willingness to Communicate	5.53	1.30	-.05	.18		
	4. Social Attractiveness	5.14	1.05	-.06	.07	.64***	
	5. Communication Anxiety	2.67	1.05	-.16	-.03	-.55***	-.53***
Integration	1. Strength of Identification with American Culture	6.30	.77				
	2. Affective Attitudes	5.31	1.32	-.06			
	3. Willingness to Communicate	5.43	1.00	.06	.09		
	4. Social Attractiveness	4.89	.85	.04	.18	.63***	
	5. Communication Anxiety	2.69	.98	.07	-.14	-.56***	-.51***
Separation	1. Strength of Identification with American Culture	6.14	1.12				
	2. Affective Attitudes	5.17	1.16	-.02			
	3. Willingness to Communicate	4.87	1.20	-.09	.20		
	4. Social Attractiveness	3.98	1.04	-.12	.15	.76***	
	5. Communication Anxiety	3.42	.98	.05	-.08	-.49***	-.56***
Marginalization	1. Strength of Identification with American Culture	6.34	.67				
	2. Affective Attitudes	5.10	1.36	.12			
	3. Willingness to Communicate	4.73	1.17	.08	.43***		
	4. Social Attractiveness	3.94	.76	.10	.24*	.53***	
	5. Communication Anxiety	3.21	.97	.12	-.18	-.30*	-.30**

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

Manipulation Check

The validity of the four scenarios was examined by conducting a multivariate analysis of variance with the four experimental conditions as between-subjects factor on two dependent variables (i.e., identification with American culture and identification with Chinese culture). Results revealed a significant multivariate composite effect of the four conditions, $F(6, 558) = 195.75, p < .001, \eta_p^2 = .68$. The univariate tests for both dimensions of identification were significant, $F(3, 280) = 226.61, p < .001, \eta_p^2 = .71$, for the American cultural identification, and $F(3, 280) = 165.28, p < .001, \eta_p^2 = .64$, for the Chinese cultural identification.

Using Tukey's HSD post hoc procedures, pairwise comparisons were conducted for each dimension. On the American cultural identification dimension, the mean score for the assimilation condition ($M = 6.23, SD = .67$) was significantly higher than the mean scores for the marginalization condition ($M = 3.05, SD = 1.01$) and for the separation condition ($M = 3.33, SD = 1.35$), but did not differ from the mean score for the integration condition ($M = 6.09, SD = .62$). Similarly, the mean score for the integration condition was significantly higher than the mean scores for the marginalization and separation conditions. The mean score for the marginalization condition did not differ from that of the separation condition. These results demonstrated theoretical consistency with the acculturation literature on the dimension assessing the identification with the host culture, validating the successful manipulation of the scenarios.

On the Chinese cultural identification dimension, post hoc analysis revealed that the mean score for the assimilation condition ($M = 4.20, SD = 1.54$) was significantly lower than the mean scores for the integration condition ($M = 6.34, SD = .49$) and for the separation condition ($M = 6.50, SD = .56$) and significantly higher than the score for the marginalization condition ($M = 3.44, SD = 1.12$). The mean score for the marginalization condition was significantly lower

than the mean scores for the integration and separation conditions. In addition, the mean score for the integration condition did not differ from that of the separation condition. Considering the significant difference found between the assimilation and marginalization conditions, one sample t-test comparing the score for the assimilation condition (i.e., $M = 4.20$) with the scale median value of 4 was conducted. Results indicated that the value of 4.20 was not significantly higher than the scale median value of 4, $t(66) = 1.06, p > .05$, indicating that the mean score for the assimilation condition was within the range of low identification with Chinese cultural dimension. These results demonstrated theoretical consistency with the acculturation literature on the dimension assessing the identification with the home culture, validating the successful manipulation of the scenarios. Results are presented in Table 7.

Table 7

Manipulation Check Results from Main Study: Comparison of Means and Standard Deviations for Identification with American Culture and Identification with Chinese Culture across Four Conditions.

	Conditions							
	Assimilation		Integration		Separation		Marginalization	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Identification with American Culture	6.24 ^a	.67	6.09 ^a	.62	3.33 ^b	1.35	3.05 ^b	1.01
Identification with Chinese Culture	4.20 ^b	1.54	6.34 ^a	.49	6.50 ^a	.56	3.44 ^c	1.12

Note: Means with different superscripts in rows differ significantly at $p < .05$.

In addition, further providing theoretical consistency with CIIM, high mean score for participants' identification with American culture (i.e., 6.20 across conditions; $M = 6.00$ in the assimilation condition, $M = 6.40$ in the integration condition, $M = 6.14$ in the separation

condition, $M = 6.34$ in the marginalization condition) verified the existence of a common ingroup identification in the assimilation and integration conditions. Participants generally reported a strong sense of belongingness to American culture. Hence, they perceived a common cultural ingroup identity shared with the assimilated and integrated Chinese international students.

Realism

Realism of each scenario was examined by conducting an analysis of variance with the four experimental conditions as a between-subjects factor with realism as the dependent variable. Results revealed that the conditions had a significant effect on realism, $F(3, 280) = 12.54, p < .001, \eta_p^2 = .12$. In order to further ensure that all of the scenarios reasonably depicted the reality, one sample t-test comparing the mean score of each condition with the scale median value of 4 were conducted. Results revealed that the mean scores in all conditions were significantly higher than the mid-point on scale: $t(66) = 5.71, p < .001$ for the assimilation condition; $t(70) = 14.94, p < .001$ for the integration condition; $t(71) = 14.10, p < .001$ for the separation condition; $t(73) = 6.84, p < .001$ for the marginalization condition, ensuring the realism of each scenario. Altogether, manipulation check results validated that manipulation of the conditions in this study was successful.

Effects of the Acculturation Strategies on Willingness to Communicate

Hypothesis 1 predicted that American participants would be most willing to communicate with the assimilated Chinese international student followed by the integrated, marginalized, and separated students. To test the hypothesis, a univariate analysis of variance with the four experimental conditions as between-subjects factor on willingness to communicate was conducted. Participants' age, sex, years of education, strength of identification with American culture, and affective attitudes toward Chinese were included in the model as covariates.

Results revealed a significant univariate effect of the condition on willingness to communicate, $F(3, 241) = 11.29, p < .001, \eta_p^2 = .12$. LSD post hoc procedures demonstrated that participants were significantly more willing to communicate with the assimilated student ($M = 5.63, SD = 1.32$) than with the marginalized ($M = 4.67, SD = 1.19$) or separated ($M = 4.87, SD = 1.16$) student. Results also showed that participants were significantly more willing to communicate with the integrated student ($M = 5.53, SD = 1.00$) than with the marginalized or separated student. However, there were no significant differences in willingness to communicate between the assimilated and integrated or between the marginalized and separated students. Hence, Hypothesis 1 was partially supported. In addition, affective attitudes, $F(3, 241) = 15.26, p < .001, \eta_p^2 = .06$, and age, $F(3, 241) = 6.80, p < .01, \eta_p^2 = .03$, also had significant effects on willingness to communicate. Results are presented in Table 8.

Table 8

Results for Hypothesis 1 Comparison of Means and Standard Deviations for Willingness to Communicate across Four Conditions.

	Conditions							
	Assimilation		Integration		Separation		Marginalization	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Willingness to Communicate	5.63 ^a	1.32	5.53 ^a	1.00	4.87 ^b	1.16	4.67 ^b	1.19

Note: Means with different superscripts in rows differ significantly at $p < .05$.

Influences of Adaptation Strategies on Judgments of the Chinese Contact

Hypothesis 2 predicted that American participants would perceive the assimilated Chinese international student to be the most socially attractive followed by the integrated, marginalized, and separated students. Similarly, Hypothesis 2 also predicted that American participants would have the least anxiety in communicating with the assimilated student followed

by the integrated, marginalized, and separated student. To test the hypothesis, a multivariate analysis of variance with the four experimental conditions as between-subjects factor on two dependent variables (i.e., social attractiveness and interpersonal communication anxiety) was conducted. Participants' age, sex, years of education, strength of identification with American culture, and affective attitudes toward Chinese were included in the model as covariates.

Results revealed a significant multivariate composite effect of the condition, $F(6, 480) = 14.87, p < .001, \eta_p^2 = .16$. The univariate tests for both of the dependent variables were significant, $F(3, 241) = 31.28, p < .001, \eta_p^2 = .28$ for social attractiveness and $F(3, 241) = 9.54, p < .001, \eta_p^2 = .11$ for interpersonal communication anxiety. Using Tukey's HSD post hoc procedures, pairwise comparisons were conducted for each dependent variable. Partially supporting the hypothesis, post hoc analyses revealed that the assimilated and integrated Chinese students were more positively perceived than the separated or marginalized Chinese student, and there were no differences between the assimilated and integrated students or between the separated and marginalized students. In addition, affective attitudes, $F(2, 240) = 4.98, p < .01, \eta_p^2 = .04$, also had a significant composite effect. The univariate tests revealed that affective attitudes had a significant effect on social attractiveness, $F(2, 240) = 9.85, p < .001, \eta_p^2 = .04$, but not on communication anxiety. Results are detailed in the following sections and presented in Table 9.

Social attractiveness. Post hoc analysis revealed that participants perceived the assimilated Chinese student ($M = 5.20, SD = 1.06$) as significantly more socially attractive than the marginalized ($M = 3.92, SD = .80$) or separated ($M = 3.98, SD = .95$) Chinese student. Similarly, participants perceived the integrated Chinese student ($M = 4.87, SD = .84$) as significantly more socially attractive than the marginalized or separated Chinese student.

However, there were no significant differences between the assimilated and integrated Chinese students and between the marginalized and separated Chinese students.

Interpersonal communication anxiety. Post hoc analysis revealed that participants were significantly more anxious in communicating with the separated Chinese student ($M = 3.44$, $SD = .98$) than with the integrated ($M = 2.73$, $SD = 1.00$) or assimilated ($M = 2.63$, $SD = 1.09$) Chinese student. Similarly, participants were more anxious in communicating with the marginalized Chinese student ($M = 3.23$, $SD = .99$) than with the integrated or assimilated Chinese student. However, there were no significant differences between the separated and marginalized Chinese students and between the integrated and assimilated Chinese students.

Table 9

Results for Hypothesis 2: Comparison of Means and Standard Deviations for Social

Attractiveness and Interpersonal Communication Anxiety across Four Conditions.

	Conditions							
	Assimilation		Integration		Separation		Marginalization	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Social Attractiveness	5.20 ^a	1.06	4.87 ^a	.84	3.98 ^b	.95	3.92 ^b	.80
Interpersonal Communication Anxiety	2.63 ^a	1.09	2.73 ^a	1.00	3.44 ^b	.98	3.23 ^b	.99

Note: Means with different superscripts in rows differ significantly at $p < .05$.

Indirect Effects of the Adaptation Strategies on Willingness to Communicate through Mediators

Mediation analysis examines “by what means X [exogenous variable] exerts its effect on Y [endogenous variable]” (Preacher, Rucker, & Hayes, 2007, p. 188; see also Preacher & Hayes, 2008). Traditionally, the most commonly used method to test mediation is Baron and Kenny’s (1986) causal steps approach, often supplemented by the Sobel test (Hayes, 2009). Baron and

Kenny's approach calls for certain prerequisite conditions to be met before proceeding to the Sobel test. These conditions include exogenous variable (i.e., X) to be a significant predictor of the endogenous variable (i.e., Y) and to have significant correlations with endogenous and mediator (i.e., M) variables (Baron & Kenny, 1986). Once these conditions are met, the Sobel test (Sobel, 1982; 1986) examines whether the influence of an exogenous variable on an endogenous variable becomes insignificant when a mediator variable is introduced. Although the causal steps approach has been frequently used in the field of communication to test the mediation effects, this approach has been criticized for three major reasons. First, Hayes (2009) argued that "if X's effect on Y is carried in part indirectly through intervening variable M, the causal steps approach is least likely of many methods available to actually detect the effect" (p. 410). Second, Hayes (2009) pointed out that "the existence of an indirect effect is inferred logically by the outcome of a set of hypothesis tests" (p. 410). In addition, Sobel test assumes the normality of the sampling distribution of the indirect effect (Hayes, 2009; Preacher & Hayes, 2008).

As an alternative to the causal steps approach, a test of indirect effects using nonparametric bootstrapping procedure has gained attention (Hayes, 2009; MacKinnon, Lockwood, & Williams, 2004). Analysis of indirect effects (i.e., mediation effects) is especially useful in experimental studies, for it allows researchers to establish causal relationship between variables by considering influences of intervening factors (MacKinnon et al., 2004). In particular, nonparametric bootstrapping procedures are a resampling strategy, and thus no assumptions about the shape of sampling distribution are necessary (Preacher, Rucker, & Hayes, 2007; Preacher & Hayes, 2008). Hence, this study used analyses of indirect effects with 5,000

bootstrap samples using Preacher and Hayes' (2008) Macro for Multiple Mediation using SPSS to test Hypothesis 3.

For Hypothesis 3, all possible pairwise comparisons of the four experimental conditions were considered. That is to say, a total of six analyses of indirect effects were conducted. As the analysis of indirect effects is based on the regression analysis, the conditions (i.e., predictor variable) were dummy coded into 0 (i.e., reference group) or 1 (i.e., comparison group). In order for all the possible pairwise comparisons to happen, three sets of three new dummy coded variables were created (i.e., total of nine new variables). First, the assimilation condition was consistently coded as 0, while other groups received 1 in one of the three dummy coded variables. This step created three pairwise comparisons (i.e., assimilation-integration, assimilation-separation, and assimilation-marginalization). For the remaining three pairwise comparisons, the second set of dummy coding consistently assigned 0 to the integration condition, while other groups received 1 in one of the three dummy coded variables within this set. This set created additional two comparisons (i.e., integration-separation and integration-marginalization) as well as integration-assimilation. Finally, for the last pairwise comparison, the third set of dummy coding consistently assigned 0 to the separation condition, while other groups received 1 in one of the three dummy coded variables within this set. This set created the last comparison (i.e., separation-marginalization) as well as separation-assimilation and separation-integration.

In conducting tests of indirect effects, willingness to communicate was entered as the dependent variable, and social attractiveness and communication anxiety were entered as the mediator variables in the Macro for Multiple Mediation script. The dummy coded variable for the targeted comparison (e.g., assimilation-integration) was entered as the independent variable, while the two remaining dummy coded variables within the same dummy coding set (e.g.,

assimilation-separation and assimilation-marginalization) were entered as covariates along with participants' age, sex, years of education, strength of identification with American culture, and affective attitudes toward Chinese. The same procedures with different pairwise comparisons were repeated until all the comparisons were exhausted (i.e., a total of six comparisons).

In general, consistent with results from Hypotheses 1 and 2, results demonstrated that the model significantly predicted the willingness to communicate, $R^2 = .53$, adjusted $R^2 = .51$, $F(10, 239) = 27.25$, $p < .001$. Across pairwise comparisons, results further indicated that both social attractiveness and communication anxiety significantly predicted willingness to communicate ($\beta = .65$, $t = 9.35$, $p < .001$ and $\beta = -.24$, $t = -3.94$, $p < .001$ respectively), suggesting that participants were more willing to communicate when they perceived a lower level of anxiety and higher level of social attractiveness. In addition, participants' affective attitudes toward Chinese ($\beta = .10$, $t = 2.43$, $p < .05$) was a significant predictor of willingness to communicate.

Indirect effects of the conditions on willingness to communicate through social attractiveness and communication anxiety were tested for each comparison by examining bootstrap results. Statistical decisions regarding the presence of indirect effects were made based on whether the bias corrected and accelerated 95% confidence intervals contained zero (Preacher & Hayes, 2008). Specifically, mediation effects are observed when the 95% confidence interval does not contain zero (Preacher & Hayes, 2008). See Table 10 for the results.

Assimilation-integration. Bootstrap results indicated that there were no total indirect effects of the conditions on willingness to communicate through either mediator. Specifically, neither social attractiveness nor communication anxiety mediated the relationship between the conditions and willingness to communicate.

Assimilation-separation. Bootstrap results indicated that there were total indirect effects of the conditions on willingness to communicate through both mediators, $\beta = -1.01$ _[95%CI = -1.35; -.70], $SE = .16$, $z = -6.14$. Social attractiveness ($\beta = -.81$ _[95%CI = -1.12; -.53], $SE = .15$, $z = -5.43$) and communication anxiety ($\beta = -.20$ _[95%CI = -.38; -.09], $SE = .07$, $z = -2.86$) were significant mediators. Specifically, the total effects of the conditions on willingness to communicate ($\beta = -.82$, $t = -3.96$, $p < .001$) became insignificant ($\beta = .19$, $t = 1.08$, $p > .05$) after the mediators were included in the path. In short, participants were more socially attracted to and less anxious in communicating with the assimilated Chinese student than with the separated Chinese student, which consequently led to participants' greater willingness to communicate with the assimilated Chinese student than with the separated Chinese student.

Assimilation-marginalization. Bootstrap results indicated that there were total indirect effects of the conditions on willingness to communicate through both mediators, $\beta = -.99$ _[95%CI = -1.31; -.69], $SE = .16$, $z = -6.14$. Social attractiveness ($\beta = -.84$ _[95%CI = -1.16; -.57], $SE = .15$, $z = -5.61$) and communication anxiety ($\beta = -.15$ _[95%CI = -.31; -.06], $SE = .06$, $z = -2.45$) were significant mediators. Specifically, the total effects of the conditions on willingness to communicate ($\beta = -.98$, $t = -4.74$, $p < .001$) became insignificant ($\beta = .01$, $t = .06$, $p > .05$) after the mediators were included in the path. In short, participants were more socially attracted to and less anxious in communicating with the assimilated Chinese student than with the marginalized Chinese student, which consequently led to participants' greater willingness to communicate with the assimilated Chinese student than with the marginalized Chinese student.

Integration-separation. Bootstrap results indicated that there were total indirect effects of the conditions on willingness to communicate through both mediators, $\beta = -.75$ _[95%CI = -1.03; -.49], $SE = .14$, $z = -5.41$. Social attractiveness ($\beta = -.58$ _[95%CI = -.84; -.37], $SE = .12$, $z = -4.78$) and

communication anxiety ($\beta = -.17$ _[95%CI = -.38; -.09], $SE = .07$, $z = -2.51$) were significant mediators. Specifically, the total effects of the conditions on willingness to communicate ($\beta = -.66$, $t = -3.27$, $p < .01$) became insignificant ($\beta = .09$, $t = .51$, $p > .05$) after the mediators were included in the path. In short, participants were more socially attracted to and less anxious in communicating with the integrated Chinese student than with the separated Chinese student, which consequently led to participants' greater willingness to communicate with the integrated Chinese student than with the separated Chinese student.

Integration-marginalization. Bootstrap results indicated that there were total indirect effects of the conditions on willingness to communicate through both mediators, $\beta = -.73$ _[95%CI = -.98; -.48], $SE = .13$, $z = -5.70$. Social attractiveness ($\beta = -.61$ _[95%CI = -.86; -.40], $SE = .11$, $z = -5.24$) and communication anxiety ($\beta = -.12$ _[95%CI = -.28; -.03], $SE = .06$, $z = -2.00$) were significant mediators. Specifically, the total effects of the conditions on willingness to communicate ($\beta = -.82$, $t = -4.07$, $p < .001$) became insignificant ($\beta = .09$, $t = -.57$, $p > .05$) after the mediators were included in the path. In short, participants were more socially attracted to and less anxious in communicating with the integrated Chinese student than with the marginalized Chinese student, which consequently led to participants' greater willingness to communicate with the integrated Chinese student than with the marginalized Chinese student.

Separation-marginalization. Bootstrap results indicated that there were no total indirect effects of the conditions on willingness to communicate through either mediator. Specifically, neither social attractiveness nor communication anxiety mediated the relationship between the conditions and willingness to communicate.

Table 10

Results for Hypothesis 3: Indirect Effects of the Conditions on Willingness to Communicate Through Social Attractiveness and Interpersonal Communication Anxiety.

		Point Estimate	Product of Coefficients		Bias Corrected and Accelerated 95% CI	
			SE	Z	Lower	Upper
Assimilation-Integration	Total	-.26	.16	-1.67	-.57	.05
	Social Attractiveness	-.23	.13	-1.78	-.49	.02
	Communication Anxiety	-.03	.05	-.69	-.14	.06
Assimilation-Separation	Total	-1.01	.16	-6.14	-1.35	-.70
	Social Attractiveness	-.81	.15	-5.43	-1.12	-.53
	Communication Anxiety	-.20	.07	-2.86	-.38	-.09
Assimilation-Marginalization	Total	-.99	.16	-6.25	-1.31	-.69
	Social Attractiveness	-.83	.15	-5.61	-1.16	-.57
	Communication Anxiety	-.15	.06	-2.45	-.31	-.06
Integration-Separation	Total	-.75	.14	-5.41	-1.03	-.49
	Social Attractiveness	-.58	.12	-4.78	-.84	-.37
	Communication Anxiety	-.17	.07	-2.51	-.33	-.06
Integration-Marginalization	Total	-.73	.13	-5.70	-.98	-.48
	Social Attractiveness	-.61	.12	-5.24	-.86	-.40
	Communication Anxiety	-.12	.06	-2.00	-.28	-.03
Separation-Marginalization	Total	.02	.12	.19	-.21	.26
	Social Attractiveness	-.03	.10	-.28	-.22	.16
	Communication Anxiety	.05	.04	1.14	-.02	.16

Model Summary: $R^2 = .53$, adjusted $R^2 = .51$, $F(10, 239) = 27.25$, $p < .001$

Summary

Hypothesis 1 predicted that participants would be most willing to communicate with the assimilated student followed by the integrated, marginalized, and separated student. Showing a partial support to the hypothesis, univariate analysis of variance results demonstrated that participants were more willing to communicate with both the assimilated and integrated Chinese international students than with the marginalized and separated students.

Hypothesis 2 predicted that participants' would judge the assimilated Chinese international student the most positively followed by the integrated, marginalized, and separated student. Partially supporting the hypothesis, multivariate analysis of variance results demonstrated that the assimilated and integrated Chinese international students were perceived to be equally more socially attractive than the separated or marginalized student. Likewise, participants perceived equally less anxiety in communicating with the assimilated and integrated students than with the marginalized or separated student.

Hypothesis 3 predicted that interpersonal communication anxiety and social attractiveness would mediate the effects of the experimental condition on willingness to communicate. Nonparametric bootstrapping results demonstrated that conditions indirectly influenced American host nationals' willingness to communicate with a Chinese international student through their perceptions of communication anxiety with and social attractiveness of the student. Specifically, consistent with the results from Hypotheses 1 and 2, American host nationals were more socially attracted to and less anxious in communicating with the assimilated and integrated Chinese students than with the separated or marginalized student, which consequently led to greater willingness to communicate with the assimilated and integrated students than with the separated or marginalized student.

CHAPTER FIVE

DISCUSSION

Guided by the theories of intergroup and intercultural communication research, this experimental study examined the effects of the cultural adaptation strategies on willingness to communicate through interpersonal communication anxiety and social attractiveness in the context of American host nationals' encounters with Chinese international students. The Intergroup Contact Hypothesis and its literature describe the central role played by individuals' contact experiences with outgroup members in interpersonal and intergroup relations (Brown & Hewstone, 2005; Gaertner & Dovidio, 2000). Advancing the Intergroup Contact Hypothesis, the Common Ingroup Identity Model (Gaertner et al., 1994) explains how we categorize others in our mind influences our perceptions of others and specifies four specific contact conditions which can encourage or discourage interpersonal and intergroup relations. These theoretical frameworks have guided the majority of intergroup research and presented solid empirical support for the positive functions of the optimal contact conditions which contain a sense of common ingroup identity. Extending the scope of these intergroup theories, the current study examined the effects of the contact conditions in an intercultural context by incorporating the acculturation framework (Berry, 1980).

There were four major goals for this study. First, an individual level communication outcome variable, willingness to communicate, was the focal point of the current investigation. Willingness to communicate is a catalyst of interpersonal relationship development, which is the foundation for improved intergroup relations as its extension. Second, this study examined the mediating role of both positive and negative intervening variables. Examination of two mediating variables advances the prior intergroup contact literature and theory on

communication anxiety (Gudykunst, 1988, Pettigrew & Tropp, 2008). Third, this study integrated CIIM and the acculturation framework in examining the effects of the optimal contact conditions. Intergroup and intercultural contact scholars have discussed the benefits of integrating these two theoretical frameworks in intercultural communication research (Brown, 2000; Gaertner & Dovidio, 2000). This study is one of the initial forays into combining or using these theoretical frameworks in the field of intercultural communication. Finally, the majority status group's perspective provides insights about how international students with different cultural adaptation strategies are perceived by host nationals in American culture.

This chapter first summarizes the major findings and provides theoretical explanations of the findings. This chapter also discusses theoretical contributions to intergroup and intercultural research as well as practical implications. In addition, limitations and suggestions for future research are discussed.

Effects of the Acculturation Strategies/Contact Conditions on Interpersonal Outcomes

Guided by prior intergroup contact literature (Dovidio et al., 2000; Greenland & Brown, 1999; Eller & Abrams, 2004), the current study predicted that the assimilated Chinese international student would be judged in the most positive light, followed by the integrated, marginalized, and separated students. Overall, the mean scores of American participants' willingness to communicate were relatively high (i.e., M range = 4.67-5.63). That is to say, American host nationals are generally motivated to communicate with Chinese international students for a few possible reasons. First, in an age of globalization, willingness to communicate with people from different cultures is a desired quality in various contexts. Therefore, social desirability may have influenced the levels of American participants' willingness to communicate with Chinese international students. Second, recent rapid economic growth in

China as well as the economic relationship between China and the U.S. may have elevated the social status of individuals from China, influencing American participants' motivation to communicate with Chinese international students. It is highly likely that American participants were aware of the necessity and importance of establishing a positive relationship with Chinese people both at individual and societal levels. Finally, the mean scores of American participants' interpersonal communication anxiety with Chinese international students were relatively low (M range = 2.63-3.44). That is to say, American host nationals are generally comfortable communicating with Chinese international students. A low level of communication anxiety, consistent with prior literature on communication anxiety (Gudykunst, 1988), is indicative of increased willingness to communicate.

That being said, results from this study demonstrated how American host nationals' willingness to communicate with Chinese international students can be further improved. Specifically, Hypothesis 1 and 2 predicting the effects of the cultural adaptation strategies on interpersonal outcomes were partially supported. The assimilated and integrated students received significantly more positive judgments than did the marginalized and separated students. Similarly, the marginalized and separated students were judged significantly less positively than were the assimilated and integrated students. Specifically, American participants were most socially attracted to and willing to communicate with the assimilated student, followed by the integrated, separated, and marginalized students. American participants reported least anxiety in communicating with the assimilated student, followed by the integrated, marginalized, and separated students. However, there were no significant differences in communication anxiety, social attractiveness, and willingness to communicate between the assimilation and integration conditions or between the marginalization and separation conditions.

In the contexts of intercultural encounters, some previous studies (Dovidio et al., 2007; Nier et al., 2001) have shown a difference in the strength of the effects of contact between the majority and minority status groups' perspectives. Specifically, the majority status group prefers the one group identification (i.e., assimilation) to two sub-groups in one group identification (i.e., integration). However, consistent with the findings from the majority of previous acculturation and intergroup contact research in intercultural contexts (Eller & Abrams, 2004; Kosic et al., 2005; see also van Oudenhoven et al., 1998), results from this study demonstrated equally positive functions of the assimilation (i.e., one group identification) and integration (i.e., two sub-groups in one group identification) conditions. These results imply that, regardless of the levels of the Chinese international student's identification with Chinese culture (i.e., low as in the assimilation condition or high as in the integration condition), American host nationals judged the student positively as long as the student showed a strong sense of connection to American culture by assimilating or integrating to the American society. On the contrary, American host nationals judged the student in a negative manner when they perceived a minimized common cultural ingroup identity displayed in the separation and marginalized conditions. Hence, findings from the current study provide additional empirical support for the constructive functions of a common ingroup identity in an intercultural context.

In general, perceived cultural ingroup identity helps cultivate feelings of liking and comfort in communicating with members of one's ingroup. The concept of ingroup favorability postulated by SIT (Tajfel & Turner, 1979) explains the positive function of a common ingroup identity found in the current study. When American host nationals perceived the Chinese international students to be a part of American culture (i.e., assimilation and integration), ingroup favoritism activates liking of the student. In addition, individuals are generally less anxious in

communicating with their own ingroup members (Gudykunst & Kim, 2003). Likewise, presence of a common ingroup identity generates expectations of the communication process being effortless, smooth, and enjoyable, leading to greater willingness to communicate.

On the contrary, perceived absence of cultural ingroup identity prevalent in the separation and marginalization conditions might have activated perceived group membership salience of the Chinese international students. Group membership salience has a destructive function drawing a sharp distinction between ingroup and outgroup memberships, increasing communication anxiety, and guiding communication behaviors (Harwood et al., 2005; Hornsey & Hogg, 2000; Voci & Hewstone, 2003; see also Tajfel & Turner, 1979 for SIT). In fact, a group of scholars have found that perceived group membership salience was linked to increased anxiety and decreased communication satisfaction and mutual understanding literature (e.g., Islam & Hewstone, 1993; Voci & Hewstone, 2003). Consistently, American host nationals reported greater communication anxiety and less social attractiveness and willingness to communicate in situations where a group membership to a different culture was salient (i.e., the separation and marginalization conditions) compared to opposite situations (i.e., the assimilation and integration conditions).

Differentiating interracial and intercultural contexts, characteristics unique to intercultural encounters also explain the positive functions of the assimilation and integration conditions. Prior research has shown that the majority status group prefers and expects racial minority status groups to assimilate into the majority group's norms, systems, and lifestyles (e.g., Nier et al., 2001). However, findings from the current study along with those from previous intercultural studies (e.g., Kosic et al., 2005; van Oudenhoven et al., 1998) demonstrated the equally positive functions of the assimilation (i.e., one group identification) and integration (i.e., two sub-groups in one group identification) conditions. In fact, it is easier for a racial minority

status group to assimilate to the racial majority within the same broad cultural group because the minority status group members typically use the language and communication practices which are not drastically different from those of the majority status group. The current findings imply that the majority status group's preference of the assimilation strategy over the integration observed in the interracial contexts is not as rigid in intercultural contexts. It is perhaps expected that immigrants and sojourners will always identify with their home culture as described in the integration strategy to some degree. Taken together, findings from this study illustrate that the effects of cultural identification with home and host cultures are orthogonal (Tadmor et al., 2009). In other words, what matters to American host nationals is whether immigrants and sojourners identify with American culture.

In intercultural contexts, perceived power dynamic between cultural groups may also have influenced American host nationals' preference between assimilation and integration of Chinese international students. Unlike the interracial contexts in which competition between the racial groups for power and resources is often observed (Allport, 1954; Tajfel & Turner, 1979), the status of international students is lower than that of American host nationals in the American society. When there is a clear status difference, members of the majority or higher status group generally feel less threatened by the other social or cultural groups (Tajfel & Turner, 1979), making it easier for the majority status group members to accept the existence of multiple cultural identities that international students hold. In the current study, the Chinese international student's strong cultural identification with Chinese culture in the integration condition may have mattered little for American host nationals because of their perceived status superiority.

In addition, SIT (Tajfel & Turner, 1979) and SCT (Turner et al., 1987) discuss the concept of relevance in social group comparison. Competition for status and power happens

when members of a group perceive their membership in the group in comparison with a reference group. In short, there should be bases of comparison between membership and reference groups. In the context of this study, it is not guaranteed that American host nationals perceived Chinese culture to be a relevant comparison group to American culture. When two cultures are not clashing against each other, integration may be perceived as positively as assimilation.

Moreover, characteristics of individualistic cultures also provide the reasons why the integrated student was perceived as positively as the assimilated student. Gudykunst and Kim (2003) explained that people in individualistic cultures, contrary to those in collectivistic cultures, acknowledge the fact that each individual belongs to multiple social groups simultaneously in lieu of having a broad concept of membership to an ingroup or outgroup. That is to say, it is perceived natural for a Chinese international student to have equally high identification with both American and Chinese cultures as portrayed in the integration condition. Hence, belongingness to another cultural group does not affect how a Chinese international student is perceived as long as there is a common identity shared with American host nationals. Altogether, comparing the effects of the assimilation and integration conditions in an intercultural context provides an optimistic implication for immigrants and sojourners. The preferred acculturation style among immigrants and sojourners, integration (van Oudenhoven et al., 1998), is also an optimal contact condition.

Consistent with the majority of previous studies which demonstrated no difference in the functions of the separation and marginalization conditions (e.g., Piontkowski et al., 2000; van Oudenhoven et al., 1998), the current study showed no significant difference between these two conditions regarding communication anxiety, social attractiveness, and willingness to

communicate. Analogically, absence of a shared cultural identity elicited feelings of uncertainty and anxiety, perceived diminished similarity, and less willingness to communicate. It is notable, however, that the separated and marginalized conditions demonstrated slightly different effects on communication anxiety compared to social attractiveness and willingness to communicate. Although not statistically significantly different, American host nationals perceived the separated student to be slightly more socially attractive and reported greater willingness to communicate with the separated student compared to the marginalized student, whereas participants were more anxious to communicate with the separated student than with the marginalized student.

Results showing a slightly better interpersonal consequence (i.e., communication anxiety) of the marginalization condition in comparison with the separation condition are consistent with prior intergroup literature on group categorization (Dovidio et al., 2000; Miller, 2002; Stephan & Stephan, 1985). Traditionally, intergroup scholars have argued that a context which is highly intergroup in nature as in the separation condition provokes communication anxiety (Stephan & Stephan, 1985). Consistently, this study demonstrated that American host nationals were more anxious in communicating with the separated student than with the marginalized student. Similarly, the concept of personalization (i.e., decategorization) provides additional explanation to the function of the marginalization condition (Miller, 2002). The marginalization condition (i.e., individuals identification) adheres to the characteristics of personalization (i.e., decategorization), a contact condition which activates attributes of a contact counterpart that are based on a self-other comparison instead of an ingroup-outgroup comparison (Miller, 2002). When individuals perceive their contact counterpart apart from a certain social group (i.e., marginalization), decreased communication anxiety can be expected compared to a situation where a contact counterpart demonstrates a clear cultural group boundary (i.e., separation).

Nonetheless, American participants' perceived communication anxiety with Chinese international students ranged from low to moderate (M range = 2.63-3.44 on a 7-point scale). Two possible explanations can be explored. First, as an increasing number of Chinese students are attending the higher institutions in the U.S. (Institute of International Education, 2011), American host nationals may be accustomed to communicating with Chinese students in general. Moreover, increasing diversity in U.S. campuses has resulted in increased opportunity for intercultural encounters. Therefore, American host nationals are exposed to diversity in general. Second, each scenario described a Chinese international student's daily activity centering on campus. Although campus activities are a large part of daily life for international students, Chinese international students' affiliation with the university may have decreased American host nationals' feelings of anxiety. As CIIM and its literature suggest, university affiliation creates a sense of common ingroup to some degree.

On the contrary, the separated Chinese student was perceived more positively than the marginalized student regarding social attractiveness and willingness to communicate. What motivates American host nationals to communicate with international students as well as to accept them may be explained by applying characteristics unique to intercultural encounters. In intercultural encounters, American host nationals have less need to engage in communication or to develop interpersonal relationships with international students than vice versa (Dunne, 2009). In addition, intercultural communication requires more effort than intracultural communication (Gudykunst & Shapiro, 1996). Hence, American host nationals' willingness to communicate with the Chinese international students and perceived social attractiveness of the students may be influenced by peripheral factors, such as predicted amount of efforts required in communicating or developing a relationship. Predictability, to some degree, determines perceived simplicity and

ease in communicating or forming relationships with others. When individuals are able to make predictions, they tend to feel more certain about their own and others' behaviors (Gudykunst & Kim, 2003). Certainty or confidence, consequently, may have influenced American host nationals' willingness to communicate with and liking of the separated student in comparison with the marginalized student.

Predictions are typically activated by the use of stereotypes in intercultural encounters. Hummert (1999) defined stereotypes as person-perception schemas about groups and argues that stereotypes serve as an important knowledge basis that guides individuals' communication behaviors. That is to say, individuals tend to apply their stereotypical views of groups to interpersonal interactions, even though predictions based on stereotypes are not always applicable to individual members of the group (Berger, 1986; Hewstone & Giles, 1986). Supporting this view, Gudykunst and Kim (2003) argued that stereotypes reduce uncertainty and increase confidence in predicting others' behaviors in interactions and interpersonal relationships. Due to the clear cultural marker portrayed in the separation condition, stereotypical views of Chinese international students in general may have been more readily accessible to American host nationals compared to the marginalization condition. As a result, American host nationals may have perceived less effort in discovering how to interact or to develop a relationship. On the contrary, it is highly likely that the marginalized student was perceived to be more effort consuming when interacting or developing a relationship with due to the considerable amount of unknown information about cultural group identification (Dunne, 2009).

Logically, the function of stereotypes should also reduce the level of anxiety experienced by the American host nationals in their encounter with the separated student compared to the marginalized student than vice versa, as is demonstrated in the current findings. Increased

certainty with the use of stereotypes generally serves to reduce anxiety (Gudykunst, 1988, 1993). Therefore, American host nationals' increased certainty in prediction should lead to reduced anxiety when communicating with the separated student than with the marginalized student. However, the current study revealed otherwise, demonstrating the strong nature of anxiety. In fact, this study also found that American participants' affective attitudes toward Chinese in general as a preexisting condition had significant effects on willingness to communicate and social attractiveness but not on interpersonal communication anxiety. Specifically, American host nationals with more positive attitudes toward Chinese were more willing to communicate with the Chinese international students and perceived greater social attractiveness of the Chinese students. However, American host nationals' positive attitudes toward Chinese did not make a difference in their anxiety when communicating with the Chinese international students. These findings provide additional support for the difficulty in reducing communication anxiety in intercultural contexts. In other words, anxiety is a nearly inevitable human nature. Hence, as Pettigrew and Tropp (2008) claimed, this study suggests that it is crucial to include positive intervening factors beyond anxiety.

In summary, one of the highlights of the findings from this study was the positive functions of a common cultural ingroup identity present in the assimilation and integration conditions. Specifically, perceived similarity marked by cultural group membership is essential for improved interpersonal outcomes from the majority status group's perspective. Altogether, findings from the current study demonstrated an escalated need to examine intergroup theories in intercultural contexts.

Indirect Effects of the Contact Conditions on Communicative Consequence

Responding to the scholarly attention on the mechanisms through which the effects of the contact conditions influence the outcome variable (Brown & Hewstone, 2005; Imamura et al., 2011), the current study explored the mediating effects of communication anxiety and social attractiveness. In general, findings from this study showed the mediation pattern consistent with the prior research on anxiety and provided additional support for the call to include positive intervening factors (Pettigrew & Tropp, 2008). Results indicated that both communication anxiety and social attractiveness fully mediated the relationship between the experimental conditions and willingness to communicate. Specifically, American host nationals in the conditions where a common cultural ingroup identity was prevalent (i.e., the assimilation and integration conditions) perceived less communication anxiety with and greater social attractiveness of the Chinese international students compared to those in the conditions where a common cultural ingroup identity was not prevalent (i.e., the separation and marginalization conditions). Furthermore, perceived communication anxiety was a negative predictor of and social attractiveness was a positive predictor of willingness to communicate. In other words, the conditions indirectly influenced willingness to communicate via communication anxiety and social attractiveness. Tests of indirect effects demonstrated that one's willingness to communicate is a consequence of psychological responses (i.e., liking and anxiety) to the contact counterpart. Hence, it is essential to reduce communication anxiety and increase feelings of liking and favorability toward one's contact counterpart in order to induce willingness to communicate with the counterpart. In addition, decreased communication anxiety and increased social attractiveness can be achieved from a perceived common ingroup identity.

In a broad picture, behavioral conducts are often driven by schematic information (e.g., identification and categorization) and psychological responses stimulated from perceived group identity (Harwood et al., 2005). Communication is indeed a behavioral consequence of how individuals perceive and feel about their contact counterparts. Specifically, this study revealed that American host nationals' willingness to communicate is contingent upon their communication anxiety with and perceived social attractiveness of the Chinese international students.

The intervening roles played by communication anxiety and social attractiveness can be explained by Anxiety/Uncertainty Management Theory (AUM; Gudykunst, 1988) as well as the literature on intergroup anxiety (Greenland & Brown, 1999; Stephan & Stephan, 1985). Specifically, the maximum and minimum thresholds of anxiety explain the logic behind the functions of communication anxiety and social attractiveness. The major consequence of anxiety at either end on the threshold is communication avoidance, which is unwillingness to communicate (Gudykunst 1988, 1993). When individuals feel excessively high levels of anxiety, they create a mental barrier in pursuing communication with an outgroup member (Lin & Rancer, 2003; Stephan et al., 1999). In an intercultural encounter, excess levels of anxiety discourage people from communicating with people who are culturally different (Lin & Rancer, 2003). Consistently, high anxiety American host nationals experienced with the Chinese international students in the current study became less willingness to communicate with the student.

In a similar vein, overly reduced anxiety experienced when encountering a contact counterpart discourages communicative engagement. When individuals feel a minimum level of anxiety, they lose interest in getting to know a contact counterpart (Gudykunst, 1988, 1993; Stephan et al., 1999). Logically, lost interest leads to unwillingness to communicate. For this

reason, interpersonal attraction should serve as a positive function bridging the contact conditions and their communication consequences in the same way communication anxiety does. Specifically, reduced anxiety should be supplemented by interest in getting to know each other for a positive effect of contact to happen. Hence, findings regarding the mediating function of social attractiveness are consistent with the theoretical delineations of AUM. Particularly, American host nationals who perceived the Chinese international students to be socially attractive were more willing to communicate, perhaps with a motivation for developing interpersonal relationships.

The findings regarding the function of social attractiveness in the current study is consistent with the findings from previous study examining the mediating role of a positive intervening function (Imamura et al., 2011). Imamura et al.'s (2011) study found that Japanese sojourners' willingness to engage in communicative behaviors with Americans in general was positively associated with relational solidarity with their most frequent American contact. Their study suggests that positive behavioral consequences, such as willingness to communicate, can be expected through interpersonal level of relational quality.

In summary, analysis of indirect effects provided empirical support for the mediating functions of both interpersonal communication anxiety and social attractiveness in the relationship between the experimental conditions and willingness to communicate. Results demonstrated that one's willingness to communicate is not instantly stimulated based solely on categorization of others, but it is a process in which communication anxiety and social attractiveness bridge the contact conditions and their behavioral consequences. Overall, findings from the current study provide several theoretical and practical implications.

Theoretical Contributions

The current study was guided by theories and literature of intergroup contact (i.e., Intergroup Contact Hypothesis and CIIM), social identity (i.e., SIT and SCT), cultural adaptation (i.e., acculturation framework), and intercultural communication (i.e., AUM). This study seeks explanations of the findings in these major theoretical frameworks and offers empirical contributions to the growing body of intergroup research in intercultural contexts. Specifically, findings from the current study provide empirical support for the benefits of integrating CIIM and the acculturation framework. Second, the positive functions of a common ingroup cultural identity extend the theoretical assumptions of SIT and SCT to intercultural contexts. Third, the current study emphasized the central functions of intervening variables. Fourth, this study challenged the conventional intervening model highlighting the sole mediating function of anxiety by introducing a positive intervening factor. Finally, findings provide support for the theoretical complexity of the Intergroup Contact Hypothesis.

First, the possibility of combining CIIM and the acculturation framework has been discussed in the fields of intergroup contact and cultural adaptation research (Gaertner & Dovidio, 2000; van Oudenhoven et al., 1998). However, limited prior research has examined the causal effects of the contact conditions informed by the acculturation framework on interpersonal or intergroup outcomes. Utilizing an experimental design, the current study established solid empirical support for combining two theoretical frameworks to portray one's cultural group identification in an intercultural context. As expected, the contact conditions with a common ingroup identity marked by strength of identification with the host culture had positive interpersonal consequences from the majority status group's perspective.

Consistent with Brown's (2000) argument, findings from the current study revealed that the functions of optimal contact conditions are widely applicable to various contexts. Host-home cultural relations discussed in the acculturation framework provide a promising way through which a common ingroup identity can be established between host nationals and sojourners. Specifically, from the majority status group's perspective, identification with the main stream culture is a key for immigrants and sojourners to have positive interpersonal communication experiences. In other words, it is the sojourners' cultural identifications manifested in their acculturation strategies that influence how they are evaluated by host nationals. This association is applicable to any cross-cultural situations beyond the American-Chinese context.

Second, the constructive functions of a common ingroup identity further provide contributions to the theories of social identity (e.g., SIT and SCT). SIT (Tajfel & Turner, 1979) as well as CIIM argue that positive consequences of intergroup encounters are the results of ingroup favoritism. In logic, a perceived common ingroup identity cultivates favoritism toward a contact counterpart. However, creation of a common ingroup identity is challenging in an intercultural context where contact counterparts do not share the same native language, communication rules, or social practices. In addition, not only is culture a core part of self-composition, but it is typically inherent in the national or geographical divide. The nature of culture, hence, often creates competition for power and resources (Hecht, Jackson II, & Pitts, 2005), making establishment of a common cultural ingroup identity more difficult than in other intergroup contexts. The current study, however, provided extended support for the function of ingroup favoritism across cultural boundaries by establishing a causal relationship between the optimal contact conditions (i.e., the assimilation and integration strategies) and their

interpersonal consequences. Specifically, ingroup favoritism can be established in intercultural contexts.

Distinguishing the functions of the assimilation condition from those of the integration condition, findings of the current study demonstrating the equally positive effects of these conditions extend the theoretical scope of SCT (Turner et al., 1987). The concept of multiple social identities composing one's self concept typically considers one's cultural identity along with other social identities such as gender, racial and ethnic, and age group identities (Hornsey, 2008). In a diverse world, an increasing number of people have come to experience dual or multiple cultural identities (Hsu, 2010; Tsai et al., 2000). As a result, it has become imperative to examine how multiple cultural identities are perceived. Findings from the current study regarding the positive function of the integration condition imply that the concept and utility of multiple identities discussed in SCT are applicable to intercultural contexts. In other words, the majority status group members (i.e., host nationals) are capable of highlighting the culture shared with their contact counterparts instead of emphasizing the unshared cultural identity. At the same time, however, the current study also demonstrated the persistent nature of cultural boundary. The negative functions found in the marginalized condition indicate that culturally different others are easily viewed as an outgroup member by host nationals even if the marginalized student shows little identification with the home culture.

Third, the current study featured the mechanisms through which the contact conditions link to a communication outcome variable. The results from the current study demonstrated the critical role played by the intervening variables. Specifically, the effect size of the conditions was larger for the intervening variables (i.e., $\eta_p^2 = .16$) than for willingness to communicate (i.e., η_p^2

= .12), suggesting that communicative outcome is not simply an instant outcome but a process to be established.

Fourth, the compelling effects of anxiety have been theoretically and empirically supported in the field of intergroup and intercultural research for the past few decades (Gudykunst, 1988; Stephan & Stephan, 1985). Although prior research has consistently revealed the mediating role of anxiety in the relationship between contact and intergroup relations, there has been a growing need to further understand the role played by an interpersonal level of anxiety in intergroup contact research. A global level of intergroup anxiety is useful in understanding how anticipation of negative consequences leads to one's attitudes toward a different social group. However, increased intergroup anxiety is a consequence of accumulated prior anxiety-raising experiences at an individual level. Hence, by examining the roots of intergroup anxiety found in interpersonal communication, the current study contributed to the prior literature on intergroup anxiety in intergroup contact. The current findings imply that increased communication anxiety propelled by the absence of a common ingroup identity was linked to decreased willingness to communicate. Hence, it is reasonable to assume that limited intercultural interactions would hinder the opportunity to overcome communication anxiety, creating a vicious circle involving interpersonal communication anxiety, willingness to communicate, and intergroup anxiety.

On the one hand, examination of the functions of increased anxiety has enriched understanding of the Intergroup Contact Hypothesis (Brown & Hewstone, 2005). On the other hand, Anxiety/Uncertainty Management Theory postulates that reducing anxiety to the minimum level is disruptive to interpersonal relationship development (Gudykunst, 1993; Stephan et al. 1999). Additionally, reduction of anxiety is remarkably challenging as it is cumulatively learned

from past experiences. Therefore, in order to advance the theories of intergroup contact and anxiety, the current study examined the intervening role of a positive interpersonal variable (i.e., social attractiveness). Only in recent years, the possibility of including a positive intervening variable has begun to receive scholarly attention (Pettigrew & Tropp, 2008; Imamura et al., 2011). In fact, findings from the current study demonstrated stronger effects of social attractiveness compared to communication anxiety. Specifically, the effect size for willingness to communicate was larger with social attractiveness than with interpersonal communication anxiety (see Table 10). Hence, findings from this study point out that anxiety has been overemphasized, while an insufficient number of studies have examined other possible mediating factors.

Finally, the current study illustrated the vital application of the Intergroup Contact Hypothesis. Results from this study have shown that American host nationals' affective attitudes toward Chinese as a preexisting condition was a significant predictor of willingness to communicate. According to the Intergroup Contact Hypothesis, affective attitudes toward a social group are established by individuals' contact experiences (Brown & Hewstone, 2005; Imamura et al., 2011). In a broad scope, the current study offers a conceptual cyclical relationship among contact, willingness to communicate, and intergroup attitudes as an extension. That is to say, affective attitudes cannot be established without one's willingness to communicate, as a communicative engagement is the catalyst of positive interpersonal contact experiences. Essentially, communication influences and is influenced by perceptions of social groups (e.g., affective attitudes).

Practical Implications

Theories are only meaningful if considered along with potential practical applications. Therefore, the current study offers a few practical implications for host nationals, immigrants and sojourners, and institutions or communities in the host environment. First, findings from this study provide host nationals with explanations for what makes it easy or difficult for them to engage in intercultural communication. Second, findings from this study offer immigrants and sojourners possible explanations for the reasons why they often experience difficulty in developing interpersonal relationships with host nationals. Overall, findings from this study provide suggestions for administrative, educational, and counseling practitioners to develop effective intercultural communication training programs and strategies to cope with intercultural communication anxiety and uncertainty.

First, for host nationals, a lack of willingness to engage in intercultural communication not only limits them from developing cross-cultural interpersonal relationships but also negatively impacts the development of intercultural empathy and understanding. Specifically, a limited number of intercultural encounters result in difficulty in “conceptualizing the fact that many people have been socialized into a very different culture” (Brislin, 1994, p. 94). Yet, there is a growing need for host nationals to interact and develop interpersonal relationships with international students in the U.S. For one reason, communication and interpersonal relationships with host nationals help immigrants and sojourners make smooth transitions into a new culture (Cushner & Nieman, 1994; Gudykunst & Kim, 2003). Second, interpersonal relationships developed with members of a different cultural group are indicative of improved intercultural attitudes (Allport, 1954; Brown & Hewstone, 2005; Imamura et al., 2011). In short, the examination of the factors which influence host nationals’ communicative engagement with

immigrants and sojourners is the first step toward establishing a cooperative environment where individuals with diverse backgrounds come together.

The current findings demonstrate that reduced anxiety and increased perceived social attractiveness influence American host nationals' willingness to communicate. A few possible routes to improve willingness to communicate can be explored based on the current findings. Intercultural communication anxiety management training is essential for the improvement of host nationals' willingness to communicate with culturally different others. In general, increased anxiety often dominates and guides our behaviors. Therefore, scholars and cognitive-behavioral therapists have long explored the ways to reduce anxiety (Butler, Cullington, Munby, Amies, & Gelder, 1984; McNally, 2007). Communication anxiety is not an exception. Especially when an individual's attention is drawn to group differences, increased communication anxiety leads to decreased amount of communicative engagement. One potentially effective method used in behavioral therapies can be applied to reducing communication anxiety. Empirical and practical evidence has demonstrated that sensitization through exposures to anxiety-rising objects or people helps reduce anxiety (Butler et al., 1984; McNally, 2007). Therefore, providing opportunities for host nationals to have direct contacts with culturally different others would help reduce anxiety when encountering individuals from different social groups.

In addition, intergroup communication scholars have sought out simpler than yet as effective as sensitization to decrease communication anxiety and to improve interpersonal and intergroup relations. For example, Crisp and Turner (2009) summarized prior intergroup contact research utilizing imagined interactions and concluded that imagining positive interactions with people from different social group actually reduce levels of anxiety. Applying the empirically supported functions of imagined interaction, training programs to help not only host nationals but

also international students envision positive communication experiences with culturally different others would be beneficial.

Furthermore, Gudykunst and Kim (2003) applied the concept of mindfulness to Anxiety/Uncertainty Management Theory as a way to reduce anxiety and uncertainty to a manageable level. Mindfulness in communication refers to awareness and consciousness of our communication behaviors (Gudykunst & Kim, 2003). Awareness of communication behaviors allows us to be open to new information and perspectives, letting us be more comfortable with unscripted and unhabitual communication practices. The concept of mindfulness, thus, can be utilized to improve willingness to communicate with people with different cultural backgrounds by bringing the levels of anxiety and uncertainty to the optimal levels.

Although reduction of anxiety is a practical skill applicable to various communication contexts, it is not the sole solution for improving willingness to communicate. On the one hand, anxiety has a persistent nature due to its function protecting human beings from potential harm or damage (Fendt & Fanselow, 1999). Especially in a stranger-to-stranger encounter, excess amounts of unfamiliarity easily trigger anxiety. Supporting this view, the current findings demonstrated that American host nationals' communication anxiety was not even affected by their affective attitudes toward Chinese. On the other hand, a lack of anxiety has a negative impact on willingness to communicate (e.g., AUM; Gudykunst, 1988). That is to say, a maximized degree of familiarity counteracts against curiosity which is generally a driving factor of communicative engagement. Hence, improvement of perceived social attractiveness carries another key role in motivating host nationals to communicate with immigrants and sojourners.

Findings from this study demonstrate two ways to increase interpersonal attraction. Specifically, interpersonal attraction can be achieved through the presence of a common ingroup identity as well as affective attitudes. Therefore, education explaining the role of identity and creating awareness of how our social identity influences our perceptions of others should help host nationals actively seek an inclusive identity shared with their contact counterparts. For example, one of the practical ways to utilize the effects of a common ingroup identity may be to expand the definition of cultural ingroup. With a more broad and flexible concept of a cultural ingroup, more inclusive attitudes in categorizing others can be expected. As an additional benefit, an inclusive definition of a cultural ingroup also helps reduce communication anxiety because people are typically less anxious with their cultural peers.

Furthermore, providing incoming international students with sufficient instructions on college life in the U.S. is essential for them to successfully merge into the new environment. The assimilation and integration scenarios describing Chinese international students' identification with American culture as manifested in their daily involvement in activities, such as university related events, demonstrated positive interpersonal outcomes in the current study, showing that these cultural adaptation strategies indeed serve as equivalent of cultural identification with American culture. Hence, it would be beneficial for international students to focus on shared interest related to school events and activities in conversations with host nationals. In short, enhancement of the quality of international students' campus life is a way to improve host nationals' willingness to communicate with international students.

Moreover, the results of this study revealed that American host nationals' affective attitudes toward Chinese in general increased not only interpersonal attraction, but also the willingness to communicate. Hence, practical ways to enhance positive attitudes toward other

cultural groups should be explored. One of the most commonly discussed ways to improve intercultural attitudes is through direct positive contact experiences (Brown & Hewstone, 2005; Christian & Lapinski, 2003; Zanna & Rampel, 1988). Therefore, sufficient opportunities for intercultural contact should be offered to host nationals. With the given opportunities, adequate consultation for communication sensitivity, empathy, and understanding should also be emphasized to improve the quality of contact experiences.

Second, from the stand point of immigrants and sojourners, a few suggestions can be taken from the current findings which revealed negative interpersonal consequences of the separation and marginalization conditions. Conventionally, influences of cultural adaptation have been examined for their psychological and behavioral consequences (Suinn, 2010; Sumer et al., 2008; Wang & Mallinckrodt, 2006). Previous studies discussed the critical role played by immigrants' and sojourners' communication experiences with host nationals and their psychological well-being (Lacina, 2002; Suinn, 2010), but without adequate suggestions for how to improve communication experiences. This study investigated more specific mechanisms through which the negative psychological consequences may be observed among culturally maladjusted immigrants and sojourners. Specifically, it is the composite effects between host nationals' unwillingness to communicate and immigrants' and sojourners' disassociation from the host culture that create these negative consequences. Although not easy, immigrants' and sojourners' active efforts to be a part of the host culture play a large part in their well-being because their acculturation strategies determine how they are perceived by host nationals.

Linguistic ability, awareness of difference in norms and social practices in the new environment, and a capacity to acknowledge trial and error as parts of successful cultural adaptation are inevitable. In fact, cultural adaptation research has shown the central role played

by linguistic competence in cultural adaptation (Florsheim, 1997). Hence, sufficient language training should be provided to immigrants and sojourners. In addition, what makes intercultural communication and relationships more challenging than those of intracultural is the differences in social norms and customs (Florsheim, 1997). Immigrants and sojourners should seek assistance in the host institutions, corporations, and communities to be well adjusted. Moreover, cultural adaptation literature has shown that cultural adaptation is a process in which immigrants and sojourners experience achievements and challenges in becoming a part of the host culture (Gudykunst & Kim, 2003). Counseling programs aiming to help immigrants and sojourners get through cultural transitions would also be beneficial (Suinn, 2010).

Finally, it requires collaborative efforts not only at an individual level but also at an institutional level to establish meaningful interpersonal relationships in intercultural contexts. Regardless of the specific goals of international students in the U.S., such as merely to get a degree, to learn English, or to maintain independence, development of interpersonal relationships with host nationals should be emphasized at an institutional level. In fact, each international student has an ambassadorial mission in the host culture, introducing a different culture to host nationals. Hence, academic institutions should establish a feasible program in which host nationals can experience intercultural communication and learn to break down perceived cultural boundaries (Brislin, 1986; see also Pettigrew, 1997). Similarly, they should also establish a program in which international students can seek active assistance when adjusting to a new environment. With these joint efforts, a more inclusive categorization, decreased anxiety, and increased interpersonal attraction lead to willingness to communicate, making it possible for interpersonal relationship to develop into meaningful intergroup relations.

Limitations and Suggestions for Future Research

One major limitation of any experimental research lies in its controlled environment (Reinard, 2008). This typical limitation is applicable to the current study. While the experimental design helps establish a causal relationship (Spencer, Zanna, & Fong, 2005), participants' responses are tied to the highly controlled conditions. In order to grasp a larger picture of how intercultural encounters work in the real world, replication and use of triangulation are suggested (Reinard, 2008). Moreover, participants reported their perceived willingness to communicate in the current study. In order to further advance the theories of intergroup contact, future research should examine actual communication engagement.

Considering the positive effects the assimilation and integration conditions had on interpersonal outcomes from the host nationals' perspective, future study should conduct a longitudinal data collection to examine how assimilation or integration are achieved by international students. Previous studies have illustrated that immigrants and sojourners commonly experience separation or marginalization (Suinn, 2010; Sumer et al., 2008; Wang & Mallinckrodt, 2006), pointing out the difficulty of achieving assimilation or integration. However, for some individuals, separation and marginalization are experienced only during a certain period of time (Hsu, 2010; Tsai et al., 2000). It is particularly meaningful to examine how the proportion of life spent in the host and home countries is associated with one's cultural adaptation (Hsu, 2010; Tsai et al., 2000).

The current study focused only on the European American host nationals' accounts. However, inclusion of other ethnic groups such as African Americans, Asian Americans, and Hispanic Americans in the future research would contribute to a better understanding of intergroup communication from both intercultural and interracial perspectives. In addition,

inclusion of Chinese participants would provide a more conclusive understanding of intercultural communication influenced by a perceived common ingroup cultural identity. It is worthwhile examining whether assimilation and integration are perceived differently from the minority group's perspective. Moreover, Chinese host nationals' perceptions of American sojourners and immigrants in China will also provide an intriguing picture of how CIIM works in a context where sojourners and immigrants are in a privileged position in the social hierarchy.

Furthermore, extending the application of the intersection of CIIM and the acculturation framework, the current study can be replicated in a different intercultural context. For example, prior literature informs that communication is more limited between individuals from the Western and East Asian cultures than between individuals from the Western cultures (Nesdale & Mak, 2003). In this sense, future study should include measurements such as perceived cultural similarity to examine the functions of a common cultural ingroup identity in various cross cultural contexts (Sias et al., 2008).

Finally, overall attitudes toward Chinese as an extension of interpersonal communication outcome should be examined in the future studies. As the Intergroup Contact Hypothesis (Brown & Hewstone, 2005) suggests, future research should investigate how host nationals' perceptions of their contact counterparts with different acculturation strategies can be transcended to attitudes toward Chinese in general. In the future, investigations of intergroup attitudes and host nationals' prior contact experiences should also be considered.

Conclusion

In an age of globalization, examination of interpersonal communication experiences in an intercultural context is of equal importance to exploration of ways to establish a society with minimized intergroup conflict, prejudice, and discrimination at a global level. Essentially, such a

society can solely be created based on accumulation of meaningful interpersonal connections which are achieved through communication with culturally different others. The more diverse a society becomes, the more important it is to investigate intercultural communication indicative of improved interpersonal and intergroup consequences. American culture, in particular, offers one of the most diverse environments in the world (van Oudenhoven et al., 2006). Among all the immigrants and international students coming to the U.S. every year, Chinese immigrants are one of the fastest growing populations (Institute of International Education, 2010; Zhang, 2010). Hence, the current study examined American host nationals' willingness to communicate with Chinese international students.

In intercultural contexts, the power dynamic between majority and minority status groups determines one's need and motivation to engage in intercultural communication (Dunne, 2009). While immigrants' and sojourners' motivation to communicate stems from necessity, host nationals' willingness to communicate is generally influenced by more complex factors. Therefore, this study examined the effects of psychological factors (i.e., four conditions specified by CIIM and the acculturation framework) on behavioral consequences (i.e., willingness to communicate) through mediators (i.e., social attractiveness and communication anxiety). Findings from this study demonstrated the importance of a perceived common cultural ingroup identity in cultivating social attractiveness and in reducing communication anxiety both of which consequently led to increased American host nationals' willingness to communicate with Chinese international students.

Cultural identity is a large part of self concept. Our memberships in cultural groups often define who we are and direct how we relate to others. In this regard, culture defines us and connects us to others, but it also can function to disconnect us from others. This study offers

insights to increase connection. It shows that perceived disassociation based on cultural group boundaries may be altered by cultivating perceived interpersonal attraction and by diminishing interpersonal communication anxiety, as these elements determine the levels of willingness to communication in intercultural contexts. Most importantly, where there is a will to communicate, there is a way to improve interpersonal and intercultural relations. Positive intercultural communication experiences increase empathy toward others with different backgrounds, sensitivity to individual differences beyond social categories, and acceptance of various forms of diversity in the world. Ultimately, the fundamental ability of human beings, to communicate, shapes the world we live in.

References

- Abrams, D., & Hogg, M. A. (2004). Collective identity: Group membership and self-conception. In M. B. Brewer & M. Hewstone (Eds.), *Self and social identity* (pp. 147-181). Malden, MA: Blackwell.
- Allport, G. W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.
- Anderson, S. L., Adams, G., & Plaut, V. C. (2008). The cultural grounding of personal relationship: The importance of attractiveness in everyday life. *Journal of Personality and Social Psychology, 95*, 352-368. doi:10.1037/0022-3514.95.2.352
- Bakker, W., van der Zee, K., & van Oudenhoven, J. P. (2006). Personality and Dutch emigrants' reactions to acculturation strategies. *Journal of Applied Social Psychology, 36*, 2864-2891. Retrieved from <http://www.blackwellpublishing.com/journal.asp?ref=0021-9029&site=1>
- Barbato, C. A., Graham, E. E., & Perse, E. M. (1997). Interpersonal communication motives and perceptions of humor among elders. *Communication Research Reports, 14*, 48-57. doi:10.1080/08824099709388644
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182. doi: 10.1037/0022-3514.51.6.1173
- Barraclough, R. A., Christopiell, D. M., & McCroskey, J.C. (1988). Willingness to communicate: A cross-cultural investigation. *Communication Research Reports, 5*, 187-192. Retrieved from <http://www.tandf.co.uk/journals/titles/08824096.asp>

- Berscheid, E., & Walster, E. H. (1978). *Interpersonal attraction* (2nd ed.). Reading, MA: Addison Wesley.
- Berger, C. R. (1986). Social cognition and intergroup communication. In W. B. Gudykunst (Ed.), *Intergroup communication* (pp. 51-61). London: Edward Arnold.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology*, 46, 5-68.
Retrieved from <http://www.blackwellpublishing.com/journal.asp?ref=0269-994x>
- Berry, J. W. (1992). Acculturation and adaptation in a new society. *International Migration*, 3, 69-85. Retrieved from
<http://www.blackwellpublishing.com/journal.asp?ref=0020-7985>
- Berry, J. W. (1980). Acculturation as varieties of adaptation. In A. Padilla (Ed.), *Acculturation: Theory, models, and findings* (pp. 9-25). Boulder, CO: Westview.
- Berscheid, E., & Walster, E. H. (1978). *Interpersonal attraction* (2nd ed.). Reading, MA: Addison Wesley.
- Binder, J., Zagefka, H., Brown, R., Funke, F., Kessler, T., Mummendey, A., ... Leyens, J. P. (2009). Does contact reduce prejudice or does prejudice reduce contact?: A longitudinal test of the contact hypothesis among majority and minority groups in three European countries, *Journal of Personality and Social Psychology*, 96, 843-856. doi:10.1037/a0013470
- Brewer, M. B., & Miller, N. (1996). *Intergroup relations*. Pacific Grove, CA: Brooks/Cole.
- Brewer, M. B., & Yuki, M. (2007). Culture and social identity. In S. Kitayama & D. Cohen (Eds.), *Handbook of cultural psychology* (pp. 307-322). New York: Guilford Press.

- Brislin, R. W. (1994). Introducing active exercises in the college classroom for intercultural and cross-cultural courses. In K. Cushner & R. W. Brislin (Eds.), *Improving intercultural interactions: Modules for cross-cultural training programs* (pp. 91-108). Thousand Oaks: Sage.
- Brislin, R. W. (1986). Prejudice and intergroup communication. In W. B. Gudykunst (Ed.), *Intergroup Communication* (pp. 74-85). London: Edward Arnold.
- Brown, S. (2011). *Measures of shape: Skewness and Kurtosis*. Retrieved on May 22, 2011 from <http://www.tc3.edu/instruct/sbrown/stat/shape.htm>
- Brown, R. (2000). Social identity theory: Past achievements, current problems and future challenges. *European Journal of Social Psychology, 30*, 745–778. Retrieved from <http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291099-0992>
- Brown, R., & Hewstone, M. (2005). An integrative theory of intergroup contact. *Advances in Experimental Social Psychology, 37*, 255–343. Retrieved from <http://www.sciencedirect.com/science/journal/00652601>
- Butler, G., Cullington, A., Munby, M., Amies, P., & Gelder, M. (1984). Exposure and anxiety management in the treatment of social phobia. *Journal of Consulting and Clinical Psychology, 52*, 642-650. Retrieved from <http://psycnet.apa.org/index.cfm?fa=buy.optionToBuy&id=1984-32085-001>
- Cadinu, M., & Reggiori, C. (2002). Discrimination of a low-status outgroup: The role of ingroup threat. *European Journal of Social Psychology, 32*, 501-515. doi:10.1002/ejsp.105
- Christian, S. E., & Lapinski, M. K. (2003). Support for the contact hypothesis: High school students' attitudes toward Muslims post 9-11. *Journal of Intercultural Communication, 32*, 247-263. Retrieved from <http://www.immi.se/intercultural/>

- Cohen, B. H. (2001). *Explaining psychological statistics* (2nd ed.). New York: John Wiley & Sons, Inc.
- Costarelli, S. (2007). Intergroup threat and experienced affect: The distinct roles of causal attributions, ingroup identification, and perceived legitimacy of intergroup status. *Personality and Social Psychology Bulletin*, *33*, 1481-1491.
doi:10.1177/0146167207303950
- Crisp, R. J., & Turner, R. N. (2009). Can imagined interactions produce positive perceptions?: Reducing prejudice through simulated social contact. *American Psychologist*, *64*, 231-240. doi: 10.1037/a0014718
- Crisp, R. J., Walsh, J., & Hewstone, M. (2006). Crossed categorization in common ingroup contexts. *Personality and Social Psychology Bulletin*, *32*, 1204-1218.
doi:10.1177/0146167206289409
- Crothers, L. M., Shreiber, J. B., Field, J. E., & Kolbert, J. B. (2009). Development and measurement through confirmatory factor analysis of the young adult social behavior scale (YASB): An assessment of relational aggression in adolescence and young adulthood. *Journal of Psychoeducational Assessment*, *27*, 17-28. doi: 10.1177/0734282908319664
- Cushner, K., & Nieman, C. (1994). Managing international and intercultural programs. In K. Cushner & R. W. Brislin (Eds.), *Improving intercultural interactions: Modules for cross-cultural training programs* (pp. 129-145). Thousand Oaks: Sage.

- DeCremer, D., & Leonardelli, G. J. (2003). Cooperation in social dilemmas and the need to belong: The moderating effect of group size. *Group Dynamics: Theory, Research, and Practice*, 7, 168-174. Retrieved from <http://www.apa.org/pubs/journals/gdn/index.aspx>
- Dovidio, J. F., Gaertner, S. L., & Kafati, G. (2000). Group identity and intergroup relations: The common in-group identity model. *Advances in Group Processes*, 17, 1-35. Retrieved from <http://www.emeraldinsight.com/books.htm?issn=0882-6145>
- Dovidio, J. F., Gaertner, S. L., Niemann, Y. F., & Snider, K. (2001). Racial, ethnic, and cultural differences in responding to distinctiveness and discrimination on campus: Stigma and common group identity. *Journal of Social Issues*, 57, 167-188. Retrieved from <http://www.wiley.com/bw/journal.asp?ref=0022-4537>
- Dovidio, J. F., Gaertner, S. L., & Saguy, T. (2007). Another view of “we”: Majority and minority perspectives on a common ingroup identity. *European Review of Social Psychology*, 18, 296-330. doi:10.1080/10463280701726132
- Duck, S. (1988). *Relating to others*. Monterey, CA: Brooks/Cole.
- Dunne, C. (2009). Host students’ perspectives of intercultural contact in an Irish university. *Journal of Studies in International Education*, 13, 222-239. doi:0.1177/1028315308329787
- Eller, A., & Abrams, D. (2004). Come together: Longitudinal comparisons of Pettigrew’s reformulated intergroup contact model and the common intergroup identity model in Anglo-French and Mexican-American contexts. *European Journal of Social Psychology*, 34, 229-256. doi:10.1002/ejsp.194

- Fendt, M., & Fanselow, M. S. (1999). The neuroanatomical and neurochemical basis of conditioned fear. *Neuroscience and Biobehavioral Reviews*, *23*, 743–760.
Retrieved from
<http://homepage.psy.utexas.edu/homepage/class/Psy332/Salinas/Models/Fanselow03.pdf>
- Florsheim, P. (1997). Chinese adolescent immigrants: Factors related to psychological adjustment. *Journal of Youth and Adolescence*, *26*, 143-163. Retrieved from
<http://www.springerlink.com/content/k22u612688187km8/>
- Gaertner, S. L., & Dovidio, J. F. (2000). *Reducing intergroup bias: The common intergroup identity model*. Philadelphia, PA: Psychology Press.
- Gaertner, S. L., Rust, M. C., Dovidio, J. F., Bachman, B. A., & Anastasio, P. A. (1994). The contact hypothesis: The role a common ingroup identity on reducing intergroup bias. *Small Group Research*, *25*, 224-249. Retrieved from <http://sgr.sagepub.com/>
- Gareis, E. (1995). *Intercultural friendship: A qualitative study*. Lanham; New York; London: University Press of America, Inc.
- Gonzalez, R., & Brown, R. (2006). Dual identities in intergroup contact: Group status and size moderate the generalization of positive attitude change. *Journal of Experimental Social Psychology*, *42*, 753-767. doi:10.1016/j.jesp.2005.11.008
- Greenland, K., & Brown, R. (1999). Categorization and intergroup anxiety in contact between British and Japanese nationals. *European Journal of Social Psychology*, *29*, 503-512. Retrieved from
<http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291099-0992>

- Gudykunst, W. B., & Kim, Y. Y. (2003). *Communicating with strangers: An approach to intercultural communication* (4th ed.). New York: McGraw-Hill.
- Gudykunst, W. B. (1993). Toward a theory of effective interpersonal and intergroup communication: An anxiety/uncertainty management perspective. In R. L. Wiseman & J. Koester (Eds.), *Intercultural communication competence* (pp. 33-71). Thousand Oaks, CA: Sage.
- Gudykunst, W. B. (1988). Uncertainty and anxiety. In Y. Y. Kim & W. B. Gudykunst (Eds.), *Theories in intercultural communication* (pp. 123-156). Newbury Park, CA: Sage.
- Gudykunst, W. B., & Shapiro, R. B. (1996). Communication in everyday interpersonal and intergroup encounters. *International Journal of Intercultural Relations*, 20, 19-45.
Retrieved from www.elsevier.com/locate/ijintrel
- Hall, E. T. (1976). *Beyond culture*. New York: Anchor.
- Hardy, L., Roberts, R., Thomas, P. R., & Murphy, S. M. (2010). Test of performance strategies (TOPS): Instrument refinement using confirmatory factor analysis. *Psychology of Sport and Exercise*, 11, 27-35. doi:10.1016/j.psychsport.2009.04.007
- Harwood, J., Giles, H., & Palomares, N. A. (2005). Intergroup theory and communication processes. In J. Harwood & H. Giles (Eds.), *Intergroup communication: Multiple perspectives* (pp. 1-17). New York: Peter Lang Publishing, Inc.
- Harwood, J., Hewstone, M., Paolini, S., & Voci, A. (2005). Grandparent-grandchild contact and attitudes toward older adults: Moderator and mediator effects. *Personality and Social Psychology Bulletin*, 31, 393-406. doi:10.1177/0146167204271577

- Hays, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76, 408-420. doi: 10.1080/03637750903310360
- Hecht, M. L., Jackson II, R. L., & Pitts, M. J. (2005). Culture: Intersections of intergroup and identity theories. In J. Harwood & H. Giles (Eds.), *Intergroup communication: Multiple perspectives* (pp. 21-42). New York: Peter Lang.
- Hendrickson, B., Rosen, D., & Aune, R. K. (2011). An analysis of friendship networks, social connectedness, homesickness, and satisfaction levels of international students. *International Journal of Intercultural Relations*, 35, 281-295. doi:10.1177/1461444810390341
- Hewstone, M., & Brown, R. (Eds.) (1986). *Contact and conflict in intergroup encounters*. Oxford: Basil Blackwell.
- Hewstone, M., & Giles, H. (1986). Social groups and social stereotypes in intergroup communication: A review and model of intergroup communication breakdown. In W. B. Gudykunst (Ed.), *Intergroup communication* (pp.10-26). London: Edward Arnold.
- Hofstede, G. (2001). *Culture's consequence: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed). Thousand Oaks: Sage.
- Hornsey, M. (2008). Social identity theory and self-categorization theory: A historical review. *Social and Personality Psychology Compass*, 2/1, 204-222. doi: 10.1111/j.1751-9004.2007.00066.x

- Hornsey, M. J., & Hogg, M. A. (2000). Subgroup relations: A comparison of mutual intergroup differentiation and common ingroup identity models of prejudice reduction. *Personality and Social Psychology Bulletin*, 26, 242-256. doi:10.1177/0146167200264010
- Hsu, C. F. (2010). Acculturation and communication traits: A study of cross-cultural adaptation among Chinese in America. *Communication Monograph*, 77, 414-425. doi: 10.1080/03637751.2010.499367
- Hummert, M. L. (1999). A social cognitive perspective on age stereotypes. In T. M. Hess & F. Blanchard-Fields (Eds.), *Social cognition and aging*. San Diego: Academic Press.
- Imamura, M., Zhang, Y. B., & Harwood, J. (2011). Japanese sojourners' Attitudes toward Americans: Exploring the influences of communication accommodation, linguistic competence, and relational solidarity in intergroup contact. *Journal of Asian Pacific Communication*, 21, 115-132. doi:10.1075/japc.21.1.09ima
- Institute of International Education. (2011). *Open doors data*. Retrieved January 15, 2011, from <http://www.iie.org/en/Research-and-Publications/Open-Doors/Data>
- Islam, M. R., & Hewstone, M. (1993). Dimensions of contact as predictors of intergroup anxiety, perceived out-group variability, and out-group attitude: An integrative model. *Personality and Social Psychology Bulletin*, 19, 700-710. Retrieved from <http://psp.sagepub.com/>
- Kassing, J. W. (1997). Development of the intercultural willingness to communicate scale. *Communication Research Reports*, 14, 399-403. doi:10.1080/08824099709388683

- Kim, M. S. (2002). *Non-western perspectives on human communication*. Thousand Oaks; London; New Delhi: Sage.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling*. New York: Guilford Press.
- Kosic, A., Mannetti, L., & Sam, D. L. (2005). The role of majority attitudes towards out-group in the perceptions of the acculturation strategies of immigrants. *International Journal of Intercultural Relations*, 29, 273-288. doi:10.1016/j.ijintel.2005.06.004
- Kudo, K. & Simkin, K. A. (2003). Intercultural friendship formation: The case of Japanese students at an Australian university. *Journal of Intercultural Studies*, 24, 91-114. doi:10.1080/0725686032000165351
- Lacina, J. G. (2002). Preparing international students for a successful social experience in higher education. *New Directions for Higher Education*, 117, 21-27. Retrieved from <http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291536-0741/issues>
- Levin, T. R. (2005). Confirmatory factor analysis and scale validation in communication research. *Communication Research Reports*, 22, 335-338. doi: 10.1080/00036810500317730
- Levin, S., van Laar, C., & Sidanius, J. (2003). The effects of intergroup and outgroup friendships on ethnic attitudes in college: A longitudinal study. *Group Processes and Intergroup Relations*, 6, 76-92. doi:10.1177/1368430203006001013

- Lin, Y., & Rancer, A. S. (2003). Ethnocentrism, intercultural communication apprehension, intercultural willingness-to-communicate, and intentions to participate in an intercultural dialogue program: Testing a proposed model. *Communication Research Reports, 20*, 62-72. Retrieved from <http://www.tandfonline.com/loi/rcrr20?genre=journal&issn=0882-4096&>
- Lu, Y., & Hsu, C. F. (2008). Willingness to communicate in intercultural interactions between Chinese and Americans. *Journal of Intercultural Communication Research, 37*, 75-88. doi:10.1080/17475750802533356
- MacIntyre, P. D., Baker, S. C., Clement, R., & Conrod, S. (2001). Willingness to communicate, social support, and language-learning orientations of immersion students. *Studies in Second Language Acquisition, 23*, 369-388. Retrieved from <http://journals.cambridge.org/action/displayBackIssues?jid=SLA>
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research, 39*, 99-128. doi: 10.1207/s15327906mbr3901_4
- McCroskey, J. C. (1992). Reliability and validity of the willingness to communicate scale. *Communication Quarterly, 40*, 16-25. Retrieved from <http://www.informaworld.com/smpp/title~content=t713721778~db=all>
- McCroskey, J. C., & McCain, T. A. (1974). The measurement of interpersonal attraction. *Speech Monographs, 41*, 261-266. Retrieved from <http://www.jamescmccroskey.com/publications/057.pdf>

- McCroskey, L. L., McCroskey, J. C., & Richmond, V. P. (2006). Analysis and improvement of the measurement of interpersonal attraction and homophily. *Communication Quarterly*, 54, 1-31. doi:10.1080/01463370500270322
- McCroskey, J. C., & Richmond, V. P. (1987). Willingness to communicate and interpersonal communication. In J.C McCroskey & J.A. Daly (Eds.), *Personality and interpersonal communication* (pp. 129-156). Beverly Hills, CA: Sage.
- McNally, R. J. (2007). Mechanisms of exposure therapy: How neuroscience can improve psychological treatments for anxiety disorders. *Clinical Psychology Review*, 27, 750-759. doi: 10.1016/j.cpr.2007.01.003
- Miller, N. (2002). Personalization and the promise of contact theory. *Journal of Social Issues*, 58, 387-410. doi: 10.1111/1540-4560.00267
- Morrison, W. M. (2010). China-U.S. trade issues: CRS issue brief for congress. Retrieved on June 15, 2011 from <http://www.fas.org/sgp/crs/row/RL33536.pdf>
- Nesdale, D., & Mak, A. S. (2003). Ethnic identification, self-esteem and immigrant psychological health. *International Journal of Intercultural Relations*, 27, 23-40. Retrieved from www.elsevier.com/locate/ijintrel
- Nier, J. A., Gaertner, S. L., Dovidio, J. F., Banker, B. S., Ward, C. M., & Rust, M. C. (2001). Changing interracial evaluations and behavior: The effects of a common group identity. *Group Processes and Intergroup Relations*, 4, 299-316. doi:10.1177/1368430201004004001
- Operario, D., & Fiske, S. T. (2003). Stereotypes: Content, structure, processes, and context. In R. Brown & S. Gaertner (Eds.), *Blackwell handbook of social psychology: Intergroup processes* (pp. 22-44). Oxford, Blackwell.

- Pettigrew, T. F. (1997). Generalized intergroup contact effects on prejudice. *Personality and Social Psychology Bulletin*, *23*, 173-195. doi: 10.1177/0146167297232006
- Pettigrew, T. F., & Tropp, L. R. (2008). How does intergroup contact reduce prejudice?: Metaanalytic tests of three mediators. *European Journal of Social Psychology*, *38*, 922–934. doi:10.1002/ejsp.504
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, *90*, 751–783. doi:10.1037/0022-3514.90.5.751
- Piontkowski, U., Florack, A., Hoelker, P., & Obdrzalek, P. (2000). Predicting acculturation attitudes of dominant and non-dominant groups. *International Journal of Intercultural Relations*, *24*, 1-26. Retrieved from www.elsevier.com/locate/ijintrel
- Preacher, K. J., & Hayes, A. F. (2008). Contemporary approaches to assessing mediation in communication research. In *The sage sourcebook of advanced data analysis methods for communication research* (pp. 13-54). London: Sage.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, *36*, 717–731. Retrieved from http://kuscholarworks.ku.edu/dspace/bitstream/1808/1491/1/preacher_hayes_2004.pdf
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, *41*, 185-227. Retrieved from <http://www.tandfonline.com/loi/hmbr20?genre=journal&issn=0027-3171>

- Reinard, J. (2008). *Introduction to communication research* (4th Ed.). Boston: McGraw-Hill.
- Rogers, E. M., & Bhowmik, D. K. (1971). Homophily-heterophily: Relational concepts for communication research. *The Public Opinion Quarterly*, *34*, 523-538. Retrieved from www.jstor.org/stable/2747708
- Schofield, J. W., Hausmann, L. R. M., Ye, F., & Woods, R. L. (2010). Intergroup friendships on campus: Predicting close and casual friendships between White and African American first-year college students. *Group Processes and Intergroup Relations*, *13*, 585-602. doi:10.1177/1368430210362437
- Schreiber, J. B., Stage, F. K., King, J., Nora, A., & Barlow, E. A. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *Journal of Educational Research*, *99*, 323-337. Retrieved from <http://rhowell.ba.ttu.edu/semstuff/rptngii.pdf>
- Schug, J., Yuki, M., Horikawa, H., & Takemura, K. (2009). Similarity attraction and actually selecting similar others: How cross-societal differences in relational mobility affect interpersonal similarity in Japan and the USA. *Asian Journal of Social Psychology*, *12*, 95-103. doi:10.1111/j.1467-839X.2009.01277.x
- Shim, Y. R., & Schwartz, R. C. (2007). The relationship between degree of acculturation and adjustment difficulties among Korean immigrants living in a Western society. *British Journal of Guidance and Counseling*, *35*, 409-426. doi:10.1080/03069880701593516
- Shupe, E. I. (2007). Clashing cultures: A model of international student conflict. *Journal of Cross-Cultural Psychology*, *38*, 750-771. doi:10.1177/0022022107308996

Sias, P. M., Drzewiecka, J. A., Mearns, M., Bent, R., Konomi, Y., Ortega, M., & White, C.

(2008). Intercultural friendship development. *Communication Reports*, 21, 1-13.

doi: 10.1080/08934210701643750

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equations models. In S. Leinhardt (Ed.), *Sociological methodology 1982* (pp. 290–312). San Francisco: Jossey-Bass.

Sobel, M. E. (1986). Some new results on indirect effects and their standard errors in covariance structure models. In N. Tuma (Ed.), *Sociological methodology 1986* (pp. 159–186). Washington, DC: American Sociological Association.

Spencer, S. J., Zanna, M. P., & Fong, G. T. (2005). Establishing a causal chain: Why experiments are often more effective than meditational analyses in examining psychological processes. *Attitudes and Social Cognition*, 89, 845-851. doi: 10.1037/0022-3514.89.6.845

Stephan, W. G., Diaz-Loving, R., & Duran, A. (2000). Integrated threat theory and intercultural attitudes: Mexico and the United States. *Journal of Cross-Cultural Psychology*, 31, 240-249. doi:10.1177/0022022100031002006

Stephan, W. G., & Stephan, C. W. (1985). Intergroup anxiety. *Journal of Social Issues*, 41, 157-175. Retrieved from <http://onlinelibrary.wiley.com/journal/10.1111/%28ISSN%291540-4560/issues>

Stephan, W. G., Stephan, C. W., & Gudykunst, W. B. (1999). Anxiety in intergroup relations: A comparison of anxiety/uncertainty management theory and integrated threat theory. *International Journal of Intercultural Relations*, 23, 613-628. Retrieved from www.elsevier.com/locate/ijintrel

- Suinn, R. M. (2010). Reviewing acculturation and Asian Americans: How acculturation affects health, adjustment, school achievement, and counseling. *Asian American Journal of Psychology, 1*, 5-17. doi:10.1037/a0018798
- Sumer, S., Poyrazli, P., & Grahame, K. (2008). Predictors of depression and anxiety among international students. *Journal of Counseling and Development, 86*, 429-437. Retrieved from <http://www.accessmylibrary.com/archive/2344-journal-of-counseling-and-development.html>
- Tadmor, C. T., Tetlock, P. E., & Peng, K. (2009). Acculturation strategies and integrative complexity: The cognitive implications of biculturalism. *Journal of Cross-Cultural Psychology, 40*, 105-139. doi:10.1177/0022022108326279
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of social conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey: Brooks/Cole.
- Tropp, L. R., & Pettigrew, T. F. (2005a). Differential relationships between intergroup contact and affective and cognitive dimensions of prejudice. *Personality and Social Psychology Bulletin, 31*, 1145-1158. doi:10.1177/0146167205274854
- Tropp, L. R., & Pettigrew, T. F. (2005b). Relationships between intergroup contact and prejudice among minority and majority status groups. *Psychological Science, 16*, 951-957. Retrieved from <http://www.psych.umn.edu/courses/spring06/borgidae/psy5202/readings/tropp%20et%20al%20%282005%29.pdf>

- Tsai, J. L., Ying, Y. W., & Lee, P. A. (2000). The meaning of “being Chinese” and “being American”: Variation among Chinese American young adults. *Journal of Cross-Cultural Psychology, 31*, 302-332. doi:10.1177/0022022100031003002
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, England; Blackwell.
- van Oudenhoven, J. P., Prins, K. S., & Buunk, B. P. (1998). Attitudes of minority and majority members towards adaptation of immigrants. *European Journal of Social Psychology, 28*, 995-1013. Retrieved from <http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291099-0992/issues>
- van Oudenhoven, J. P., Ward, C., & Masgoret, A. M. (2006). Patterns of relations between immigrants and host societies. *International Journal of Intercultural Relations, 30*, 637-651. doi:10.1016/j.ijintrel.2006.09.001
- Verbrugge, L. M. (1977). The structure of adult friendship choices. *Social Forces, 56*, 576-597. Retrieved from <http://www.jstor.org/pss/2577741>
- Voci, A., & Hewstone, M. (2003). Intergroup contact and prejudice toward immigrants in Italy: The mediational role of anxiety and the moderational role of group salience. *Group Processes and Intergroup Relations, 6*, 37-54. doi:10.1177/1368430203006001011
- Walther, J. B., van der Heide, B., Kim, S. Y., Westerman, D., & Tong, S. T. (2008). The role of friends' appearance and behavior on evaluations of individuals on facebook: Are we known by the company we keep? *Human Communication Research, 34*, 28-49. doi:10.1111/j.1468-2958.2007.00312.x

- Wang, C. C. D. C., & Mallinckrodt, B. (2006). Acculturation, attachment, and psychosocial adjustment of Chinese/Taiwanese international students. *Journal of Counseling Psychology, 53*, 422-433. doi:10.1037/0022-0167.53.4.422
- Ward, C., & Kennedy, A. (1999). The measurement of sociocultural adaptation. *International Journal of Intercultural Relations, 23*, 659-677. Retrieved from www.elsevier.com/locate/ijintrel
- Weiss, S. D., & Houser, M. L. (2007). Student communication motives and interpersonal attraction toward instructor. *Communication Research Reports, 24*, 215-224. doi:10.1080/08824090701439091
- West, T. V., Pearson, A. R., Dovidio, J. F., Shelton, J. N., & Trail, T. E. (2009). Superordinate identity and intergroup roommate friendship development. *Journal of Experimental Social Psychology, 45*, 1266-1272. doi:10.1016/j.jesp.2009.08.002
- Wolsko, C., Park, B., Judd, C. M., & Bachelor, J. (2003). Intergroup contact: Ethnicity on group evaluations and perceived variability. *Group Processes and Intergroup Relations, 6*, 93-110. doi:10.1177/1368430203006001014
- Yeh, C. J., & Inose, M. (2003). International students' reported English fluency, social support satisfaction, and social connectedness as predictors of acculturative stress. *Counseling Psychology Quarterly, 16*, 15-28. doi:10.1080/0951507031000114058
- Yuki, M. (2003). Intergroup comparison versus intragroup relations: A cross-cultural examination of social identity theory in North American and East Asian cultural contexts. *Social Psychology Quarterly, 66*, 166-183. Retrieved from <http://www.jstor.org/stable/1519846>

- Zanna, M. P., & Rampel, J. K. (1988). Attitudes: A new look at an old concept. In D. Bar-Tal & A. W. Kruglanski (Eds.), *The social psychology of knowledge* (pp. 315-334). New York: Cambridge University Press.
- Zhang, Q. (2010). Asian Americans beyond the model minority stereotypes: The nerdy and the left out. *Journal of International and Intercultural Communication*, 3, 20-37.
doi:10.1080/17513050903428109
- Zhang, J., & Goodson, P. (2011). Acculturation and psychosocial adjustment of Chinese international students: Examining mediation and moderation effects. *International Journal of Intercultural Relations*, 35, 139-162. doi:10.1016/j.ijintrel.2010.11.011
- Zhang, Y. B., Harwood, J., & Hummert, M. L. (2005). Perceptions of conflict management styles in Chinese intergenerational dyads. *Communication Monographs*, 72, 71-91.
doi:10.1080/0363775052000342535

Appendix A

Acculturation Scenarios in Pilot 1

Introduction to Each Scenario

[Instructions: In this section, you will be given some facts about international students from China and introduced to a typical Chinese student. Researchers in this study interviewed the student and summarized her/his experience in American culture as well as at KU. Please read each paragraph carefully and report your responses to the following questions and statements.]

Chinese is a growing population in the U.S. Each year, the United States accepts a number of immigrants and sojourners (i.e., temporary workers and students) from China. For example, Chinese international students attending institutions in the U.S. was over 98,000 in the academic year of 2009/10. As of today, there are approximately 2,000 Chinese international students at the University of Kansas.

Mei-Lin/Chen is a very typical, one of those Chinese international students at KU. S/he came to the U.S. three years ago, and is currently an undergraduate student at KU.

Assimilation/One Group Condition Scenario

Since s/he came to the U.S., s/he has been using her/his English name, Jennifer/John. S/he enjoys American culture and has many American friends. On her/his free time, s/he spends time with them going out, watching movies, and cheering for Jayhawks at sporting events. When s/he was asked to share her/his experience in the U.S. in intercultural communication class, s/he said, "I don't really think about my Chinese background. I have little contact with other Chinese students on campus, partly because I don't really want to speak Chinese. English allows me to be more expressive and direct. I also adore American food like French fries and pizza. I often watch Seinfeld, and I am following other TV series. After spending a few years in this country, I have assimilated into the American lifestyle. I feel I'm a part of American culture and proud of being a Jayhawk."

Integration/Two Sub-Groups in One Group Condition Scenario

Since s/he came to the U.S., s/he has been using both her/his English name, Jennifer/John, and Chinese name. S/he enjoys American culture and has many American friends with whom s/he spends time going out, watching movies, and cheering for Jayhawks at sporting events. S/he also has many Chinese friends and is an active member of Chinese student organization on campus. When s/he was asked to share her/his experience in the U.S. in intercultural communication class, s/he said, "I really enjoy studying at KU as well as the American lifestyle. At the same time, I also value my Chinese background. I like speaking English because it allows me to be more expressive and direct, but I often like to think and express myself in Chinese. When I get together with my American friends, we often watch TV or movies and order a pizza. With my Chinese friends, we watch Chinese TV shows or sometimes go out to Chinese restaurants. I usually visit one of my American friends' home for Thanksgiving and Christmas. For Chinese New Year celebration, I join my Chinese friends. After spending a few years in this country, I have become aware of the lifestyles of both cultures. I am proud to be a Jayhawk and feel very well connected to both American and Chinese cultures."

Separation/Two Groups Condition Scenario

S/he has many Chinese friends living in the U.S. S/he is an active member of Chinese students organization on campus and attends weekly meetings on weekends. S/he enjoys going out to eat at a Chinese restaurant and watching Chinese TV shows with her/his friends. When s/he was asked to share her/his experience in the U.S. in intercultural communication class, s/he said, "I value my Chinese cultural background. I don't have many American friends, but I don't feel the need as long as I have friends with whom I can share the same values and language. Chinese is the most comfortable language to me and I can always talk to my friends in Chinese. It's hard for me to live like an American person because I don't like American food or TV shows. The purpose of my stay here in the U.S. is really to get my degree and graduate. After spending a few years in this country, I still value the Chinese lifestyle. I am most deeply connected with Chinese culture."

Marginalization/Separate Individuals Condition Scenario

When s/he left China for the States, s/he was hopeful that her/his independent personality would be more appreciated in American culture than in Chinese culture. However, s/he has found her/himself quite lost in the new environment. S/he is having hard time engaging in conversations in English. As a consequence, s/he has little contact with Americans. When s/he talks to Chinese students on campus, s/he finds it difficult to feel connected to them. S/he thinks these Chinese students are attending KU for various motivations and reasons, and their interests are not exactly the same as hers/his. Gradually, s/he lost interest in maintaining her/his original cultural background or assimilating into American culture. When s/he was asked to share her/his experience in the U.S. in intercultural communication class, s/he said, "I just feel that neither Chinese nor American culture appreciates who I am, or I cannot find a way to relate myself to either one of the cultures. I've never felt like getting involved in Thanksgiving or Christmas. I also don't feel like celebrating Chinese New Year. I guess I just don't identify myself with either Chinese or American culture. Since I am a student, I go to classes and sit quietly, but that's pretty much all I do."

Appendix B

Manipulation Check in Pilot 1

Identification with American Culture/University and Chinese Culture

[Instructions: Please indicate the degree to which you agree or disagree with the following statements describing Mei-Lin/Chen's identification with American/KU culture and Chinese culture by choosing a corresponding number. Higher number indicates stronger agreement with each statement (1 = strongly disagree, 4 = neutral, and 7 = strongly agree).]

I think...	Strongly Disagree				Strongly Agree		
	1	2	3	4	5	6	7
1. Mei-Lin/Chen is a part of American culture.	1	2	3	4	5	6	7
2. Mei-Lin/Chen is a part of KU student group, Jayhawk.	1	2	3	4	5	6	7
3. Mei-Lin/Chen is a part of Chinese culture.	1	2	3	4	5	6	7
4. American culture is important to Mei-Lin/Chen.	1	2	3	4	5	6	7
5. Being a Jayhawk is important to Mei-Lin/Chen.	1	2	3	4	5	6	7
6. Chinese culture is important to Mei-Lin/Chen.	1	2	3	4	5	6	7
7. Mei-Lin/Chen likes the American lifestyle.	1	2	3	4	5	6	7
8. Mei-Lin/Chen likes the student lifestyle at KU.	1	2	3	4	5	6	7
9. Mei-Lin/Chen likes the Chinese lifestyle.	1	2	3	4	5	6	7
10. Mei-Lin/Chen is proud of being a part of American culture.	1	2	3	4	5	6	7
11. Mei-Lin/Chen is proud of being a part of Jayhawk.	1	2	3	4	5	6	7
12. Mei-Lin/Chen is proud of being a part of Chinese culture.	1	2	3	4	5	6	7
13. Mei-Lin/Chen communicates with many Americans on daily basis.	1	2	3	4	5	6	7
14. Mei-Lin/Chen communicates with many KU students on campus.	1	2	3	4	5	6	7
15. Mei-Lin/Chen communicates with many Chinese on daily basis.	1	2	3	4	5	6	7
16. Mei-Lin/Chen appreciates American culture.	1	2	3	4	5	6	7
17. Mei-Lin/Chen appreciates the environment at KU.	1	2	3	4	5	6	7
18. Mei-Lin/Chen appreciates Chinese culture.	1	2	3	4	5	6	7

***Note: Items assessing identification with American culture include #1, 2, 4, 5, 7, 8, 10, 11, 13, 14, 16, 17; Items assessing identification with Chinese culture include #3, 6, 9, 12, 15, 18.

Appendix C

Acculturation Scenarios in Pilot 2

Introduction to Each Scenario

[Instructions: In this section, you will read about an international student from China and her/his experience in the United States. Please read each paragraph carefully before you answer the following questions and statements.]

Chinese is a growing population in the U.S. For example, according to the Institute of International Education, Chinese international students attending institutions in the U.S. were over 98,000 in the academic year of 2009/10. As of today, there are approximately 2,000 Chinese international students at the University of Kansas.

Mei-Lin/Chen is one of those Chinese international undergraduate students at KU. S/he came to the U.S. three years ago.

Assimilation/One Group Condition Scenario

Since s/he came to the U.S., s/he has been using her/his English name, Jennifer/John. S/he enjoys American culture and has many American friends. In her/his free time, s/he spends most of her/his time with her/his American friends going out, watching movies, and cheering for Jayhawks at sporting events. S/he is well assimilated into American culture. When s/he was asked to share her/his experience in the U.S., s/he said, "I don't really think about my Chinese background. I have little contact with other Chinese students on campus, partly because I don't really want to speak Chinese. I like speaking English more than Chinese. I also love American food. I often watch American TV series. I enjoy the major American holidays such as Thanksgiving or Christmas. I seldom celebrate Chinese holidays. I feel I'm a part of American culture and proud of being a Jayhawk."

[Instruction: Please answer the following questions based on your understanding of the scenario.]

1. What is the name of the international student? _____
2. What is the sex of the international student? _____
3. How long has s/he been in the United States? _____
4. What does s/he enjoy doing with his/her American friends? Please list one thing.

Integration/Two Sub-Groups in One Group Condition Scenario

Since s/he came to the U.S., s/he has been using both her/his English name, Jennifer/John, and Chinese name, Mei-Lin/Chen. S/he enjoys American culture and has many American friends with whom s/he spends time going out, watching movies, and cheering for Jayhawks at sporting events. S/he also has many Chinese friends and is an active member of Chinese students organization on campus. When s/he was asked to share her/his experience in the U.S., s/he said, “I really enjoy studying at KU as well as the American lifestyle. At the same time, I also value my Chinese background. I like speaking both English and Chinese. I enjoy the major American holidays such as Thanksgiving or Christmas. At the same time, I also like celebrating Chinese New Year or Mid-Autumn Day (the Moon Festival). After spending a few years in this country, I have become aware of the lifestyles of both cultures. I am proud to be a Jayhawk and feel very well connected to both American and Chinese cultures.”

[Instruction: Please answer the following questions based on your understanding of the scenario.]

1. What is the name of the international student? _____
2. What is the sex of the international student? _____
3. How long has s/he been in the United States? _____
4. What are the holidays that s/he enjoys celebrating?

Separation/Two Groups Condition Scenario

S/he has many Chinese friends living in the U.S. S/he is an active member of Chinese students organization on campus and attends weekly meetings on weekends. S/he enjoys hanging out with her/his Chinese friends more than s/he does with Americans. When s/he was asked to share her/his experience in the U.S., s/he said, "I value my Chinese cultural background. I don't have many American friends, but I have many Chinese friends. I enjoy talking to them in Chinese. I don't celebrate the major American holidays such as Thanksgiving or Christmas, but I enjoy celebrating Chinese New Year or Mid-Autumn Day (the Moon Festival). After spending a few years in this country, I still value the Chinese lifestyle. I am most deeply connected with Chinese culture."

[Instruction: Please answer the following questions based on your understanding of the scenario.]

1. What is the name of the international student? _____
2. What is the sex of the international student? _____
3. How long has s/he been in the United States? _____
4. What does s/he enjoy doing with his/her Chinese friends? Please list one thing.

Marginalization/Separate Individuals Condition Scenario

S/he has found her/himself quite lost in the new environment. On the one hand, s/he has little contact with Americans. On the other hand, s/he finds it difficult to connect with Chinese students. When s/he was asked to share her/his experience in the U.S., s/he said, “I find it difficult to socialize with either Chinese or Americans. There are times I feel that neither Chinese nor Americans appreciate me. I've never felt like getting involved in the major American holidays such as Thanksgiving or Christmas. At the same time, I also don't feel like celebrating Chinese New Year or Mid-Autumn Day (the Moon Festival), either. I just don't identify myself with either Chinese or American culture. I guess I don't feel comfortable being with others in general.”

[Instruction: Please answer the following questions based on your understanding of the scenario.]

1. What is the name of the international student? _____
 2. What is the sex of the international student? _____
 3. How long has s/he been in the United States? _____
 4. How does s/he feel about American and Chinese holidays?
-

Appendix D

Manipulation Check in Pilot 2

Identification with American Culture and Chinese Culture

[Instructions: Please indicate the degree to which you agree or disagree with the following statements describing Mei-Lin/Chen's identification with American and Chinese culture by choosing a corresponding number. Higher number indicates stronger agreement with each statement (1 = strongly disagree, 4 = neutral, and 7 = strongly agree).]

I think...	Strongly Disagree						Strongly Agree
	1	2	3	4	5	6	7
1. Mei-Lin/Chen is a part of American culture.	1	2	3	4	5	6	7
2. Mei-Lin/Chen is a part of Chinese culture.	1	2	3	4	5	6	7
3. American culture is important to Mei-Lin/Chen.	1	2	3	4	5	6	7
4. Chinese culture is important to Mei-Lin/Chen.	1	2	3	4	5	6	7
5. Mei-Lin/Chen likes the American lifestyle.	1	2	3	4	5	6	7
6. Mei-Lin/Chen likes the Chinese lifestyle.	1	2	3	4	5	6	7
7. Mei-Lin/Chen is proud of being a part of American culture.	1	2	3	4	5	6	7
8. Mei-Lin/Chen is proud of being a part of Chinese culture.	1	2	3	4	5	6	7
9. Mei-Lin/Chen communicates with many Americans on daily basis.	1	2	3	4	5	6	7
10. Mei-Lin/Chen communicates with many Chinese on daily basis.	1	2	3	4	5	6	7
11. Mei-Lin/Chen appreciates American culture.	1	2	3	4	5	6	7
12. Mei-Lin/Chen appreciates Chinese culture.	1	2	3	4	5	6	7

***Note: Items assessing identification with American culture include #1, 3, 5, 7, 9, 11; Items assessing identification with Chinese culture include #2, 4, 6, 8, 10, 12.

Scenario Identification

[Instructions: Please read the following definitions of four acculturation orientations. After you finish reading them, please answer the following question.]

Assimilation: Sojourners identify strongly with the new/host culture (i.e., American culture), while they identify weakly with their home culture (i.e., Chinese culture). Sojourners with assimilation orientation enjoy the lifestyle in the new/host culture more than that in their home culture.

Integration: Sojourners identify strongly with both new/host culture (i.e., American culture) and their home culture (i.e., Chinese culture). Sojourners with integration orientation enjoy the lifestyles in both the new/host and home cultures.

Separation: Sojourners identify weakly with the new/host culture (i.e., American culture), while they identify strongly with their home culture (i.e., Chinese culture). Sojourners with separation orientation enjoy the lifestyle in their home culture more than that in the new/host culture.

Marginalization: Sojourners identify weakly with the new/host culture (i.e., American culture) and their home culture (i.e., Chinese culture). Sojourners with marginalization orientation tend to withdraw themselves from socializing with others both in the new/host culture and their home culture.

Please pay attention to Mei-Lin/Chen's experience described in the scenario you have read, and indicate which one of the four acculturation orientations reflects her/his experience in the U.S.

_____ orientation reflects Mei-Lin/Chen's experience in the U.S.

Realism

[Instruction: Based on the scenario you have read, please answer the following questions by choosing corresponding numbers.]

How realistic do you think the scenario/story about Mei-Lin/Chen's experience in the U.S. is?								
Not realistic	1	2	3	4	5	6	7	Realistic

How reasonable do you think the scenario/story about Mei-Lin/Chen's experience in the U.S. is?								
Not reasonable	1	2	3	4	5	6	7	Reasonable

Appendix E

Participants' Basic Information in the Main Study

[Instructions: This section asks you to provide some basic background information. Please answer the following questions by choosing a corresponding number or filling in blanks.]

1. What is your age?

_____ years old

2. What is your sex?

1. Male
2. Female

3. What is your racial/ethnic background?

1. European American/Caucasian/White
2. African American/Black
3. Latino American/Hispanic
4. Asian American
5. Other: Please specify _____

4. Are you a citizen of the U.S.?

1. Yes
2. No

5. How many years of education have you received? (e.g., typically 13 years for completing through high school)

_____ years

6. What is your school year at KU?

1. Freshman
2. Sophomore
3. Junior
4. Senior
5. Graduate
6. Non-degree seeking
7. Other: Please specify _____

7. What is your major at KU?

8. a. Do you speak any second language?

1. Yes
2. No

b. If yes, please indicate the language(s) and the level(s) of acquisition.

Language _____	Introductory	1	2	3	4	5	6	7	Advanced
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Language _____	Introductory	1	2	3	4	5	6	7	Advanced
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9. What are your oversea experiences? Please briefly describe your study abroad, short term visits, and traveling experiences in terms of length of each stay, location, and year.

Location _____ / Length of Stay ___ ___ years ___ ___ months /

When _____

Location _____ / Length of Stay ___ ___ years ___ ___ months /

When _____

Location _____ / Length of Stay ___ ___ years ___ ___ months /

When _____

Location _____ / Length of Stay ___ ___ years ___ ___ months /

When _____

Appendix F

Acculturation Scenarios in the Main Study

Introduction to Each Scenario

[Instructions: In this section, you will read about an international student from China and her/his experience in the United States. Please read each paragraph carefully before you answer the following questions and statements.]

Chinese is a growing population in the U.S. For example, according to the Institute of International Education, Chinese international students attending institutions in the U.S. were over 98,000 in the academic year of 2009/10. As of today, there are approximately 2,000 Chinese international students at the University of Kansas.

Mei-Lin/Chen is one of those Chinese international undergraduate students at KU. S/he came to the U.S. three years ago.

Assimilation/One Group Condition Scenario

Since s/he came to the U.S., s/he has been using her/his English name, Jennifer/John. S/he enjoys American culture and has many American friends. In her/his free time, s/he spends most of her/his time with her/his American friends going out, watching movies, and cheering for Jayhawks at sporting events. S/he is well assimilated into American culture. When s/he was asked to share her/his experience in the U.S., s/he said, "I don't really think about my Chinese background. I have little contact with other Chinese students on campus, partly because I don't really want to speak Chinese. I like speaking English more than Chinese. I also love American food. I often watch American TV series. I enjoy the major American holidays such as Thanksgiving or Christmas. I seldom celebrate Chinese holidays. I feel I'm a part of American culture and proud of being a Jayhawk."

[Instruction: Please answer the following questions based on your understanding of the scenario.]

1. What is the name of the international student? _____
2. What is the sex of the international student? _____
3. How long has s/he been in the United States? _____
4. What does s/he enjoy doing with his/her American friends? Please list one thing.

Integration/Two Sub-Groups in One Group Condition Scenario

Since s/he came to the U.S., s/he has been using both her/his English name, Jennifer/John, and Chinese name, Mei-Lin/Chen. S/he enjoys American culture and has many American friends with whom s/he spends time going out, watching movies, and cheering for Jayhawks at sporting events. S/he also has many Chinese friends and is an active member of Chinese students organization on campus. When s/he was asked to share her/his experience in the U.S., s/he said, “I really enjoy studying at KU as well as the American lifestyle. At the same time, I also value my Chinese background. I like speaking both English and Chinese. I enjoy the major American holidays such as Thanksgiving or Christmas. At the same time, I also like celebrating Chinese New Year or Mid-Autumn Day (the Moon Festival). After spending a few years in this country, I have become aware of the lifestyles of both cultures. I am proud to be a Jayhawk and feel very well connected to both American and Chinese cultures.”

[Instruction: Please answer the following questions based on your understanding of the scenario.]

1. What is the name of the international student? _____
2. What is the sex of the international student? _____
3. How long has s/he been in the United States? _____
4. What are the holidays that s/he enjoys celebrating?

Separation/Two Groups Condition Scenario

S/he has many Chinese friends living in the U.S. S/he is an active member of Chinese students organization on campus and attends weekly meetings on weekends. S/he enjoys hanging out with her/his Chinese friends more than s/he does with Americans. When s/he was asked to share her/his experience in the U.S., s/he said, "I value my Chinese cultural background. I don't have many American friends, but I have many Chinese friends. I enjoy talking to them in Chinese. I don't celebrate the major American holidays such as Thanksgiving or Christmas, but I enjoy celebrating Chinese New Year or Mid-Autumn Day (the Moon Festival). After spending a few years in this country, I still value the Chinese lifestyle. I am most deeply connected with Chinese culture."

[Instruction: Please answer the following questions based on your understanding of the scenario.]

1. What is the name of the international student? _____
2. What is the sex of the international student? _____
3. How long has s/he been in the United States? _____
4. What does s/he enjoy doing with his/her Chinese friends? Please list one thing.

Marginalization/Separate Individuals Condition Scenario

S/he has found her/himself quite lost in the new environment. On the one hand, s/he has little contact with Americans. On the other hand, s/he finds it difficult to connect with Chinese students. Although s/he finds it difficult to socialize, s/he regularly attends classes. When s/he was asked to share her/his experience in the U.S., s/he said, “I find it difficult to socialize with either Chinese or Americans. There are times I feel that neither Chinese nor Americans appreciate me. I’ve never felt like getting involved in the major American holidays such as Thanksgiving or Christmas. At the same time, I also don’t feel like celebrating Chinese New Year or Mid-Autumn Day (the Moon Festival), either. I just don’t identify myself with either Chinese or American culture. I guess I don’t feel comfortable being with others in general.”

[Instruction: Please answer the following questions based on your understanding of the scenario.]

1. What is the name of the international student? _____
 2. What is the sex of the international student? _____
 3. How long has s/he been in the United States? _____
 4. How does s/he feel about American and Chinese holidays?
-

Appendix G

Manipulation Check in Main Study

Identification with American Culture and Chinese Culture

[Instructions: Please indicate the degree to which you agree or disagree with the following statements describing Mei-Lin/Chen's identification with American and Chinese culture by choosing a corresponding number. Higher number indicates stronger agreement with each statement (1 = strongly disagree, 4 = neutral, and 7 = strongly agree).]

I think...	Strongly Disagree						Strongly Agree
	1	2	3	4	5	6	7
1. Mei-Lin/Chen is a part of American culture.	1	2	3	4	5	6	7
2. Mei-Lin/Chen is a part of Chinese culture.	1	2	3	4	5	6	7
3. American culture is important to Mei-Lin/Chen.	1	2	3	4	5	6	7
4. Chinese culture is important to Mei-Lin/Chen.	1	2	3	4	5	6	7
5. Mei-Lin/Chen likes the American lifestyle.	1	2	3	4	5	6	7
6. Mei-Lin/Chen likes the Chinese lifestyle.	1	2	3	4	5	6	7
7. Mei-Lin/Chen is proud of being a part of American culture.	1	2	3	4	5	6	7
8. Mei-Lin/Chen is proud of being a part of Chinese culture.	1	2	3	4	5	6	7
9. Mei-Lin/Chen communicates with many Americans on daily basis.	1	2	3	4	5	6	7
10. Mei-Lin/Chen communicates with many Chinese on daily basis.	1	2	3	4	5	6	7
11. Mei-Lin/Chen appreciates American culture.	1	2	3	4	5	6	7
12. Mei-Lin/Chen appreciates Chinese culture.	1	2	3	4	5	6	7

***Note: Items assessing identification with American culture include #1, 3, 5, 7, 9, 11; Items assessing identification with Chinese culture include #2, 4, 6, 8, 10, 12.

Realism

[Instruction: Based on the scenario you have read, please answer the following questions by choosing corresponding numbers.]

How realistic do you think the scenario/story about Mei-Lin/Chen's experience in the U.S. is?								
Not realistic	1	2	3	4	5	6	7	Realistic

How reasonable do you think the scenario/story about Mei-Lin/Chen's experience in the U.S. is?								
Not reasonable	1	2	3	4	5	6	7	Reasonable

Appendix H

Major Measurements in the Main Study

Affective Attitudes toward Chinese

[Instructions: The following sets of adjectives describe your feelings and thoughts about Chinese people in general. Please indicate the degree to which you feel cold-warm, negative-positive, and hostile-friendly toward Chinese by choosing a corresponding number. Higher number indicates more positive feelings you have toward Chinese.]

Cold	1	2	3	4	5	6	7	Warm
Negative	1	2	3	4	5	6	7	Positive
Hostile	1	2	3	4	5	6	7	Friendly

Participants' Strength of Identification with American Culture

[Instructions: Following statements measure your identification with American culture and the membership to KU. Please choose a corresponding number that best represents your agreement or disagreement with each statement by choosing a corresponding number (1 = strongly disagree, 4 = neutral, and 7 = strongly agree). Higher number indicates stronger agreement with each statement.]

	Strongly Disagree				Strongly Agree			
1. I feel like a member of American culture.	1	2	3	4	5	6	7	
2. I am proud to be an American.	1	2	3	4	5	6	7	
3. I often think of myself as an American.	1	2	3	4	5	6	7	
4. American culture is important to me.	1	2	3	4	5	6	7	
5. I like the American lifestyle.	1	2	3	4	5	6	7	
6. I appreciate American culture.	1	2	3	4	5	6	7	

General Instructions after Reading the Scenario

[In this section, imagine a situation you will be meeting Mei-Lin/Chen in person. Based on the descriptions of Mei-Lin/Chen in the scenario you have read, please carefully read each instruction below and answer the following series of questions by choosing corresponding numbers on 7-point scales.]

Willingness to Communicate

[Instructions: The following questions ask you to think about how willing or unwilling you are to communicate with Mei-Lin/Chen. Please indicate the degree to which you are willing or unwilling to engage in each behavior. Higher number indicates stronger agreement with each statement (1 = not willing to, 4 = neutral, and 7 = extremely willing to).]

To what extent are you willing to...	Not Willing to				Extremely Willing to		
	1	2	3	4	5	6	7
1. talk to Mei-Lin/Chen?	1	2	3	4	5	6	7
2. initiate conversations with Mei-Lin/Chen?	1	2	3	4	5	6	7
3. chat with Mei-Lin/Chen?	1	2	3	4	5	6	7
4. communicate with Mei-Lin/Chen?	1	2	3	4	5	6	7

Social Attractiveness

[Instructions: The following statements ask you to think about your perceptions about socializing with Mei-Lin/Chen. Please indicate the degree to which you agree or disagree with the following statements. Higher number indicates stronger agreement with each statement (1 = strongly disagree, 4 = neutral, and 7 = strongly agree).]

	Strongly Disagree				Strongly Agree		
	1	2	3	4	5	6	7
1. I think Mei-Lin/Chen could be a friend of mine.	1	2	3	4	5	6	7
2. It would be difficult to meet and talk with Mei-Lin/Chen.	1	2	3	4	5	6	7
3. Mei-Lin/Chen would be pleasant to be with.	1	2	3	4	5	6	7
4. Mei-Lin/Chen would be sociable with me.	1	2	3	4	5	6	7
5. I could become close friends with Mei-Lin/Chen.	1	2	3	4	5	6	7
6. Mei-Lin/Chen would be easy to get along with.	1	2	3	4	5	6	7

Interpersonal Communication Anxiety

[Instructions: The following statements ask you to think about how you would feel when you encountered a situation to interact with Mei-Lin/Chen. Please indicate the degree to which you agree or disagree with the following statements. Higher number indicates stronger agreement with each statement (1 = strongly disagree, 4 = neutral, and 7 = strongly agree).]

When I interact with Mei-Lin/Chen...	Strongly Disagree				Strongly Agree		
	1	2	3	4	5	6	7
1. I would be self-conscious.	1	2	3	4	5	6	7
2. I would be irritated.	1	2	3	4	5	6	7
3. I would be defensive.	1	2	3	4	5	6	7
4. I would feel suspicious.	1	2	3	4	5	6	7
5. I would be careful.	1	2	3	4	5	6	7