

# Host communication competence and locus of control of international students in the United States

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## Abstract

A survey of 169 international students was conducted at a large southern research university to investigate the relationship between host communication competence and students' locus of control. Results of correlation and multiple regressions revealed that international students' host communication competence was positively influenced by the internal locus of control. The independent sample *t* test showed that female and European students scored significantly higher in host communication competence than male and non-European international students.

**Keywords:** international students, host communication competence, locus of control

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## Introduction

More than half a million foreign students are studying in the United States (Institute of International Education [IIE] 2006). For most international students; however, the excitement of coming to the U.S. diminishes after their arrival (Olaniran 1996) as most students feel pressure to adapt to new ways of thinking and behaving in the host environment. According to available studies on adjustment, personal traits are critical factors affecting sojourners' psychological health and their adjustment to the host culture (Kramer, Wayne and Jaworski 2001, Kim 1995, Ward and Kennedy 1992, 1996). A body of research has suggested the effects of locus of control on cross-cultural adjustment (e.g., Black 1990, Seipel 1988, Ward and Kennedy 1992, 1996) Researchers (Black 1990, Seipel 1988, Kim 1988) found that individuals with an internal locus of control participate in intercultural communication more actively than individuals with an external locus of control and are also found to be psychologically healthier. Ward and Kennedy (1992) developed a predictive model in which the locus of control proved to have a significant effect on psychological distress. These authors concluded that the locus of control has a lineal effect that does not interact with elements of socio-cultural adaptation. In other words, the factors which mediate psychological well-being during cultural transitions seem to be the same as those that lead to an adaptive attitude in other contexts (as cited in Martinez Garcia *et al.* 2002). Although few quantitative studies have investigated how students' cultural, social and personal differences relate to their score on host communication competence, none of the studies mention the relationship between host communication competence and locus of control. In this study we investigated the relationship between host communication competence and students' locus of control. We also tested for the relationship between host communication competence and other personality characteristics, including sex and ethnicity.

### *Cross-cultural adaptation theory and host communication competence*

When people sojourn in a foreign country, some adjust well to the new environment within a short period of time, while others find the new environment a nightmare (Chen 1992).

Brislin (1993) identified three factors of adjustment, including (1) having successful relationships with people from other cultures; (2) feeling that interactions are warm, cordial, respectful, and cooperative; and (3) accomplishing tasks in an effective and efficient manner. Gudykunst, Hammer, and Wiseman (1977) included the ability to manage psychological stress effectively.

For foreigners, the communication patterns of the host environment have to be learned (acculturation), while some communication patterns acquired from their original home culture have to be "deleted" (deculturation). According to Tsekouras (2005), this process takes place gradually. Researchers (Coelho 1958, Morris 1960, Beals and Humphrey 1957) most often talk about four stages of acculturation including honeymoon, crisis/culture shock, recovery and adjustment (U-curve). Lysgaard (1955) first proposed, based upon a study of 200 Norwegian students studying in the United States, a three-phase "U" curve hypothesis of intercultural adjustment. During the first phase of adjustment, sojourners are fascinated with the experience in the new culture in which more positive factors of the host culture are perceived. The second phase is the "crisis" stage of adjustment. Sojourners experience the impact of loneliness and other symptoms of maladjustment. Negative perception towards encounters characterizes this phase. Whenever individuals become more involved in social life, they will feel more comfortable living in the host culture. This is the third phase of cross-cultural adjustment (Sun and Chen 1999). Later, Gullahorn and Gullahorn (1963) developed the W-curve hypothesis to extend the U-curve model. The authors argue that after sojourners come back to their home countries they may experience a similar readjustment process (Sun and Chen 1999). Research shows that international students feel a desire to make friends with host nationals (Zhang and Brunton 2007), but are limited by a heavy academic workload and by language. Students worry that others may not understand them, that they will misunderstand others, and that they won't be able to fully express thoughts and feelings (Marylin and Renee 2000). On the other side, domestic students are often uninterested in initiating contact with their international peers (Ward 2001). Of all factors that influence the adaptation process (communication skills, personality factors, demographic factors, cultural factors, social support network), it is generally agreed that the host language ability is the most important one for a successful international adaptation. The better the student's spoken language skills, the better their social interactions tend to be (Toyokawa and Toyokawa 2002). Related to language skills is host communication competence.

### *Host communication competence*

According to Kim (1988, 1995), host communication competence is an individual's ability to effectively communicate their experience to others in the host society. It is the overall internal capacity to decode and encode information in accordance with the communication practices of the host culture. According to Kim's theory of cross-cultural adaptation (1988), when strangers have acquired a sufficient level of host communication competence, they become more mature members of the host society and less reliant on others for protection in managing their daily activities. Strangers "build" communication competence through participation in interpersonal and mass communication activities in the host society. According to Kim, the key empirical indicators of host communication competence are: "(1) knowledge of the host communication system, (2) cognitive complexity in responding to the host environment, (3) affective (emotional, aesthetic) co-orientation with the host culture, and (4) behavioral capability to perform various interactions in the host environment" (Kim 1988: 86).

The host communication system indicates the ability of immigrants to identify properly and realize messages from the host environment in different situations of interaction with it. The most critical issues related to this indicator are knowledge of the host language and knowledge of the host non-verbal behavior (Kim 1988, Spicer 1968, Spitzberg and Cupach, 1984). The cognitive complexity indicator concerns the ability of strangers to acquire, interpret, and respond to the information necessary to perform satisfactorily in the host milieu (Kim 1988). According to Spitzberg and Cupach (1984), the content aspect of strangers' cognitive competence is defined as the substance of their ideas and knowledge that constitute the requisite information necessary to perform various transactions. The emotional aesthetic coorientation indicator refers to the emotional readiness and emotional participation in the cultural values, attitudes, and aesthetic/emotional experiences of the host culture. This indicator deepens strangers' understanding of the subtle feelings and attitudes embedded in various messages from the host environment and thereby enriches their communicative capabilities (Kim 1988, Spitzberg and Cupach 1984). Finally, the behavioral capability indicator refers to the ability of selecting behaviors that are effective and appropriate in various social situations (Kim 1988).

Kim differentiates between immigrants, or those who reside in a new culture for a long, indefinite period, and sojourners, or those who stay for a shorter time. This study focuses on sojourners; however, relevant literature on immigrant adaptation was reviewed because individuals in a new environment share common adaptation experiences (Kim 1988).

*Locus of control*

Students' locus of control might be one of the explanations why some students adjust easier to American culture than others. Researchers (Black 1990, Seipel 1988, Kim 1988) found that individuals with an internal locus of control participate in intercultural communication more actively and are also psychologically healthier than individuals with an external locus of control. Rotter (1966) defined locus of control as "the degree to which the individual perceives that reward follows from, or is contingent upon, his (her) own behavior or attributes versus the degree to which he (she) feels the reward is controlled by forces outside of him (her) self and may occur independently of his (her) own actions" (p.1). Internal and external loci of control can explain the way in which international students interact and their psychological health. A study conducted among New Zealand adults in Singapore showed that respondents with an external locus of control had more difficulty communicating in everyday life and more difficulty living in a new culture. Similarly, Seipel (1988) examined the behavior of Koreans in the United States and reported that respondents with an internal locus of control maintained more positive psychological health. Wheelless, Erickson, and Behrens (1986) found that international students with external loci were more likely subscribe to their culture's values. Yum (1988) conducted a study to examine the effect on communication patterns among Koreans, Japanese, Filipinos, and Caucasians in Hawaii. The results showed the positive effects of an internal locus of control on intercultural communication contacts among Koreans and Filipinos, but not among Japanese, Samoan, and Caucasian sojourners. Similarly, Yamaguchi and Wiseman (2003) found a positive relationship between external locus of control and Japanese international students' host communication. Because of the contradictory findings, we asked:

RQ1: What is the relationship between international students' locus of control and their self-reported host communication competence?

Chen (2000) found that a significant difference existed between international students coming from European countries and non-European countries in their adapting to the U.S. educational system and culture. European students were more satisfied with their interactions in the host society than students from non-European countries. Olaniran (1996) also confirmed that the more similar to American culture the foreign student's home culture was, the less social difficulty the student experienced. Kim (1988) states: "To the extent that the original culture coincides with the host cultural patterns, less new learning is necessary to become functionally fit in the host environment" (p. 131). In the United States, research showed, non-white and non-European students experience the greatest cultural differences, poorest mental and physical health, and highest acculturative stress (Poyrazli and Lopez 2007). Based on research findings, we asked a question:

RQ2: Do international students from Europe score higher on host communication competence than non-European students?

No two strangers share exactly the same adaptation experiences (Kim 1988). Lee and Chen (2000) looked at the relationship between host communication competence and the psychological adjustment of Chinese-Canadian adolescents. They found that adolescents' host communication competence was correlated negatively with psychological problems. Results of their study showed that female adolescents scored significantly higher in native communication competence than men; however, there was no difference between male and female adolescents in their host communication competence. In another study, female students reported having higher levels of English proficiency than did male international students studying in the United States. This can be explained by the gender differences in socialization process as females establish relationships more easily and converse more often with others (Poyrazli and Lopez 2007).

Because the literature review provides contradicting data about the relationship between international students' host communication competence and sex, we posed the research question:

RQ3: Is there a difference in host communication competence between male and female international students?

## Method

## Sample

The participants consisted of 169 international students (97 men and 72 women). Students ranged in age from 17 to 50 years ( $Mdn = 26$ ,  $M = 28.4$ ,  $SD = 6.27$ ). One fifth (20.7%) of all respondents were Europeans, and the rest were from Asia, America, Africa and Australia. The students' average length of time in the United States was 3.29 years ( $SD = 2.02$ ), ranging from 2 months to 15 years.

## Procedure

Through the International Cultural Center at a large southern university, emails were sent to all 1,433 international students enrolled during the Spring 2007 semester. The email contained a link to a questionnaire, posted on [www.surveymonkey.com](http://www.surveymonkey.com) that was approved by the Institutional Review Board (IRB). Therefore, all members of the international population at a large southern university had an equal chance of being included in the study. Of 1,433 international students, 172 returned the questionnaire (response rate = 12%). Of those, 169 respondents completed the items sufficiently for the analysis used in this study.

The online survey method allowed the researcher to collect data very fast, 24 hours a day, and at a low cost. Generally, web-based surveys allow large samples to be collected as easily as smaller samples ([Reips 2002](#)). Comparisons of data collected online and via modes that are more traditional tend to confirm that no major differences occur ([Krantz and Dalal 2000](#)).

## Measures

The dependent variable for this study measured host communication competence. To measure host communication competence this study used Tsekouras' (2005) eight attributes host communication competence scale. This scale was used as it focuses on the key empirical indicators of host communication competence (as defined in Kim, 1988:86): "(a) knowledge of the host communication system (item 1 and item 2), (2) cognitive complexity in responding to the host environment (item 3 and item 4), (3) affective (emotional, aesthetic) co-orientation with the host culture (item 5 and item 6), and (4) behavioral capability to perform various interactions in the host environment (item 7 and item 8)." Tsekouras used categorical data clustering to find these four indicators. Because Tsekouras's scale was used with immigrants in Greece, we had to adapt the items to measure host communication competence among international students who study in the United States. For example, Tsekouras's (2005) item "Speak the language of the host environment with family or close friends" was changed into "Speak English with family or close friends." We asked respondents about how often they pursued one of eight activities (e.g., "Speak English with family or close friends," "Read English newspapers/magazines"). The mean score of all the items for the Host communication competence dimension was 3.24 ( $SD = .78$ , Cronbach's alpha = .80). Because the scale showed relatively high reliability, we have summed the items as a scale, such that the larger the value of the scale, the greater the amount of host communication competence.

The questionnaire for this study also contained demographic items including sex, age, and country of origin. We also asked students how many years they had been in the United States.

Eight items on the locus of control were chosen from Levenson's (1974) original nine-item scale. The Levenson scale is now widely accepted as an alternative to Rotter's (1966) original scale. Researchers (Lam & Mizerski, 2005), however, indicated that one of Levenson's internal locus of control items correlates poorly with other scale items, so we excluded the item from the study. Of eight items, three items measured the internal locus of control, while the others measured the external locus of control. Sample items included "My life is determined by my own actions," and "When I get what I want, it is usually because I am lucky." All of the items were measured on a five-point Likert scale ranging from 1, representing *strongly disagree*, to 5, representing *strongly agree*. Items were summed into a scale, such that the larger the value of each scale, the greater the internal or external locus of control. The mean score of all the items for the internal locus of control dimension was 3.76 on a 1-5 possible range ( $SD = .68$ , Cronbach's alpha = .76), whereas the mean score for the external locus of control dimension was 2.31 ( $SD = .67$ , Cronbach's alpha = .79). Those reliabilities are acceptable and are also similar to Lam and Mizerski (2005) findings (for internal locus Cronbach's  $\alpha = .61$  and for external locus of control Cronbach's  $\alpha = .72$ ). Factor analysis was performed to check the factors' groupings using a principal

component solution and varimax rotation to find variable groupings. The final factors accounted for 66.44% of the variance.

Before analyzing any of the data, we cleaned the entire data set. Range checks were done by running frequency distributions of all the variables in the data set. Missing data was replaced by the average mean score of valid data. Three incomplete cases were removed from the sample.

## Results

Table 1 shows descriptive statistics for each item of the host communication competence scale, and Table 2 shows descriptive statistics for items of the locus of control scale. The locus of control score shows that international students had more internal locus of control than external locus of control. Those who are coming to study in the United States believe that they have more control of their life, rather than expecting that some outer forces, such as luck or destiny determine their life path.

RQ1 asked about the relationship between international students' locus of control and their host communication competence. Results of Pearson product moment correlations showed a positive correlation between an internal locus of control and host communication competence,  $r(169) = .36, p < .01$ , and a negative correlation between external locus of control and host communication competence,  $r(169) = -.14, p < .05$ . (see Table 3). Table 4 depicts correlations between locus of control and the single indicators of the host communication competence.

Independent sample *t* test was conducted to see if a difference exists between male and female international students in their reported host communication competence. Results found significant differences in host communication competence between these groups,  $t(166) = -2.01, p < .05$  (*M* for male host communication competence = 3.15, *SD* = .82; *M* for female host communication competence = 3.39, *SD* = .71). Female students scored higher in host communication competence than males.

Table 1

### *Means and Standard Deviations for Host Communication Competence Scale*

Host communication competence	Mean	SD
Speak English with family or close friends	3.01	1.38
Observe American holidays, celebrations, and ceremonies	3.13	1.21
Read English newspapers/magazines	3.92	1.19
Spend time studying the history of the United States	2.11	1.01
Listen to American music	3.46	1.19
Wear American-style clothes	3.60	1.14
Engage in friendly interaction with American students	3.51	1.18
Interact with Americans at informal gatherings	3.24	1.29

Table 2

### *Means and Standard Deviations for Locus of Control Scale*

Locus of control items	Mean	SD

<i>Internal</i> My life is determined by my own actions.	4.19	.79
When I get what I want, it is usually because I worked hard for it	3.99	.85
I can pretty much determine what will happen in my life	3.11	1.01
<i>External</i> To a great extent my life is controlled by accidental happenings	2.57	.94
When I get what I want, it is usually because I am lucky	2.35	.86
It is not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad luck.	2.50	1.04
I feel like what happens in my life is mostly determined by powerful people.	2.21	.89
My life is chiefly controlled by powerful others.	1.96	.96

Table 3

*Correlations for Host Communication Competence*

Subscale	1	2	3	4	5
	Students ( <i>n</i> = 169)				
1. Host communication competence	-	.36**	-.14*	.25**	.01
2. Internal locus of control		-	-.40**	.04	.04
3. External locus of control			-	-.04	-.17*
4. Years in the United States				-	.19**
5. Age					-

\*\* . Correlation is significant at the .01 level, one-tailed.

\* . Correlation is significant at the .05 level, one-tailed.

Table 4

*Correlations between Locus of Control and Indicators of Host Communication Competence*

Host communication competence	Internal LOC	External LOC
1. Speak English with family or close friends	Students ( <i>n</i> = 169)	
	.16* -.10	

2. Observe American holidays, celebrations, and ceremonies	.24**	-.21**
3. Read English newspapers/magazines	.27**	-.13
4. Spend time studying the history of the United States	.09	.09
5. Listen to American music	.19*	-.05
6. Wear American-style clothes	.27**	-.08
7. Engage in friendly interaction with American students	.31**	-.16
8. Interact with Americans at informal gatherings	.30**	-.13

\*\* . Correlation is significant at the .01 level, two-tailed.

\* . Correlation is significant at the .05 level, two-tailed.

Stepwise multiple regression analysis was run with host communication competence as a dependent variable, and external locus of control, internal locus of control, ethnicity, and age as independent variables. In a (standard) multiple regression analysis, the researcher decides how many predictors to enter and all the predictors enter the regression model simultaneously. In a stepwise multiple regression analysis, the number of predictors to be selected and the order of entry are both decided by statistical criteria (e.g., entry or removal criterion).

Collinearity statistics were satisfactory with all tolerances greater than .95. The results of the regression analysis found three significant predictors of host communication competence explaining together 20.3% of variance,  $F(4, 162) = 10.32, p < .001$ . The strongest predictor was internal locus of control ( $B = .38, SE B = .08, \beta = .38, , p < .001$ ) explaining 12.4% of variance in the host communication competence, followed by the number of years being in the United States ( $B = .09, SE B = .03, \beta = .24, , p < .05$ ) explaining 5.6% of variance, and ethnicity ( $B = .28, SE B = .14, \beta = .15, , p < .05$ ) explaining 2.3% of variance. This analysis shows that students' host communication competence was positively influenced by their internal locus of control. The years spent in the United States and European origin account together for less than 8 percent of variance and therefore are not the most important predictors of how well students communicate in a host society.

## Discussion

Several studies have examined the host communication competence of immigrants in the United States. However, none of them investigated the relationships between host communication competence and diverse population of international students' locus of control. In order to find this relationship, we conducted a survey of 169 international students at a large American research university. The basis of the research began with Tsekouras' (2005) work on eight attributes of host communication competence.

Based on correlation, multiple regression, and *t* test analysis findings we have found that international students with internal locus of control score higher on host communication competence than students with external locus of control. Locus of control appeared to be a meaningful construct that can help explain international students' host communication competence. This reflects Seipel's (1988) findings that students with internal locus of control maintained more positive psychological health. It is also in a line with Yum's (1988) findings. Some may claim that Yamaguchi and Wiseman (2003) showed host communication to be positively correlated with external locus of control; however, while it may be true only for the Japanese international students they interviewed, other studies show the opposite. In our study we had a diverse population of foreign students, and no matter where the students came from, the correlation between host communication competence and internal locus of control was positive, and relationship between external locus of control and host communication competence was negative. More importantly, our locus of control items showed good reliability. Based on our testing, one cannot argue the opposite. In addition, in a study conducted by Martinez Garcia *et al.* (2002), Asians scored higher in internality than externality. From a study carried out with four groups of Asian residents in the United States, Kuo and Tsai (1986) found that in a high proportion of immigrants one observes the

characteristics of a hardy personality, meaning they held the belief that subjects can control their own lives, the anticipation of changes in living circumstances as a positive goal, and the assumption of calculated risks in situations of uncertainty. This finding is in line with the characterization that other authors make of the immigrant as a person with initiative, active and energetic, who feels comfortable with people and scores high in values, such as personal liberty and individualism (Taft 1986) (as cited in Martinez Garcia 2002:302). Although locus of control is not the same as motivation, psychologists (Chirkov, Vansteenkiste, Tao and Lynch 2007) found that self-determined international students performed and adopted better to the studying abroad than students who were not self-determined.

In addition to correlation analysis, multiple regression findings show the locus of control as the best explanation for the ability to effectively communicate in a host society. Locus of control may tell us why some students are more or less adaptive to a host environment. This supports the body of research that shows personality traits as being the critical factors for effective intercultural communication and psychological health, and as potential predictor of successful cross-cultural adjustment (e.g., Bochner 1986, Church 1982, Cui, Berg and van Den 1991, Y. Kim 2001, Milstein 2003). As we have found, persons with internal locus of control are more able to communicate in a host environment. Based on Kim's theory of cross-cultural adaptation (1988), we can assume that students with an internal locus of control have a better knowledge of the host communication system, more complex cognitive system in responding to the host environment, better affective co-orientation with the host culture, and higher behavioral capability to perform various interactions in the host environment.

Furthermore, results indicate that international students from Europe score higher on host communication competence than non-European students as these were also findings from the Olaniran (1996) and Chen (2000) study. Because European culture coincides with the American cultural patterns more so than Asian and African cultures do, less new learning is necessary to fit in the host environment. It will be interesting to see how this will change in several years when new generations of now Westernized Asian cultures come to the United States.

The study found female international students scoring higher on host communication competence than male students. We do not know for sure what causes this gender difference as not many previous studies found or discussed them; however, women have a larger social network and have been socialized to be more expressive and open in their communication. Women are concerned with and evaluate their interpersonal relationships more often than men. As Burnett (1990) found, men are bothered about the practical aspects that make relationships possible, regardless of what went on in them, whereas women care more about monitoring and evaluating the intrinsic relational events. Since women's social network is larger, they may also adapt easier to the host society and therefore score higher on the communication competence.

In addition to the research questions asked in the study, we found that the more years the students spent in the United States, the higher is their host communication competence. As Tsekouras (2005) suggested, acculturation takes place gradually. The process includes not just language acquisition, but affects food and clothing preferences, value and belief systems, rituals and holidays observed, among others (Lum 2000; Thomas and Schwarzbaum 2006). According to Nilsson and Anderson (2004), more time spent in the U.S. is associated with higher degrees of acculturation, and therefore probably with a higher score on the host communication competence. This, however, is not a unique finding of this study.

As mentioned above, previous research has identified a host of psychological factors that contribute to intercultural adjustment (Bhawuk and Brislin 1992, Hammer *et al.* 2003, Van der Zee and Van Oudenhoven 2000) and some of the identified constructs overlap. For example, self-determination is similar to students' perception that they can control the world around them (internal locus of control). Some of the items on the host communication competence scale overlap with items on Van der Zee and Van Oudenhoven's (2001) Multicultural personality questionnaire, including open-mindedness and social initiative (as cited in Matsumoto, LeRoux, Robles and Campos 2007). Future studies will need to compare these various measures in order to identify what the active psychological skills are in predicting adjustment and adaptation.

This study has limitations. First, only self-ratings were used to measure the variables. Because adaptation to a host environment is a gradual process, a longitudinal study would be suitable in order to measure

host communication competence at different stages of international students' adaptation to the host culture, including collecting data on the first day that international students come to a new university. The second limitation is a small sample size and students' categorization into "European" and "non-European," which was used only for statistical reasons. Some researchers may object that we cannot use an internal locus of control scale on international students, as the scale was developed by testing Americans. We argue that we do not currently have a better measure to test the locus of control than the one developed in western world. Furthermore, in our case, the scale seemed to work. In addition to this, there tend to be so many differences between the ethnic groups or between the host communities in comparison that it is not possible to attribute the results to one single difference a priori (whether it is the ethnic group or host community in question). This is the case with our sample where we had Europeans, Asians, Africans and South Americans.

Future studies could test to what degree host communication competence is achieved through participation in interpersonal communication and participation in mass communication activities in the host society. It could also test other predictors that may influence host communication competence, such as students' media habits before and after coming to the United States and their Test of English as a Foreign Language score. They could test students' self-esteem and other personality traits (extraversion, neuroticism, openness, consciousness, and agreeableness) that may contribute to adjustment. The nature and content of communication interactions between sojourners and hosts may also influence host communication competence. We could also ask students if they plan to return to their home country after getting a degree in the United States. We could add a qualitative analysis of open-ended interviews of international students regarding their experience of perceiving that they can control the world, versus the perception that world controls them.

The purpose of this study was to contribute to the literature on *international students*, particularly the association between communication competence in a host society, locus of control, sex, ethnicity, and years of being in the United States. We believe that knowing how students' personal differences influence their communication competence is important not only for scholars, but for the education administration who often perceive international students as quiet and shy. Our findings can bring some light to what really causes students to open up or shut down when in a new environment. They can help to develop solutions to education problems (such as ELOP) that can help students with an external locus of control to adapt faster to a new environment.

## References

- Beals, E.L. and Humphrey, N.D. (1957). *No frontier to learning: The Mexican student in the United States*. Minneapolis: University of Minnesota Press.
- Begley, P.A. (1999). Sojourner adaptation. In L. A. Samovar and R. E. Porter (Eds.), *Intercultural communication: A reader* (pp. 400-405). Belmont, CA: Wadsworth Publishing Company.
- Bhawuk, D.P.S. and Brislin, R. (1992). The measurement of intercultural sensitivity using the concepts of individualism and collectivism. *International Journal of Intercultural Relations*, 16, 413-436.
- Black, J.S. (1990). Locus of control, social support, stress and adjustment in international transfers. *Asia Pacific Journal of Management*, 7, 1-29.
- Bochner, S. (1986). Coping with unfamiliar cultures: Adjustment or cultural learning? *Australian Journal of Psychology*, 38, 347-359.
- Brislin, R. (1993). *Understanding culture's influence on behavior*. Fort Worth, TX: Harcourt Brace Jovanovich.
- Chapdelaine, R.F. and Alexitch, L.R. (2004). Social skills difficulty: Model of culture shock for international graduate students. *Journal of College Student Development*, 45, 167-184.

- Chen, G.M. (1992). A test of intercultural communication competence. *Intercultural Communication Studies*, 2, 23-42.
- Chen, Z.J. (2000). International students' preparation for and adaptation to the American higher educational system: A study of cross-cultural communication. *World Communication*, 29, 25-48.
- Chirkov, V., Vansteenkiste, M., Tao, R. and Lynch, M. (2007). The role of self-determined motivation and goals for study abroad in the adaptation of international students. *International Journal of Intercultural Relations*, 31, 199-222.
- Coelho, G.V. (1958). *Changing Images of America: A Study of Indian Students' Perceptions*. Glencoe: The Free Press.
- Cui, G., van den Berg and Jiang, Y. (1998). Cross-cultural adaptation and ethnic communication: Two structural equation models. *The Howard Journal of Communications*, 9, 69-85.
- Gudykunst, W.B., Hammer, M.R. and Wiseman, R. (1977). An analysis of an integrated approach to cross-cultural training. *International Journal of Intercultural Relations*, 1, 99- 110.
- Hammer, M.R., Bennett, M.J. and Wiseman, R. (2003). Measuring intercultural sensitivity: The intercultural development inventory. *International Journal of Intercultural Relations*, 27, 421-443.
- Gullahorn, J.T. and Gullahorn, J.E. (1963). An extension of the U-curve hypothesis. *Journal of Social Issues*, 19(3), 33-47.
- Harrison, J.K., Chadwick, M. and Scales, M. (1996). The relationship between cross-cultural adjustment and the personality variables of self-efficacy and self-monitoring. *International Journal of Intercultural Relations*, 20, 167-188.
- Hoffman, D.L., Novak, T.P. and Schlosser, A.E. (2003). Locus of control, web use, and consumer attitudes toward Internet regulation. *Journal of Public Policy and Marketing*, 22, 41-57.
- Institute of International Education. (2006, November). *New enrollment of foreign students in the U.S. climbs in 2005/06*. Retrieved January 30, 2007, from <http://opendoors.iienetwork.org/?p=89251>
- Janssen, T. and Carton, J.S. (1999). The effects of locus of control and task difficulty on procrastination. *Journal of Genetic Psychology*, 160, 436-442.
- Kim, Y.Y. (1988). *Communication and cross-cultural adaptation: An integrative theory*. Philadelphia: Multilingual Matters Ltd.
- Kim, Y.Y. (1995). Cross-cultural adaptation: An integrative theory. In R. L. Wiseman (Ed.), *Intercultural communication theory* (pp. 170-193). Thousand Oaks, CA: Sage.
- Kim, Y.Y. (2001). *Becoming intercultural: An integrative theory of communication and cross-cultural adaptation*. Thousand Oaks, CA: Sage.
- Kramer, M., Wayne, S. and Jaworski, R. (2001). Sources of support and expatriate performance. The mediating role of expatriate adjustment. *Personal Psychology*, 54, 71-101.
- [Krantz, J.H. and Dalal, R. \(2000\)](#). Validity of Web-based psychological research. In M.H. Birnbaum (Ed.), *Psychological experiments on the Internet* (pp. 35-60). San Diego, CA: Academic Press.
- Kuo, W.H. and Tsai, Y.M. (1986). Social networking, hardiness and immigrant's mental health. *Journal of Health and Social Behavior*, 27, 133-149.
- Lachman, M.E. and Leff, R. (1989). Perceived control and intellectual functioning in the elderly: a 5-year longitudinal study. *Developmental Psychology*, 25, 722-728.

Lam, D. and Mizerski, D. (2005). The effects of locus of control on word-of-mouth communication. *Journal of Marketing Communications*, 11, 215-228.

Lee, B.K. and Chen, L. (2000). Cultural communication competence and psychological adjustment: A study of Chinese immigrant children's cross-cultural adaptation in Canada. *Communication Research*, 27, 764-792.

Levenson, H. (1974). Activism and powerful others: distinctions within the concept of internal-external control. *Journal of Personality Assessment*, 38, 377-383.

Lum, D. (2004). *Social work practice and people of color*. Belmont, CA: Brooks/Cole.

Lysgaard, S. (1955). Adjustment in a foreign society: Norwegian Fulbright grantees visiting the United States. *International Social Science Bulletin*, 7.

Marilyn, E.R. and Renee, S.T. (2000). Concerns, values, stress, coping, health and educational outcomes of college students who studies abroad. *International Journal of Intercultural Relations*, 24, 409-435.

Martinez, Garcia, M.F., Garcia Ramirez, M. and Jariego, I.M. (2002). Social support and locus of control as predictors of psychological well-being in Moroccan and Peruvian immigrant women in Spain. *International Journal of Intercultural Relations*, 26, 287-310.

Matsumoto, D., LeRoux, J.A., Robles, Y. and Campos, G. (2007). The intercultural adjustment potential scale (ICAPS) predicts adjustment above and beyond personality and general intelligence. *International Journal of Intercultural Relations*, 31, 747-759.

Milstein, T. (2003, May). *Transformation in a foreign land: Self-efficacy via sojourning*. Paper presented at the annual meeting of the International Communication Association, San Diego.

Morris, T. (1960). *The two-way mirror: National status in foreign students' adjustment*. Minneapolis: University of Minnesota Press.

Nilsson, J.E., & Anderson, M.Z. (2004). Supervising international students: The role of acculturation, role ambiguity, and multicultural discussions. *Professional Psychology: Research & Practice*, 35, 306-312.

Olaniran, B.A. (1996). Social skill acquisition: A close look at foreign students on college campuses and factors influencing their level of social difficulty in social situations. *Communication Studies*, 47, 72-88.

Pedersen, P. (1995). *The five stages of culture shock: Critical incidents around the world*. Westport, CT: Greenwood Pres.

Poyrazli, S. and Lopez, M.D. (2007). An exploratory study of perceived discrimination and homesickness: A comparison of international students and American students. *The Journal of Psychology*, 141, 263-280.

[Reips, U.D. \(2002\)](#). Standards for Internet-based experimenting. *Experimental Psychology*, **49**, 243-256.

Rotter, J.B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80, 1-28.

Seipel, M.M.O. (1988). Locus of control as related to life experiences of Korean immigrants. *International Journal of Intercultural Relations*, 12, 61-71.

Spitzberg, B.H. and Cupach, W.R. (1984). *Interpersonal communication competence*. CA: Sage, Beverly Hills.

Sun, W. and Chen, G.M. (1999). Dimensions of difficulties mainland Chinese students encounter in the United States. *Intercultural Communication Studies*, 9, 19 - 30.

Taft, R. (1986). Methodological considerations in the study of immigrant adaptation in Australia. *Australian Journal of Psychology*, 38, 339–346.

Thomas, K. and Althen, G. (1989). Counseling foreign students. In Pederson, P. B., Draguns, J. G., Lonner, W. J., & Trimble, J. E. (Eds.). *Counseling across culture* (pp 205-42). Honolulu, HI: University of Hawaii Press.

Thomas, A. J. and Schwarzbaum, S. (2006). *Culture & identity*. Thousand Oaks, CA: Sage.

Toyokawa, T. and Toyokawa, N. (2002). Extracurricular activities and the adjustment of Asian international students: A study of Japanese students. *International Journal of Intercultural Relations*, 26, 363-379.

Tsekouras, G. E. (2005). [Modeling the cross-cultural adaptation process of immigrants using categorical data clustering](http://www.aegean.gr/culturaltec/tsekouras/Papers/IEEE%20Conf%20Comput%20Intell.pdf). Presented at Proceedings of the International Conference on Computational Intelligence for Modeling, Control and Automation and International Conference on Intelligent Agents, Web Technologies and Internet Commerce. Retrieved February 15, 2007, from <http://www.aegean.gr/culturaltec/tsekouras/Papers/IEEE%20Conf%20Comput%20Intell.pdf>

Van der Zee, K.I. and Van Oudenhoven, J.P. (2000). The Multicultural Personality Questionnaire: A multidimensional instrument of multicultural effectiveness. *European Journal of Personality*, 14, 291–309.

Ward, C. and Kennedy, A. (1992). Locus of control, mode disturbance, and social difficulty during cross-cultural transitions. *International Journal of Intercultural Relations*, 16, 175-194.

Ward, C. and Kennedy, A. (1996). Crossing cultures. The relationship between psychological and sociocultural dimensions of cross-cultural adjustment. In J. Pandey, D. Sinah, & D. P. S. Bhawak (Eds.), *Asians contributions to cross-cultural psychology* (pp. 289-306). Thousand Oaks, CA: Sage.

Ward, C. (2001). *The impact of international students on domestic students and host institutions*. Wellington. New Zealand: Ministry of Education.

Ward, C. (2004). Psychological theories of culture contact and their implications for intercultural training and interventions. In: D. Landis, J. M. Bennett & M. J. Bennett (Eds.), *Handbook of intercultural training*. Thousand Oaks, CA: Sage.

Wheless, L.R., Erickson, K.V. and Segars Behrens, J. (1986). Cultural differences in disclosiveness as a function of locus of control. *Communication Monographs*, 53, 36-46.

Zhang, Z. and Brunton, M. (2007). Differences in living and learning: Chinese international students in New Zealand. *Journal of Studies in International Education*, 11, 124-140.

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Journal of Intercultural Communication, ISSN 1404-1634, issue 24, October 2010.  
URL: <http://www.immi.se/intercultural/>.