Scholarship and Professional Work - Communication

College of Communication

2018

Appraisal models of intercultural communication apprehension among sojourners.

Rong Ma
Butler University, rma@butler.edu

Dale Hample
University of Maryland at College Park

Recommended Citation

Appraisal Models of Intercultural Communication Apprehension Among Sojourners

Rong Ma and Dale Hample

Department of Communication, University of Maryland, College Park, MD

Rong Ma, 4300 Chapel Lane, 2130 Skinner Building, College Park, MD, 20742. Phone: 301-412-7206; Email: rmah@umd.edu. Dale Hample, 4300 Chapel Lane, 2130 Skinner Building, College Park, MD, 20742. Phone: 301-405-1414; Email: dhample@umd.edu.

Rong Ma is a doctoral student in the Department of Communication at the University of Maryland, College Park. Her research focuses on the role of social identities in interpersonal and mediated communication.

Dale Hample is an associate professor in the Department of Communication at the University of Maryland. His research studies how people take conflict personally in interpersonal interactions, the processes of interpersonal arguing, particularly the role of argument frames and emotions in interpersonal exchange, and inventional capacity, or the number of things an individual can say in an interpersonal exchange. His most recent book is *Interpersonal Arguing* (Peter Lang, 2018).

Appraisal Models of Intercultural Communication Apprehension Among Sojourners

We used Lazarus' appraisal theory of emotions to propose a theoretical model of anxiety, upon which we built two empirical models centering on intercultural communication apprehension (ICA), distinguished by timing. We tested the models in three samples: Chinese in the U.S. ($N = 268$), U.S. Americans who studied abroad ($N = 419$), and U.S. Americans in the U.S ($N = 515$). The models achieved good fit. The results showed that during an anticipated or actual intercultural interaction, people had multiple, potentially conflicting goals. The goal-related appraisals of the situation resulted in emotional reactions, such as ICA, as well as coping strategies. ICA and coping further influenced people's immediacy behaviors and the intention to interact. Our empirical models supported the utility of the theoretical framework for all three samples, and provided advice for practitioners to improve sojourners' time abroad.

Keywords: intercultural communication apprehension, appraisal, emotion, goal, sojourners

Appraisal Models of Intercultural Communication Apprehension Among Sojourners

The world is more fluid than ever. More and more people now travel, live, and receive education across the globe. According to the Institute of International Education (2016a), there were 313,415 U.S. American students who studied abroad in the academic year of 2014-2015, most of whom (87.6%) were undergraduates. In the same academic year, more than one million international students studied in the U.S. Chinese, the largest group of international students, constituted almost one third (31.5%) of this population (Institute of International Education, 2016b).

For these sojourners, the experience of studying and living in a foreign country can be both intellectually and emotionally challenging compared to life in their home country because of the unfamiliar environment in which they become immersed. Sojourners may have different adaptation orientations in the new culture based on their goals of maintaining the home cultural identity and interacting with the host culture (Berry, 1997). In other words, they evaluate the new environment in terms of their goals during the time abroad and use different coping strategies accordingly. Research on acculturation and emotion has suggested that sojourners' goal-related evaluation (i.e., appraisal) of the environment, as well as their coping abilities, have important implications for their psychological wellbeing during the time abroad (Berry, 2005; Folkman & Lazarus, 1988). For example, the achievement of study abroad goals may lead to positive feelings about the experience in the host country (Yang, Webster, & Prosser, 2011), whereas perceived discrimination from and impermeability of the host culture strongly predicted identity conflict for the sojourners (Lin, 2008).

This paper centers on one psychological effect that is particularly important in intercultural encounters, intercultural communication apprehension (ICA). We propose that ICA

is a key element in sojourners' experience with the host culture for two reasons. First, "fitting in socially" was found to be the primary concern of students who studied abroad. Yet, social interactions in the host culture were often appraised as challenging and sometimes threatening, and coping was not always effective (Ryan & Twibell, 2000). ICA is the emotional construct that connects all these factors: sojourners' goals in social interaction, appraisals of social interaction, coping strategies, and the behavioral outcomes (e.g., responsive and assertive communication; Neuliep & Ryan, 1998). In other words, ICA can be the mechanism explaining why people would behave and communicate in a certain, sometimes maladaptive, way in intercultural encounters. Second, ICA has implications beyond the specific interaction and has impact on sojourners' daily life. As a special type of anxiety, intense experience of ICA can lead to distress and dysfunction of the person (see Lazarus, 1991). Moreover, it influences sojourners' communication with the host nationals—high levels of ICA led to unwillingness to communicate with the other culture (Lu & Hsu, 2008), whereas the decrease in ICA predicted the preference for integrating and compromising styles to deal with conflict with the host nationals (Oommen, 2014). Therefore, ICA is a construct within the "affective domain of communication" (Neuliep, 2012, p. 7) that is worth the close examination of intercultural scholars to better understand how people think, feel, and behave in intercultural contexts.

Using the appraisal theory of emotions (Lazarus, 1991), we first outline the theoretical model of anxiety, which we argue is the key emotion that ICA represents. We then derive two empirical models of ICA from our theoretical model, differentiated by timing. We propose that ICA, anxiety triggered by uncertainty in intercultural contexts, is caused by a set of unfavorable goal-related appraisals about anticipated or real communication events. The same appraisals, during the actual interaction, may also lead the individual to actively cope with the situation.

Moreover, ICA, alongside coping, can lead to different behavioral outcomes.

Intercultural communication apprehension

When interacting with those from a different culture, people may be anxious because of uncertainty. In other words, people tend to experience ICA, defined as "the fear or anxiety associated with either real or anticipated interaction with people from different groups, especially different cultural or ethnic groups" (Neuliep & McCroskey, 1997, p. 147).

Previous research has documented correlates, predictors, and effects of ICA in different contexts, but these uncoordinated findings are difficult to synthesize. First, scholars have found that the anticipation of study abroad alone was enough to elicit ICA before students actually started their time abroad, although this anxiety was reduced after the study abroad program (Gullekson, Tucker, Coombs, & Wright, 2011). Second, ICA was lower among people who had strong perceived social support from friends and family (Oommen, 2014) and high emotional intelligence (Fall, Kelly, MacDonald, Primm, & Holmes, 2013), but higher among those who were ethnocentric and intolerant of ambiguity (Goldstein & Kim, 2006). Third, ICA negatively predicted a series of socially desirable intentions and outcomes, such as willingness to communicate with the host nationals (Lin & Rancer, 2003a; Lu & Hsu, 2008) and responsive and assertive communication (Neuliep & Ryan, 1998). Moreover, it influenced people's preference for conflict styles in an intercultural encounter (Oommen, 2014), lowered people's satisfaction with the interaction, and inhibited further uncertainty reduction (Neuliep, 2012). Fourth, group differences in ICA have also been found: For example, South Koreans scored higher on ICA than their U.S. counterparts (Merkin, 2009), whereas men tended to have higher ICA than women (Lin & Rancer, 2003b).

These results are valuable in demonstrating ICA as an important construct in intercultural

communication, but they are somewhat scattered. Much of the research on ICA has been

correlational without a theoretical foundation (cf. Neuliep, 2012). They did not examine the

underlying mechanism why ICA was related to so many other constructs, and thus are limited in

their ability to reveal the implications of such findings. Without an integrative theory to guide

variable-to-variable investigations, researchers may choose new variables unsystematically

(Cartwright, 1979), possibly resulting in no more than a simple inventory of bivariate

associations, and making practical advice less secure (Berger, 2011). Realizing both the merits

and limitations of previous research on ICA, we propose a new theoretical framework to

integrate the findings. We first present the general theoretical model of anxiety, and then propose

two complementary models of ICA—one for anticipated intercultural interactions and one for

ongoing interactions—both derived from Lazarus' appraisal theory of emotions.

Theoretical model

In common with other scholars, we have selected Lazarus' (1991; Scherer, Schorr, & Johnstone,

2001) appraisal theory as a theoretical framework for this investigation. Appraisal theory has an

important place in the study of emotions in interpersonal communication (Metts & Planalp,

2011) and group identity-based communication (Mackie, Maitner, & Smith, 2009). The theory

posits that each discrete emotion is a process that involves a particular set of appraisals, feelings,

physiological reactions, and behavioral tendencies. We center particularly on anxiety, and we

will eventually treat ICA as a particular operationalization of anxiety caused by situational

uncertainty, in common with other scholars' approaches (Afifi & Weiner, 2004; Gudykunst,

2005). We will present our theoretical model in this section, and then propose our empirical

models in the sections that follow.

In contrast to fright, anxiety is less well defined. If one confronts the possibility of failing

an exam and is worried, fright results. The exam worry is the immediate cause. But in the case of anxiety, the negative emotion has a non-specific cause (Öhman, 2008); it is evoked by a sense of uncertainty (So, Kuang, & Cho, 2016). One can feel lost, disconnected, and out of place, but not for a specific reason. Anxiety has mysterious causes and does not imply any particular coping possibilities (Lazarus, 1991).

Lazarus said the primary appraisal elements for anxiety are threefold, and these successively narrow the emotional reaction to that of anxiety. The first is goal relevance, which implicates any emotion. The second is goal incongruence, which means that some negative emotion will result. The third is that ego-involvement consists of protecting one's personal meaning (ego-identity) against existential threats. The third element is what selects anxiety as the reaction, out of all the possible negative emotions. Because the existential threat is undefined, coping possibilities are undefined, and uncertainty colors future expectancies. No secondary appraisal components are necessary. Avoidance is the action tendency stimulated by the presence of anxiety (Lazarus, 1991).

We have displayed this theoretical model in Figure 1. It indicates the outlines of our conceptual system, and we will refine it to describe our particular research problem, ICA, in the next section. The situation is perceived to have (perhaps even to be almost completely registered as having) existential uncertainty. The person cannot securely locate the self in this social system. This could occur for many reasons, but here we wish to point out that it could happen because of deep unfamiliarity with the social context. This leads to the second portion of the theoretical model, anxiety. This is the emotional registration of existential uncertainty (Lazarus, 1991; 2001). Notice that it occurs because no coping mechanisms have been available or successful. Anxiety has too mysterious a cause to have any specific coping mechanisms directed

to it. Thus the action tendency is escape, leaving the field. By fleeing or abandoning the confusing situation, the person's anxiety can be relieved.

[Figure 1 about here]

We now apply this theoretical model to our particular concern, communicating in a new national/cultural environment. This requires us to specify the theoretical model in more detail, indicating how we will fit the general ideas of existential uncertainty, anxiety, and escape into the personal experience of communicating within a new culture. We will give two specific and operationalized models: one covers anxiety in anticipation of an interpersonal encounter, and the other describes anxiety during an ongoing interpersonal encounter. This will require us to give particular operationalizations of each concept, and to flesh out the empirical models with elements that we know to be important elements of those two situations.

Empirical models

In this section, we show how we are implementing the theoretical model. This involves attaching more specific operationalizations to the general theoretical terms in the previous section. For that reason, we call these our empirical models. We have two of them, one to describe people's anticipations of intercultural encounters, and the other to describe how the theoretical system applies itself during an actual interaction. By applying the theoretical model to these particular contexts, we are able to add some detail to our previous descriptions of situation, emotion, and action tendencies.

Goals and appraisals

In every communication event, the individual has goals that dictate behavior (Dillard, 1990). Some goals are instrumental, meaning that the person wants to achieve substantive outcomes in the interaction. Other goals are concerns about identity or relationships (Ting-Toomey, 1999).

The individual continuously evaluates (i.e., appraises) the situation in terms of the goals. Below we specify two goals that are particularly important in an intercultural encounter and their related appraisals.

Interaction goal. The sojourner may have some instrumental or relational needs that can only be satisfied through communicating with people from the host culture, such as dealing with administrative work with a local official, negotiating with the landlord, working with other-nation classmates on a project, or making friends and establishing social networks. In order to satisfy these needs, the individual intends to interact with the culturally different others, although the intention can be weak or strong. After the interaction goal is activated, the individual evaluates whether the immediate situation is relevant to the goal. The more important the interaction is, the stronger the emotion will be. In other words, interaction importance is the first appraisal that is relevant in the intercultural encounter.

Face goal. Maintaining self-face is an identity goal that is important in an intercultural interaction and is particularly related to the existential uncertainty that causes anxiety. People in all cultures strive to maintain face (i.e., a positive self-image) in social interactions, and face becomes a bigger concern in uncertain situations (Ting-Toomey, 2005, 2017). An intercultural encounter can be filled with "novelty, unfamiliarity, dissimilarity, and uncertainty" (Neuliep & McCroskey, 1997, p. 147), compared to communication within the culture. The individual is not only uncertain about others' expectations of her, but also unsure whether the others will help her maintain face (cf. Goffman, 1967). Thus, she must rely on herself to maintain face, and has a very salient face goal.

As we explained in the previous section, anxiety results from the appraisals that the situation is relevant to and incongruent with the goal, and urges the individual to protect her ego-

identity from the existential threat. In our empirical models, we operationalize these concerns using two appraisals: the perceived probability of losing face (goal incongruence appraisal) and face uncertainty (coping potential appraisal).

In summary, we argue that the existential threat in the theoretical model (see Figure 1) consists of the three appraisals derived from the two goals mentioned above: interaction importance, perceived probability of losing face, and face uncertainty. This is consistent with other emotion scholars' notion that situations appraised as having high personal importance and low controllability are considered as threatening (Folkman, 2013).

ICA

ICA is a particular type of anxiety by definition. It is the subjective feeling that is associated with the appraisals generated from the existential uncertainty in an intercultural encounter, and leads to avoidant or escaping behaviors. Other terms typically used to describe this feeling include uneasiness, concern, and worry (Lazarus, 1991).

Coping

Although coping potential is appraised as uncertain because anxiety has an ambiguous cause, the anxious individual may still actively seek ways to cope with it so that the person-environment relationship can be altered to suit her goals. Lazarus (1991, 2001) defined two types of coping: emotion-focused coping, which refers to the cognitive efforts to control the subjective feeling, and problem-focused coping, which refers to the behaviors that aim at changing the actual person-environment relationship. Facework, defined as the "behaviors that we engage in to maintain or restore face loss" (Ting-Toomey, 2005, p. 73), is a problem-focused coping strategy that one can use in an intercultural interaction. Here we focus on a narrower conceptualization of facework—the behaviors that we engage in to uphold *self*-face—because it is the coping

behavior that is evoked by the self-face goal. By presenting herself in a positive light, the

individual may receive positive feedback from others in the interaction, thus having a stronger

intention to stay in the interaction. As a coping strategy, facework does not have to follow from

anxiety. It can be directly generated from appraisals, and affect subsequent appraisals and

behaviors (Lazarus, 1991). Facework only applies during the interaction, not prior to it. It is also

important to note that, although research on facework has distinguished between different types

of facework (e.g., restorative vs. preventive, Ting-Toomey, 2005; positive vs. negative, Brown &

Levinson, 1987), here we are not focusing on any specific strategies, but are only referring to a

general behavioral intention to leave a positive impression during the encounter.

Action tendencies

Each emotion has a particular set of behavioral tendencies (Frijda, 1987), and the behavioral

tendency of anxiety is to avoid or escape (Lazarus, 1991). This can manifest in two ways. When

the individual experiences ICA while *anticipating* the upcoming intercultural interaction, the

intention to engage in the interaction may decrease because of the tendency to escape caused by

anxiety. Similarly, during the actual interaction, ICA will lead to a decrease in the intention to

continue the interaction. However, when the individual is *already interacting*, the decrease in the

intention to continue may not be enough for the individual to give up the interaction completely.

Instead, the individual may show avoidant behavior through decreased involvement in the

interaction, which we capture with verbal and nonverbal immediacy measures.

Timing: Two models

We present two models of ICA distinguished by timing. We differentiate between the emotional

processes *before* and *during* the actual interaction for several reasons. First, the person's

perceptions of the situation when anticipating the interaction may change after he actually

participates in it. The appraisals may well be dynamic, and depend on the changing features of

the environment and the interlocutors rather than the imagination and limited information that

the individual had before. Second, during the interaction, the person is able to use various coping

strategies, such as positive facework, to alter the situation. The decision to employ facework

depends on the appraisals, and will affect behavioral outcomes and therefore subsequent

appraisals. Third, compared to anticipated interaction, the individual has a more concrete choice

of behaviors in an actual interaction, being able to manifest avoidance through decreased

intention to stay in the situation or through lower immediacy. Therefore, it is necessary to

differentiate between anticipatory and actual situations.

Before the interaction: Empirical model 1 (Figure 2)

When the individual anticipates the intercultural interaction, he has three appraisals: interaction

importance (goal relevance appraisal of the interaction goal), probability of losing face (goal

incongruence appraisal of the face goal), as well as face uncertainty (coping potential appraisal

of the face goal). These three appraisals contribute to the emergence of ICA. Specifically,

H1: Before the interaction, (a) higher face uncertainty, (b) higher perceived probability of

losing face, or (c) higher importance of the interaction each leads to a higher level of ICA.

When the individual experiences ICA, he has the behavioral tendency to avoid the

situation. Therefore,

H2: Before the interaction, a higher level of ICA leads to a weaker intention to engage in

the interaction.

Moreover, the more important is the interaction goal, the more likely it should be to guide

behavior (Dillard, 1990), regardless of the emotion. Therefore,

H3: Before the interaction, higher importance of the interaction leads to a stronger

intention to engage in the interaction.

Note that in Hypotheses 1-3, we proposed that interaction importance could possibly affect the intention to engage in the interaction in two ways: One indirect path through ICA, and one direct path. In other words, when the interaction is important, the person may experience some psychological conflict: On one hand, he is motivated to interact to achieve his goals; on the other hand, the anxiety may impede him from doing so because of the high stake of the interaction.

[Figure 2 about here]

During the interaction: Empirical model 2 (Figure 3)

As the individual engages in the interaction, the two goals and the goal-related appraisals still exist and function in about the same fashion, although in a more dynamic and changeable way. H4 is parallel to H1, such that the three appraisals lead to ICA:

H4: During the interaction, (a) higher face uncertainty, (b) higher perceived probability of losing face, or (c) higher importance of the interaction each leads to a higher level of ICA.

The three appraisals will also lead the individual to employ a problem-focused coping strategy such as facework to deal with an unfavorable situation. Specifically, when face uncertainty is high and the interaction is important, the individual may strive to use facework. When the perceived probability of losing face is high, however, the individual may be less motivated to use facework because there is little hope of restoring face. Therefore,

H5: During the interaction, (a) higher face uncertainty, (b) lower perceived probability of losing face, or (c) higher importance of the interaction each leads to more facework.

Facework and ICA may influence the individual's behavioral tendencies in opposite directions. Because of the avoidant behavior that anxiety brings, ICA may lead to more

avoidance and lower immediacy toward the interlocutors. On the other hand, successful

facework strategies might bring better behavioral outcomes, resulting in approaching rather than

avoidant behaviors. However, we wonder whether there is an interaction between ICA and

facework in predicting behaviors. For example, for people with higher ICA, more facework may

predict stronger intention to stay in the interaction and more immediacy, which can be the direct

results of facework as a successful problem-focused coping strategy (e.g., becoming more

willing to continue the interaction once the effort to leave a positive impression is successful), or

part of the coping itself (e.g., showing more immediacy to win a positive impression). When ICA

is low, however, facework may not be needed as a coping behavior, but only represent ordinary

interactional effort. In this case, the positive effect of facework on approaching behaviors may

disappear. Taking these possibilities into account, we ask the following research question:

RQ: Do facework and ICA interact to predict (a) intention to continue the interaction, (b)

nonverbal immediacy, and (c) verbal immediacy?

Last, importance of the interaction should still have a direct impact on the behavioral

outcomes, such that,

H6: During the interaction, higher importance of the interaction leads to (a) a stronger

intention to continue the interaction, (b) higher nonverbal immediacy, and (c) higher verbal

immediacy.

[Figure 3 about here]

Although our methodology involves using three distinct samples, we offer no predictions

about sample differences. We believe that in principle, our thinking should apply equally to

Chinese studying in the U.S., U.S. Americans studying abroad, and U.S. Americans studying

only at our somewhat globalized university, even if they have different mean values on various

measures. We chose these samples to assess the generalizability of our theory.

Method

We recruited participants from three populations: Chinese nationals who were currently studying in the U.S., undergraduate U.S. Americans who had experience of studying abroad, and undergraduate U.S. Americans in the U.S. who had never studied abroad. All participants completed an online questionnaire in English based on their experience of a previous initial interaction with someone from another nationality (the first two samples) or the same nationality (the third sample). The same instruments were used for each sample, with minor rewording to fit their circumstances.

Participants

Undergraduate students enrolled in communication courses at a large public mid-Atlantic university were recruited through an online system to participate in the study and earned extra credit.

Chinese sample

From the 481 cases, we deleted the cases in which less than half the questions were answered (n = 103). Although we clearly indicated that the study was only open to Chinese nationals, only two thirds of the remaining participants confirmed their ethnicity as Asian/Asian American, and the rest were deleted from the dataset. The final sample size was 268 (52.2% female). Participants were, on average, 19.50 years old (SD = 1.85).

U.S. Americans abroad sample

After deleting cases with less than half the responses (n = 97), the sample contained 419 cases (56.1% female). On average, participants were 20.03 years old (SD = 4.03). Participants reported their race/ethnicity as African/African American (11.2%), Asian/Asian American (12.4%),

European/European American (49.7%), Hispanic American (6.4%), South/Central American

(1.4%), other (6.2%), and a combination of some of the above (7.6%). Nineteen (4.5%) preferred

not to answer the question.

U.S. Americans in the U.S. sample

After deleting cases with less than half the responses ($n = 24$), the sample contained 515 cases

(63.7% female). Participants were, on average, 19.21 years old ($SD = 2.15$). Participants reported

their race/ethnicity as African/African American (10.3%), Asian/Asian American (14.9%),

European/European American (55.4%), Hispanic American (5.4%), South/Central American

(0.2%), other (4.7%), and a combination of some of the above (6.2%). Twelve (2.3%) preferred

not to answer the question.

Procedures

In the questionnaire, we asked that Chinese in the U.S. recall a previous interaction with a U.S.

citizen who was not of their same ethnicity. We asked U.S. Americans who studied abroad to

recall a previous interaction with someone from a different nationality during their stay in the

foreign country, and we asked U.S. Americans in the U.S. to report on an interaction with

another U.S. American. All participants were also instructed that the interaction they recalled

should be the first time they interacted with the partner (i.e., initial interaction). They were asked

to recall as many details as possible before they continued with the questionnaire.

Participants were then asked to fill out the survey, which had two major parts. The first

part asked about their thoughts and feelings *before* the interaction, and the second part asked

about their subjective experience *during* the same interaction. Some instruments were used in

both parts, but the wording of the items was adjusted so that it reflected the time points (before

or during the interaction). Last, participants provided demographic information.

We collected data about the types of relationships with the partner in participants'

recalled interactions. Among all the types, the category with the highest percentage was someone

that participants worked or studied with, such as a classmate or team member (55.6% for

Chinese in the U.S., 29.4% for U.S. Americans abroad, and 35.1% for U.S. Americans in the

U.S.). Relationship information is available in the online supplemental material.

Measures

Face uncertainty

Based on the conceptualization of face as a person's positive social image (Goffman, 1967;

Ting-Toomey, 2017), we developed eight 9-point Likert items to measure participants' face

uncertainty both before and during the interaction. Examples include, "I was worried about

protecting my pride" and "I didn't know if the other person would respect me." The scale

achieved high reliability with all Cronbach's $\alpha s \geq .91$.

Probability of losing face

Four items were adapted from the self-face concern scale (Oetzel & Ting-Toomey, 2003) and

were used in both the "before" and "during" contexts. Examples include, "I was going to bring

shame to myself" and "I was going to fail to protect my personal pride." Participants rated on a

scale from 1 (very unlikely) to 9 (very likely). The measure was reliable with all Cronbach's αs

$\geq .93$.

Importance of the interaction

Interaction importance was measured once near the end of the questionnaire. We created four 9-

point items, where higher scores indicated more importance. Examples include, "How important

was this interaction to you?" and "How much did you want to get from this interaction?" The

measure was reliable (Cronbach's αs $\geq$ .86).

ICA

We used the Personal Report of Intercultural Communication Apprehension (PRICA-14; Neuliep & McCroskey, 1997) to measure participants' ICA both before and during the interaction. The instrument contained seven positive-scored (e.g., "I was tense and nervous while interacting with the person from a different culture") and seven reverse-scored items (e.g., "I was comfortable interacting with the person from a different culture"), and reached high reliability with all Cronbach's αs $\geq$ .93. Note that for the U.S. Americans in the U.S. sample, the phrase "from a

different culture" was deleted in all items, because the questionnaire asked about their interaction with someone from the same culture. For convenience, the variable is still called "ICA" below for the U.S. Americans in the U.S. sample. Based on the results of the measurement models (see below), we reduced the scale to include only the seven positive-scored items to measure ICA.

Intention to engage in/continue the interaction

We wrote four 9-point items to measure participants' intention to interact both before and during the interaction, where higher scores indicated stronger intention. Examples are, "How motivated were you to engage in/continue the interaction?" and "How strongly did you intend to engage in/continue the interaction?" Again, the measure was reliable with all Cronbach's αs $\geq$ .89.

Positive facework

We created six 9-point Likert-scale items to measure participants' positive facework during the interaction. Examples of items include, "I tried to impress the other person in a positive way" and "I tried to win respect from the other person." The measure was highly reliable (Cronbach's αs $\geq$ .90). We wish to note again that our concept of positive facework is not derived from the

notion of positive face (i.e., the desire to be liked and approved; Brown & Levinson, 1987) and does not imply any specific facework behaviors (cf. Oetzel, Ting-Toomey, Yokochi, Masumoto, & Takai, 2000). Rather, it represents the general tendency to leave a positive impression, regardless of the specific strategies that the person uses.

Nonverbal immediacy

The measure of participants' nonverbal immediacy during the interaction was taken from Richmond, McCroskey, and Johnson (2003) and included 26 Likert-scale items. The measure was reliable across the three samples (Cronbach's αs ≥ .88).

To simplify the scale for subsequent latent variable analysis and improve our subject-to-indicators ratios, we did PCAs on the scale for each of the samples, and selected the items that satisfied two criteria: they were among the seven items with the highest loadings on the first factor, and they had loadings of at least .60. Next, among the selected items, we chose the overlapping items in the three samples to form the reduced scale. Four items were chosen: "I used a monotone or dull voice while talking to the other person," "I avoided eye contact while talking to the other person," "My voice was monotonous or dull when I talked to the other person," and "I was stiff when I talked to the other person." The reduced scale was reliable (Cronbach's αs ≥ .84), and was nicely correlated with the complete scale (Pearson's rs ≥ .75).

Verbal immediacy

Fourteen items taken from Gorham (1988) were used to measure verbal immediacy during the interaction. The measure achieved high reliability (Cronbach's αs ≥ .89). Similar procedures were undertaken to simplify the scale. Four items were selected: "I used personal examples or talked about experiences I had," "I asked questions or encouraged the other person to talk," "I

addressed the other person by name," and "I asked the other person's opinions." The reduced

scale was reliable (Cronbach's α s $\geq$ .77) and was highly correlated with the complete scale

(Pearson's rs $\geq$ .90).

Measurement models

We first conducted confirmatory factor analysis on all the items using Mplus 7 (Muthén &

Muthén, 1998-2015) to assess the fit of the measurement model for each sample. In the initial

analysis, we found that the model did not have very good fit (details available from first author).

We speculated that the reverse scored items of ICA were the reason. Some researchers have

argued that reverse-scored items may behave differently from positive-scored items (Woods,

2006), and may actually be measuring a construct related, but not identical, to the construct that

the positive-scored items measure (Rodebaugh, Woods, & Heimberg, 2007). Therefore, we split

ICA into two factors with positive- and reverse-scored items as indicators respectively. This

model had good fit (details available from first author).

Next, we investigated whether the positive-scored items of ICA contained sufficient

information about the construct of ICA and decided that they did, for two reasons. First, the

reduced scale with all seven positive-scored items was highly reliable (Cronbach's α s $\geq$ .93).

Second, the correlations between the 7 positive-scored items (reduced scale) and all 14 items (the

complete scale) ranged from .88 to .98 for the two contexts and three samples, suggesting that

the two scales were measuring the same thing. We concluded that the positive-scored items

provided sufficient information to measure ICA, and only included the seven positive-scored

items in subsequent analysis. Descriptive statistics for all variables can be found in the online

supplemental material.

Measurement invariance

The measurement models for each sample achieved good fit (see online supplemental material). Yet, before assessing the structural models, we need to establish measurement invariance across the three samples. Measurement invariance concerns how well the same measurement model fit for the multiple samples, and whether parameters (e.g., loadings) differed across samples. Kline (2015) proposed that there are four types of measurement invariance, with increasing levels of constraint: (1) configural invariance, in which the correspondence between factors and indicators are the same across groups, but parameters are freely estimated in each group; (2) pattern invariance (i.e., weak invariance), in which factor loadings are constrained to be equal across groups; (3) strong invariance, which requires equal loadings and equal unstandardized intercepts; and (4) strict invariance, which, on the basis of strong invariance, also requires equal error variances and covariances. To evaluate measurement invariance means to assess these four types of invariance in that sequence.

The results show that the CFA models achieved pattern invariance but not strong invariance both before and during the interaction (see online supplemental material for an example of Mplus code and the specifics of measurement invariance testing). This means that the factor loadings were invariant across the three samples, but the unstandardized intercepts were not. Therefore, in the subsequent analyses, the loadings were constrained to be equal when running the structural models.

Results

We proceeded to run the structural models, first separately, then in a multiple-group analysis to see if the same model held in all three groups. After that, we report the results of hypothesis testing. We elaborate the procedures and results below.

Structural models

The procedures of running structural models (see Figures 2 and 3) were parallel to those for the

measurement models. First, we obtained separate model fit indices for each sample. Then, we ran

the model simultaneously for all samples without imposing constraints on parameters (except for

equal loadings). If the model had good fit, we constrained path coefficients to be equal across

samples, evaluated model fit, and then compared the models with and without the constraint on

paths. Last, we reported results of hypothesis testing.

"Before the interaction" model. Table 1 shows the fit indices of the "before the

interaction" structural model for each sample and for multiple-sample analyses. The structural

model for the "before the interaction" context (Figure 2) fit well for the Chinese, U.S. Americans

abroad, and U.S. Americans in the U.S. samples. The model was then fitted to the three samples

simultaneously, with equal indicator loadings but with freely estimated path coefficients. The

model achieved good fit.

Next, we added the additional constraint of equal path coefficients in all three samples.

The model had good fit. The χ^2 test of the free-path model and the equal-path model was

significant, $\Delta\chi^2 = 19.21$, $\Delta df = 10$, $p = .038$. But because $\Delta CFI = 0$, we concluded that the equal-

path model did not fit significantly worse than the free-path model, and we accepted the equal-

path model. The model was significant in predicting ICA before the interaction and the intention

to engage in the interaction for all three samples (see Table 2 for R^2s).

We therefore proceeded to hypothesis testing for the "before" condition (see Figure 2).

The significant path coefficients for the equal-path model are shown in Figure 4. H1 predicted

that (a) face uncertainty, (b) probability of losing face, and (c) interaction importance would each

increase ICA before the interaction. Results show that in all three samples, face uncertainty had a

positive effect on ICA ($b = 0.45$), as did probability of losing face ($b = 0.48$). However

interaction importance did not significantly predict ICA ($b = 0.005$, $p = .810$). Therefore, H1(a)

and (b) were supported, but H1(c) was not.

H2 predicted that ICA would have a negative effect on intention to engage in the

interaction. H2 was supported ($b = -0.23$). H3 predicted a positive effect of interaction

importance on intention to engage. H3 was supported ($b = 0.46$).

[Figure 4 about here]

"During the interaction" model. We needed slightly different procedures of model fitting

and multiple-group analysis for the "during" model. Because there is a latent variable interaction

in the model (i.e., ICA × facework), specified by the XWITH command in Mplus, traditional fit

indices such as χ^2 and CFI are not provided. We followed the steps proposed by Maslowsky,

Jager, and Hemken (2015) to select a model and infer model fit: First, we ran the model without

the interaction term (termed Model 0, misspecified by hypothesis), and evaluated the model fit.

Second, we ran the model with the interaction term (termed Model 1, properly specified by

hypothesis), and obtained a loglikelihood value. Third, because Model 0 was nested in Model 1,

we ran a loglikelihood ratio test by calculating $D = -2[(\text{loglikelihood of Model 0}) -$

$(\text{loglikelihood of Model 1})]$ and comparing it to a χ^2 distribution, with the difference in free

parameters as the degree of freedom. A significant result would suggest that Model 0 fit

significantly worse than Model 1. If Model 0 already had good fit, we could conclude that Model

1 (i.e., the model with the interaction term) had even better fit. Moreover, we also compared the

AICs of the two models (Burnham & Anderson, 2004). We demonstrate these steps below by

first providing separate model fit for the three samples and then running the multiple-group

analysis. The traditional fit indices of Model 0 for each sample are displayed in Table 1.

[Table 1 about here]

First we fit separate models for each sample and evaluated Model 0 against Model 1. For

Chinese, Model 0 had good fit, loglikelihood = -18920.25, AIC = 38130.49. Then we added the

interaction term and fit Model 1, loglikelihood = -18913.66, AIC = 38123.32. The loglikelihood

ratio test was significant, $D = 13.18$, $\Delta df = 3$, $p = .004$. Also, $\Delta AIC = 7.17$. Therefore, the

interaction term was needed for the Chinese sample. Considering Model 0 always fit worse than

or the same as Model 1, Model 1 (the model with the interaction term) had good fit.

For U.S. Americans abroad, Model 0 fit well, loglikelihood = -31427.03, AIC =

63144.05. Model 1 was then fit to the data, loglikelihood = -31414.01, AIC = 63124.02. We

calculated $D = 26.03$, $\Delta df = 3$, $p < .00001$; $\Delta AIC = 20.03$. Therefore, Model 1 was better.

For U.S. Americans in the U.S., Model 0 had good fit, loglikelihood = -38060.31, AIC =

76410.62. After the interaction term was added, loglikelihood = -38043.47, AIC = 76382.94. $D =$

33.68, $\Delta df = 3$, $p < .00001$; $\Delta AIC = 27.68$. Therefore, Model 1 was selected.

In conclusion, the ICA $\times$ facework interaction term was needed in all three samples. The

model with the interaction term (Model 1) had good fit in all the samples.

Next, we fit the model with the interaction term simultaneously to all three samples,

where all the parameters were freely estimated except that the indicator loadings were

constrained to be equal across samples. Again, the traditional fit indices were not available.

Loglikelihood = -89684.74 and AIC = 180129.48.

Next, we constrained all path coefficients to be equal across samples. Loglikelihood = -

89708.64 and AIC = 180105.27. Because this model was nested in the free-path model just

mentioned, we conducted a loglikelihood ratio test, $D = 47.79$, $\Delta df = 36$, $p = .09$. Also, $\Delta AIC = -$

24.21. This means that the equal-path model did not lose a significant amount of fit compared to

the free-path model. Therefore we accepted the equal-path model.

In order to infer model fit, we ran the equal-path model without the interaction (Model 0).

Because it was nested in the equal-path model with the interaction term (Model 1), if it had good

fit, it would indicate that Model 1 also had good fit. This was the case—for Model 0, χ^2 =

4631.79, df = 2367, $p < .0001$, RMSEA = .049, 90% CI [.047, .051], CFI = .946, SRMR = .060.

Therefore, our model (with interaction term, equal paths) also fit well.

As Table 2 indicates, the model not only had good fit measures, but also made substantial

predictions of the endogenous variables. The smallest R^2s were about .30 and the largest were

around .70. Figure 5 therefore is a successful model of these communication variables during

one's first intercultural interaction.

[Table 2 about here]

[Figure 5 about here]

It remains to test the "during" hypotheses. Figure 5 shows the significant path

coefficients. H4 predicted that (a) face uncertainty, (b) perceived probability of losing face, and

(c) interaction importance would each increase ICA during the interaction. Results show that

face uncertainty increased ICA ($b = 0.32$), as did probability of losing face ($b = 0.53$). However,

interaction importance did not significantly affect ICA ($b = -0.02, p = .406$). H4(a) and (b) were

supported, but H4(c) was not.

H5 predicted that (a) face uncertainty increases, (b) probability of losing face decreases,

and (c) interaction importance increases facework during the interaction. Results show that face

uncertainty did have a positive effect on facework ($b = 0.53$), that probability of losing face had a

negative effect on facework ($b = -0.33$), and that interaction importance positively affected

facework ($b = 0.21$). All the elements of H5 were supported.

H6 predicted a positive effect of interaction importance on (a) intention to continue the

interaction, (b) nonverbal immediacy, and (c) verbal immediacy. Interaction importance

increased both intention to continue ($b = 0.56$) and verbal immediacy ($b = 0.28$), but not

nonverbal immediacy ($b = -0.005$, $p = .80$). Therefore, H6(a) and (c) were supported, but H6(b)

was not.

We also asked a research question about whether ICA and facework interact to predict

the behavioral tendencies: (a) intention to continue the interaction, (b) nonverbal immediacy, and

(c) verbal immediacy. We report the path coefficients below. When the ICA–facework

interaction was significant, we did further analysis using PROCESS (Hayes, 2013). We entered

facework as the independent variable, ICA as the moderator, the various outcomes as dependent

variables, and face uncertainty, probability of losing face, and interaction importance as the

covariates. The output reported the estimated conditional effect of facework given values of ICA

at one SD above the mean (high ICA), at the mean (moderate ICA), and at one SD below the

mean (low ICA). The graphic representations are shown in Figures 6-8.

[Figures 6-8 about here]

For intention to continue, ICA had a negative effect ($b = -0.29$), facework had a positive

effect ($b = 0.19$), and the interaction term had a positive effect ($b = 0.06$). The results of

PROCESS show that when ICA was low, facework did not significantly predict intention to

continue ($b = 0.06$, $p = .082$). When ICA was moderate, facework had a positive effect on

intention to continue ($b = 0.17$, $p < .0001$). This was even more the case with high ICA ($b = 0.27$,

$p < .0001$).

For nonverbal immediacy, ICA had a negative effect ($b = -0.55$), facework had a positive

effect ($b = 0.22$), and their interaction had a positive effect ($b = 0.07$). Facework positively

predicted nonverbal immediacy when ICA was low ($b = 0.09$, $p = .002$), moderate ($b = 0.20$, p

< .0001) or high ($b = 0.32$, $p < .0001$), and the effect grew as ICA increased.

For verbal immediacy, ICA had a negative effect ($b = -0.28$), facework had a positive effect ($b = 0.30$), and the interaction term had a positive effect ($b = 0.07$). Again, facework predicted verbal immediacy at all levels of ICA, but the effect increased as ICA increased: $b = 0.11$, $p = .002$ with low ICA, $b = 0.23$, $p < .0001$ with moderate ICA, and $b = 0.34$, $p < .0001$ with high ICA.

In sum, our answer to the research question is that ICA and facework did in fact interact to predict all three dependent variables: intention to continue, verbal immediacy, and nonverbal immediacy.

Discussion

In our study, we first proposed a theoretical model of anxiety, then we proposed two empirical models of ICA based on the theoretical model. The findings obtained in three samples were mostly consistent with our predictions. Either before or during the interaction, people had the goal of maintaining self-face, and appraised both the possibility of face loss and uncertainty about restoring face. These two appraisals led to ICA and coping efforts, which in turn, influenced the intention to stay in the interaction and the immediacies. Importance of the communication event also affected the behavioral outcomes. Our study has both theoretical and practical implications.

ICA: An emotional process

Our models have shown that ICA is essentially an emotional process: It is anxiety with particular situational stimuli, that is, an intercultural encounter. The good fit of the multiple-sample models and the large amount of explained variance in the endogenous variables demonstrate the utility of our theorizing of ICA when applied cross-culturally (Chinese in the U.S. vs. U.S. Americans

abroad). Moreover, because the models fit equally well in an intracultural context (for U.S. Americans in the U.S.), this suggests that ICA has a nature similar to standard communication apprehension and anxiety, even though it has distinctive situational stimuli. ICA is not merely an isolated physiological reaction. It is a process that begins with appraising the person's relationship with the environment based on her goals, and involves behavioral tendencies.

Our models can be useful in integrating the existing findings on ICA reviewed at the beginning of the manuscript by showing how different correlates of ICA found in previous research can influence different components in the models. First, variables such as anticipation of a study abroad program can influence the goals presented in our models by making them more salient, thus increasing ICA indirectly (Gullekson et al., 2001). Second, appraisals in the models can be influenced by environmental factors (e.g., social support; Oommen, 2014), individual characteristics (e.g., emotional intelligence; Fall et al., 2013), and group or cultural differences (e.g., South Koreans vs. U.S. Americans; Merkin, 2009). For example, high ethnocentrism may lead to the person's misperception of a different culture based on her own culture, and result in appraisals of high face uncertainty and probability of losing face, and therefore high ICA, when the person finds out that her behavior pattern is not expected by the interlocutors. Third, the tendency to avoid and escape that ICA leads to can be manifested in a series of outcomes, such as a lower willingness to communicate (Lu & Hsu, 2008) and lower responsiveness and assertiveness in communication (Neuliep & Ryan, 1998). Using our empirical models, we will be able to answer the "how" and "why" questions by hypothesizing and testing the mechanisms through which these different variables are related to ICA.

Two of our hypotheses were not supported by the data. First, the importance of the interaction did not predict ICA either before or during the interaction. It is possible that, unlike

the face goal and its two appraisals, the interaction goal did not involve existential threat to personal meaning, which was a necessary condition of anxiety (Lazarus, 1991). In other words, the interaction importance appraisal captured the strength of an instrumental (e.g., completing a group project) or relational goal (e.g., establishing social networks) rather than that of an identity goal (see Ting-Toomey, 1999), and therefore was irrelevant to the identity threat that caused anxiety. However, interaction importance could possibly result in other emotions that were not examined in our study (e.g., excitement). Second, interaction importance did not predict nonverbal immediacy during the interaction. It is possible that respondents were not recalling sufficiently aversive situations to elicit the reactions we predicted.

Before vs. during the interaction

We modeled ICA distinguished by timing, because during the interaction, the appraisals depend more on the information that the individual is constantly receiving, and the individual is able to use coping strategies and manifest emotion through various avoidant behaviors. The results of model fitting suggested that the two models nicely explained the emotional process at the two time points, and confirmed the original definition of ICA being an emotion that can emerge in both anticipated and real interactions (Neuliep & McCroskey, 1997). It shows that even for the same emotion, the specific content of appraisals, coping, and behavioral tendencies can vary depending on timing.

One demonstration of the dynamic nature of ICA during the interaction is how ICA and facework interacted to predict behavioral outcomes. The positive effect of facework on the behavioral outcomes increased as ICA did. This supported our speculation that, when ICA was high, higher intention to stay in the interaction and higher immediacy could be the direct results or manifestation of facework as a successful problem-focused coping strategy. That is, the

person's efforts to leave a better impression successfully coped with the anxiety-inducing

situation, thus reducing the person's tendency to avoid or escape caused by ICA, and leading to

more approaching behaviors. When ICA was low, on the other hand, there was not much

variability in the behavioral outcomes (see Figures 6-8).

Applications

The models we proposed have utility in the practical world, too, by offering ways for

practitioners to improve sojourners' experience abroad. For example, programs can be designed

to improve sojourners' knowledge of the host culture before or during their time abroad or to

rehearse common episodes, thus reducing uncertainty about the proper behavioral patterns when

interacting with people from the host culture. Reduced uncertainty will lead to lower ICA and

more approaching behaviors, which should result in positive behaviors that the interlocutors

reciprocate, more positive perceptions, and better wellbeing for the sojourners. Practitioners can

also teach sojourners diverse facework strategies that are appropriate and useful in the host

culture, enabling them to alter the situation to match their goals.

Limitations

There are several limitations of our study. First, we only examined one emotion, ICA. Other

emotions, such as excitement, may be generated from a different set of appraisals during an

intercultural interaction, and may blunt or reinforce the experience of ICA (Winterich, Han, &

Lerner, 2010). Second, we used a convenience college student sample, thereby limiting the

generalizability of our results. Although our models were based on theory and achieved good fit,

future research should test the models in samples that are more representative of specific

populations in various nations. Third, we asked participants to recall an interaction. Therefore,

participants' reporting of their thoughts and feelings might have been shaped by the outcome of

that recalled interaction, and might differ from what their impression actually was before or during that interaction.

Conclusion

ICA is a psychological phenomenon that is extremely important in intercultural communication. In the present study, we proposed and tested two models of ICA, which were derived from the appraisal theory of emotions. We have shown that during an anticipated or actual intercultural interaction, the individual had potentially conflicting goals. The goal-related appraisals of the situation resulted in ICA as well as coping strategies. ICA and coping further influenced the behaviors of the individual. Our models supported the utility of the theoretical framework, demonstrating how they can integrate previous research on ICA and clarify its conceptual domain. The models also point out directions for future research and provide advice for practitioners to improve sojourners' time abroad.

References

Afifi, W. A., & Weiner, J. L. (2004). Toward a theory of motivated information management. *Communication Theory, 14*, 167-190. doi:10.1093/ct/14.2.167

Berger, C. R. (2011). From explanation to application. *Journal of Applied Communication Research*, *39*, 214–222. doi:10.1080/00909882.2011.556141

Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology*, *46*, 5-34. doi:10.1111/j.1464-0597.1997.tb01087.x

Berry, J. W. (2005). Acculturation: Living successfully in two cultures. *International Journal of Intercultural Relations*, *29*, 697–712. doi:10.1016/j.ijintrel.2005.07.013

Brown, P. & Levinson, S. C. (1987). *Politeness: Some universals in language usage.* Cambridge, England: Cambridge University Press.

Burnham, K. P., & Anderson, D. R. (2004). Multimodel inference: Understanding AIC and BIC in model selection. *Sociological Methods & Research, 33*, 261–304. doi:10.1177/0049124104268644

Cartwright, D. (1979). Contemporary social psychology in historical perspective. *Social Psychology Quarterly, 42*, 82-93. doi:10.2307/3033880

Dillard, J. P. (1990). The nature and substance of goals in tactical communication. In M. J. Cody & M. J. McLaughlin (Eds.), *The psychology of tactical communication* (pp. 70-91). Philadelphia, PA: Multilingual Matters.

Fall, L. T., Kelly, S., MacDonald, P., Primm, C., & Holmes, W. (2013). Intercultural communication apprehension and emotional intelligence in higher education: Preparing business students for career success. *Business Communication Quarterly*, *76*, 412–426. doi:10.1177/1080569913501861

Folkman, S. (2013). Stress: Appraisal and coping. In M. D. Gellman & J. R. Turner (Eds.),

 Encyclopedia of behavioral medicine (pp. 1913-1915). New York, NY: Springer New

 York.

Folkman, S., & Lazarus, R. S. (1988). The relationship between coping and emotion:

 Implications for theory and research. *Social Science & Medicine, 26*, 309–317.

 doi:10.1016/0277-9536(88)90395-4

Frijda, N. H. (1987). Emotion, cognitive structure, and action tendency. *Cognition and Emotion,*

 1, 115-143. doi:10.1080/02699938708408043

Goffman, E. (1967). On Face-work: An analysis of ritual elements in social interaction.

 Interaction ritual: Essays in face-to-face behavior (pp. 5-45). Chicago, IL: Aldine.

Goldstein, S. B., & Kim, R. I. (2006). Predictors of US college students' participation in study

 abroad programs: A longitudinal study. *International Journal of Intercultural Relations,*

 30, 507–521. doi:10.1016/j.ijintrel.2005.10.001

Gorham, J. (1988). The relationship between verbal teacher immediacy behaviors and student

 learning. *Communication Education, 37*, 40–53. doi:10.1080/03634528809378702

Gudykunst, W. B. (2005). An anxiety/uncertainty management (AUM) theory of effective

 communication: making the mesh of the net finer. In W. B. Gudykunst (Ed.), *Theorizing*

 about intercultural communication (pp. 281-322). Thousand Oaks, CA: Sage.

Gullekson, N. L., Tucker, M. L., Coombs, G., & Wright, S. B. (2011). Examining intercultural

 growth for business students in short-term study abroad programs: Too good to be true?

 Journal of Teaching in International Business, *22*, 91–106.

 doi:10.1080/08975930.2011.615672

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A*

regression-based approach. New York, NY: Guilford Press.

Institute of International Education. (2016a). "Profile of U.S. Study Abroad Students, 2004/05-

2014/15." *Open Doors Report on International Educational Exchange*. Retrieved from

http://www.iie.org/opendoors

Institute of International Education. (2016b). "Top 25 Places of Origin of International Students,

2014/15-2015/16." *Open Doors Report on International Educational Exchange*.

Retrieved from http://www.iie.org/opendoors

Kline, R. B. (2015). *Principles and practice of structural equation modeling* (4th ed.). New York,

NY: Guilford Press.

Lazarus, R. S. (1991). *Emotion & adaptation*. Oxford: Oxford University Press.

Lazarus, R. S. (2001). Relational meaning and discrete emotions. In K. R. Scherer, A. Schorr, &

T. Johnstone (Eds.), *Appraisal processes in emotion: Theory, methods, research*. Oxford,

England: Oxford University Press.

Lin, E.-Y. (2008). Family and social influences on identity conflict in overseas Chinese.

International Journal of Intercultural Relations, 32, 130–141.

doi:10.1016/j.ijintrel.2007.09.005

Lin, Y., & Rancer, A. S. (2003a). 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. doi:10.1080/08824090309388800

Lin, Y., & Rancer, A. S. (2003b). Sex differences in intercultural communication apprehension,

ethnocentrism, and intercultural willingness to communicate. *Psychological Reports*, *92*,

195-200. doi:10.2466/pr0.92.1.195-200

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

Mackie, D. M., Maitner, A. T., & Smith, E. R. (2009). Intergroup emotions theory. In T. D.

  Nelson (Ed.), *Handbook of prejudice, stereotyping, and discrimination* (pp. 285-308).

  New York, NY: Taylor & Francis Group.

Maslowsky, J., Jager, J., & Hemken, D. (2015). Estimating and interpreting latent variable

  interactions. *International Journal of Behavioral Development, 39*, 87–96.

  doi:10.1177/0165025414552301

Merkin, R. S. (2009). Cross-cultural differences in approach-avoidance communication In South

  Korea and the US. *Human Communication*, *12*, 199–213.

Metts, S., & Planalp, S. (2011). Emotional experience and expression: Current trends and future

  directions in interpersonal relationship research. In M. L. Knapp & J. A. Daly (Eds.), *The*

  SAGE handbook of interpersonal communication, 4th ed. (pp. 283-316). Los Angeles,

  CA: Sage.

Muthén, L. K. and Muthén, B. O. (1998-2015). *Mplus user's guide* (7th ed.). Los Angeles, CA:

  Muthén & Muthén.

Neuliep, J. W. (2012). The relationship among intercultural communication apprehension,

  ethnocentrism, uncertainty reduction, and communication satisfaction during initial

  intercultural interaction: an extension of anxiety and uncertainty management (AUM)

  theory. *Journal of Intercultural Communication Research, 41*, 1–16.

  doi:10.1080/17475759.2011.623239

Neuliep, J. W., & McCroskey, J. C. (1997). The development of intercultural and interethnic

communication apprehension scales. *Communication Research Reports*, *14*, 145–156. doi:10.1080/08824099709388656

Neuliep, J. W., & Ryan, D. J. (1998). The influence of intercultural communication apprehension and socio-communicative orientation on uncertainty reduction during initial cross-cultural interaction. *Communication Quarterly, 46*, 88−99.

doi:10.1080/01463379809370086

Oetzel, J. G., & Ting-Toomey, S. (2003). Face concerns in interpersonal conflict: A cross-cultural empirical test of the face negotiation theory. *Communication Research*, *30*, 599–624. doi:10.1177/0093650203257841

Oetzel, J. G., Ting-Toomey, S., Yokochi, Y., Masumoto, T., & Takai, J. (2000). A typology of facework behaviors in conflicts with best friends and relative strangers. *Communication Quarterly, 48*, 397−419. doi:10.1080/01463370009385606

Öhman, A. (2008). Fear and anxiety: Overlaps and dissociations. In M. Lewis, J. M. Haviland-Jones, & L. Feldman Barrett (Eds.), *Handbook of emotions*, 3rd ed. (pp. 709-729). New York, NY: Guilford Press.

Oommen, D. (2014). The relationships among perceptions of social support, intercultural communication apprehension (ICA), and conflict management preferences in the context of cultural adaptation. *Journal of Intercultural Communication Research, 43*, 215–237. doi:10.1080/17475759.2014.935797

Richmond, V. P., McCroskey, J. C., & Johnson, A. D. (2003). Development of the nonverbal immediacy scale (NIS): Measures of self-and other-perceived nonverbal immediacy. *Communication Quarterly*, *51*, 504-517. doi:10.1080/01463370309370170

Rodebaugh, T. L., Woods, C. M., & Heimberg, R. G. (2007). The reverse of social anxiety is not always the opposite: The reverse-scored items of the social interaction anxiety scale do not belong. *Behavior Therapy, 38*, 192–206. doi:10.1016/j.beth.2006.08.001

Ryan, M. E., & Twibell, R. S. (2000). Concerns, values, stress, coping, health and educational outcomes of college students who studied abroad. *International Journal of Intercultural Relations, 24*, 409–435. doi:10.1016/s0147-1767(00)00014-6

Scherer, K. R., Schorr, A., & Johnstone, T. (2001). (Eds.) *Appraisal processes in emotion: Theory, methods, research.* Oxford, England: Oxford University Press.

So, J., Kuang, K., & Cho, H. (2016). Reexamining fear appeal models from cognitive appraisal theory and functional emotion theory perspectives. *Communication Monographs, 83*, 120–144. doi:10.1080/03637751.2015.1044257

Ting-Toomey, S. (1999). *Communicating across cultures*. New York, NY: Guilford Press.

Ting-Toomey, S. (2005). The matrix of face: An updated face-negotiation theory. In W. B. Gudykunst (Ed.), *Theorizing about intercultural communication* (pp. 71-92). Thousand Oaks, CA: Sage.

Ting-Toomey, S. (2017). Conflict face-negotiation theory. In X. Dai & G.-M. Chen (Eds.), *Conflict management and intercultural communication: The art of intercultural harmony* (pp. 123-143). Abingdon, England: Routledge.

Winterich, K., Han, S., & Lerner, J. (2010). Now that I'm sad, it's hard to be mad: The role of cognitive appraisals in emotional blunting. *Personality and Social Psychology Bulletin, 36,* 1467-1483. doi:10.1177/0146167210384710

Woods, C. M. (2006). Careless responding to reverse-worded items: Implications for confirmatory factor analysis. *Journal of Psychopathology and Behavioral Assessment,*

28, 186–191. doi:10.1007/s10862-005-9004-7

Yang, M., Webster, B., & Prosser, M. (2011). Travelling a thousand miles: Hong Kong Chinese
students' study abroad experience. *International Journal of Intercultural Relations, 35*,
69–78. doi:10.1016/j.ijintrel.2010.09.010

Table 1

Fit Indices of the Structural Models

	χ^2	*df*	*p* value	RMSEA	90%CI	CFI	SRMR
Before the Interaction							
CH	553.73	316	< .0001	.053	[.046, .060]	.960	.043
AMAB	723.60	316	< .0001	.055	[.050, .061]	.949	.054
AMUS	695.68	316	< .0001	.048	[.043, .053]	.964	.044
Multi-group, Free Paths	2033.93	992	< .0001	.051	[.048, .054]	.957	.050
Multi-group, Equal Paths	2053.14	1002	< .0001	.051	[.048, .054]	.957	.052
During the Interaction, Model 0							
CH	1251.92	757	< .0001	.049	[.044, .054]	.948	.055
AMAB	1505.64	757	< .0001	.049	[.045, .052]	.946	.055
AMUS	1769.35	757	< .0001	.051	[.048, .054]	.944	.055

Note. CH = Chinese in the U.S. sample; AMAB = U.S. Americans who studied abroad sample;

AMUS = U.S. Americans in the U.S. sample. RMSEA = root mean square error of

approximation; CFI = comparative fit index; SRMR = standardized root mean residual.

Table 2

Proportion of Explained Variance (R²) of the Outcomes

	CH	AMAB	AMUS
Before the Interaction			
ICA	.54	.48	.46
Intention to Engage	.42	.38	.42
During the Interaction			
ICA	.55	.53	.52
Facework	.27	.30	.32
Intention to Continue	.56	.51	.57
Nonverbal Immediacy	.52	.54	.67
Verbal Immediacy	.45	.38	.40

Note. CH = Chinese in the U.S. sample; AMAB = U.S. Americans who studied abroad sample;

AMUS = U.S. Americans in the U.S. sample. All R^2s were significant at the $p < .001$ level.
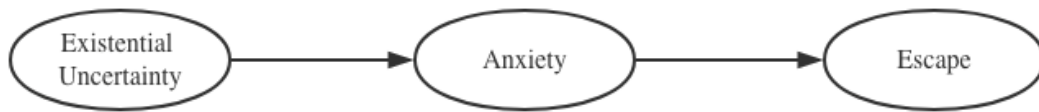
Figure 1. Theoretical model of anxiety.
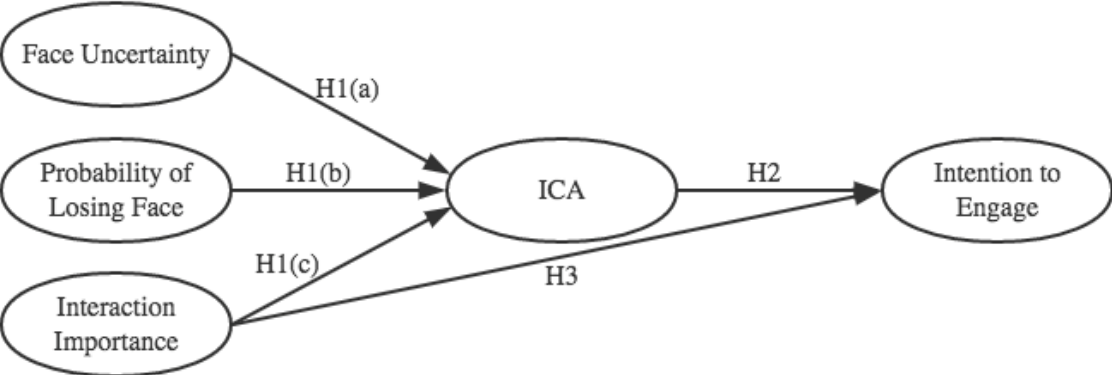
Figure 2. Appraisal model of ICA before the interaction.
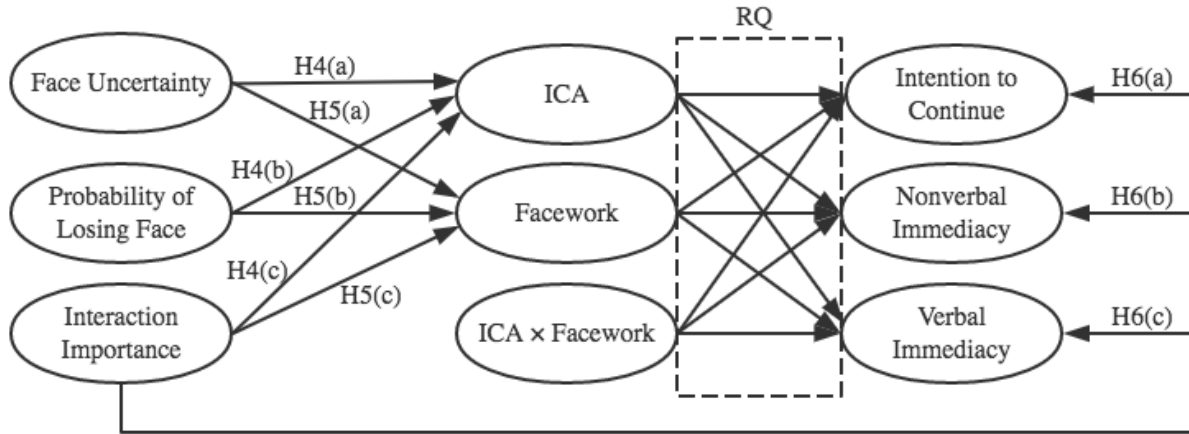
Figure 3. Appraisal model of ICA during the interaction.
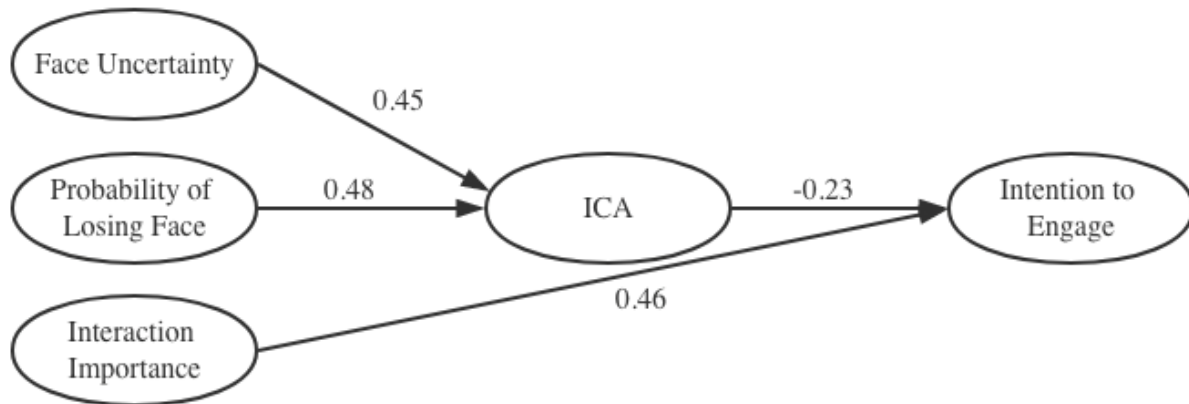
Figure 4. Path coefficients for the appraisal model of ICA before the interaction. All shown path coefficients were significant at the $p < .001$ level. The insignificant path (from interaction importance to ICA) is not included in the figure.
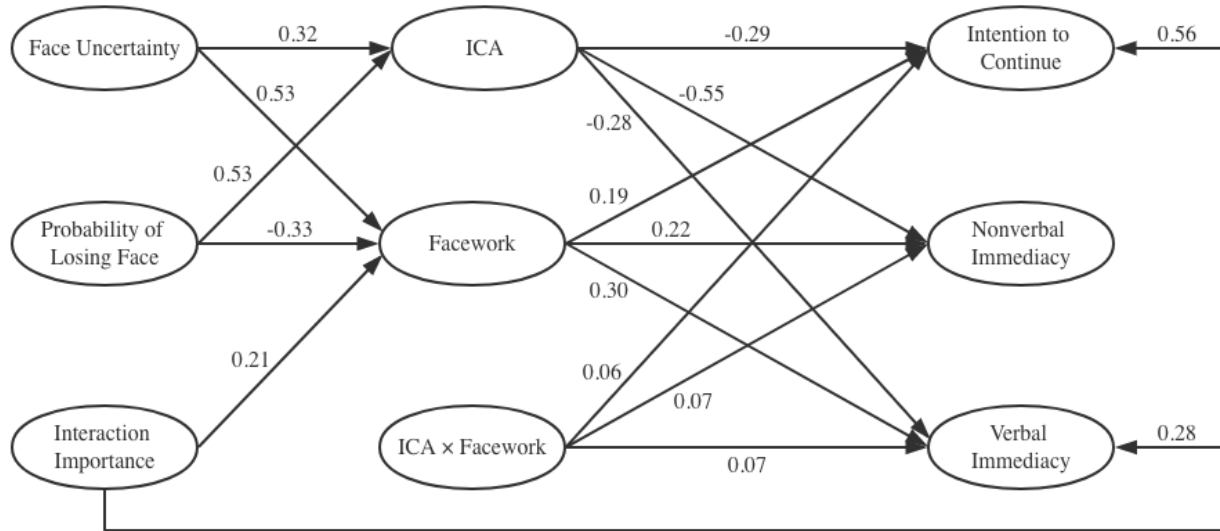
Figure 5. Path coefficients for the appraisal model of ICA during the interaction. All shown path

coefficients were significant at the $p < .001$ level. The insignificant paths (from interaction

importance to ICA and from interaction importance to nonverbal immediacy) are not included in
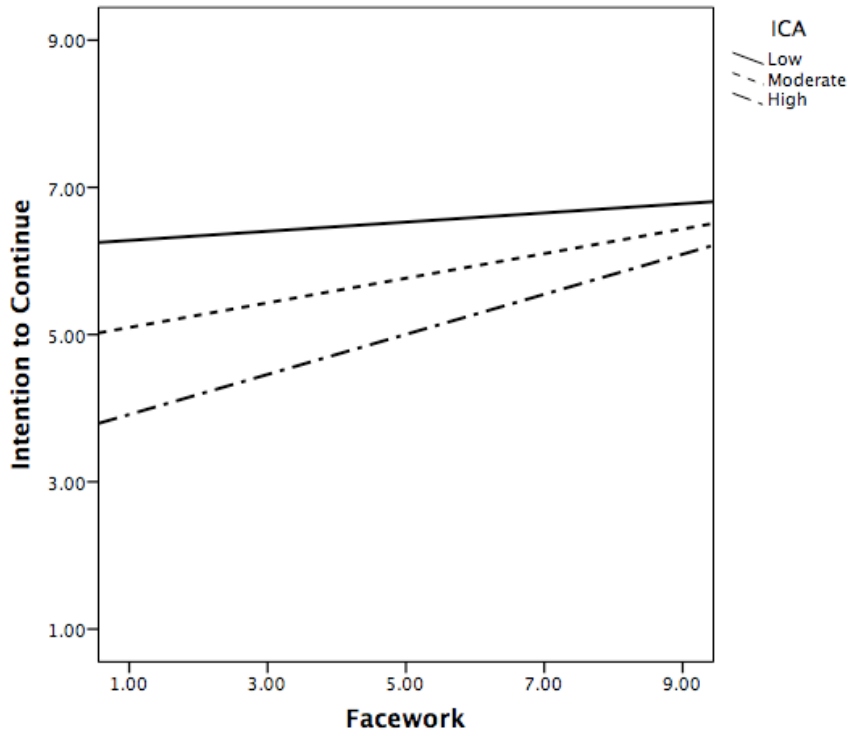
the figure.

Figure 6. The effect of facework on intention to continue the interaction when ICA was low (1.63), moderate (3.54), and high (5.45).
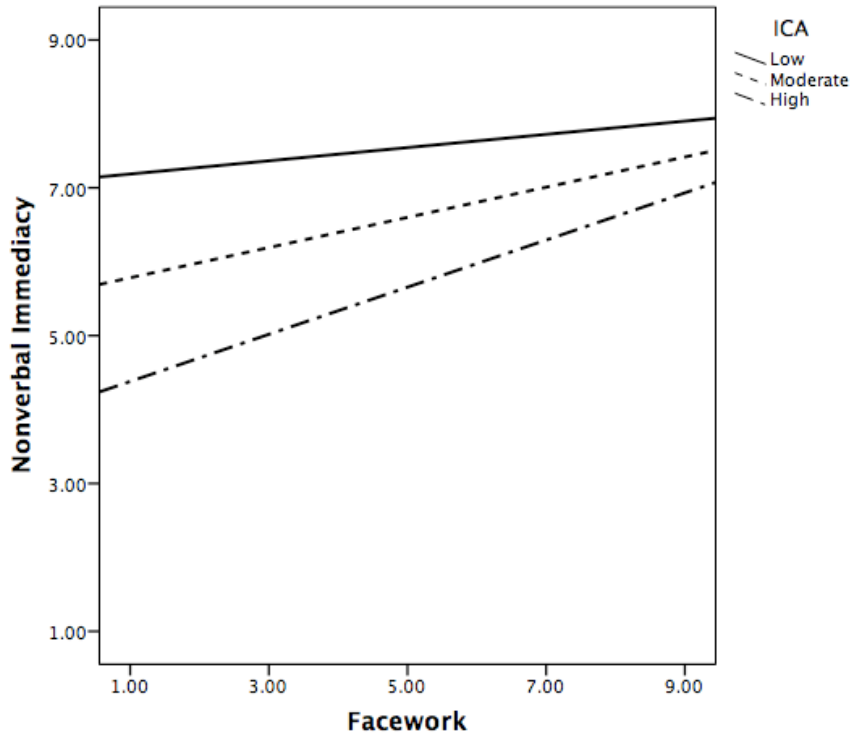
Figure 7. The effect of facework on nonverbal immediacy when ICA was low (1.63), moderate (3.54), and high (5.45).
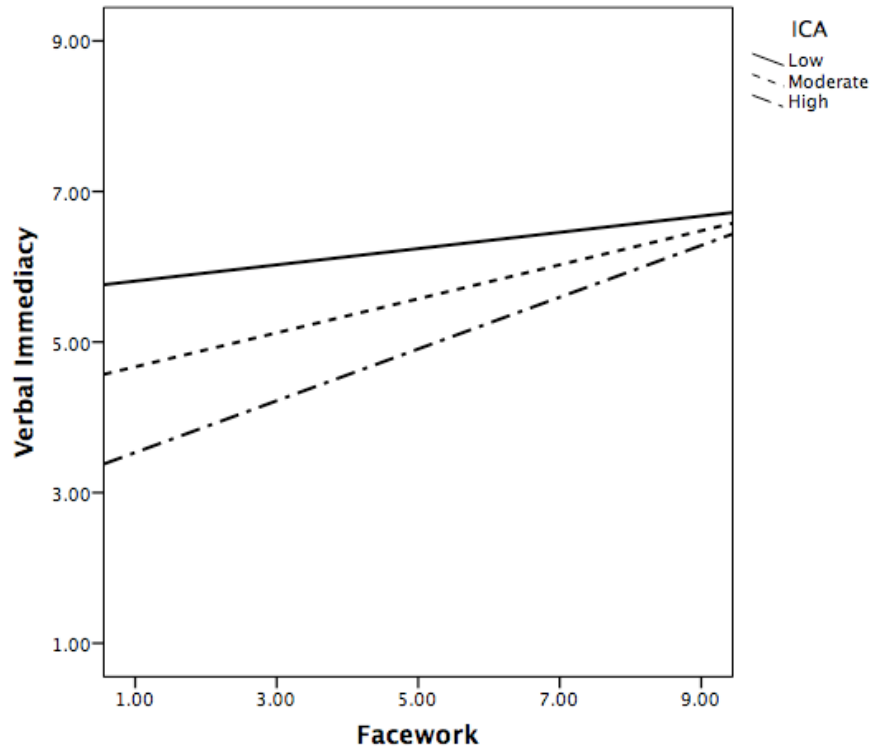
Figure 8. The effect of facework on verbal immediacy when ICA was low (1.63), moderate

(3.54), and high (5.45).