

Acculturative Stress, Stigma toward Mental Illness, Help-Seeking Behaviors, and Preferences for  
Mental Health Professionals among Korean College Students in U.S.

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\*\* This study was funded by IIT Educational and Research Initiative Funding (ERIF).

## Introduction

On April 16, 2007, Seung-Hui Cho, an 1.5 generation Korean American, killed 32 people and wounded many more, before committing suicide on the Virginia Tech campus in Blacksburg, Virginia. This tragedy, the deadliest school shooting in U.S. history, pointed out gaps in mental health care that left Cho's deteriorating condition in college untreated and indicated Cho's difficulties developing social relationships and his isolation. The ensuing interviews with Cho's parents and neighborhood also implied Korean community's strong stigma toward mental illness and showed their lack of help-seeking behaviors in U.S. This tragedy prompted many colleges and universities to review their mental health care and outreach efforts for students on their campuses, with a special emphasis on counseling and support services for international students and students from racial and ethnic minority backgrounds. We propose a research study in this application which is part of a larger planned program of research to identify factors relevant to these counseling and support services.

As mentioned, Koreans represent one of the largest international student group and the most rapidly growing population in American universities (Institute of International Education, 2006). Researchers have been trying to understand factors that affect international students' adjustment in the U.S. (e.g., Chen, Mallinckrodt, & Mobley, 2002; Constatine, Okazaki, & Utsey, 2004; Swagler & Ellis, 2003; Yeh & Inose, 2003). One of the most important factors was acculturative stress. Acculturative stress is defined as a stress reaction in response to life events that are rooted in the experiences of acculturation (Berry, 2005), psychological difficulties in adapting to a new culture (Smart & Smart, 1995), or psychosocial stressors resulting from unfamiliarity with new customs and social norms (Lin & Yi, 1997). Research has consistently indicated that Asian international students including Korean students experience more

acculturative stress than other international students (e.g., Cross, 1995; Kaul, 2001). Adapting to new school, work and social environments, overcoming language barriers, and resolving family conflicts cause by the differential rate of acculturation between parents and children can be included as resources of acculturative stress (Wei et al., 2007). However, a comprehensive review of the counseling and psychology literature revealed with few studies that aimed at increasing our understanding of acculturative stress, stigma toward mental illness, and help-seeking behaviors of Asian students, especially Korean international students. In addition, research reported high termination rate of counseling session for Asian American clients (Sue & Sue, 1990) and different expectations for professional help (Byon, Chan, & Thomas, 1999). Thus, it is important to understand association between acculturative stress and psychosocial adjustments.

Another hindrance to mental healthcare for Asian international students is the high stigma toward mental illness which interferes with seeking professional help when in need (Tsang, Tam, Chan, & Cheung, 2003). According to Corrigan (2004), the most often cited reason for why people do not seek counseling and other mental health services is the stigma associated with mental illness and seeking treatment. Stigma can decrease the likelihood that an individual will seek services even when the potential consequences of not seeking counseling are severe (Sibickey & Dovidio, 1986). Research studies that explored the relationship between adherence to Asian cultural values and attitudes toward seeking professional help indicated that Asian-American students' level of acculturation was significantly correlated with their tolerance of stigma associated with psychological help and their willingness to see a counselor (Kim & Omizo, 2003). Yoo (1997) compared help seeking attitudes between Korean and US college students and found that US students had more positive attitudes toward professional

psychological help-seeking than Korean students. Studies also showed that Korean students as a group seek professional psychological help less often than US students for issues such as substance abuse, stress, and depression and their expectation about the counseling was different from American students (Yoo, Goh, & Yoon, 2005; Yoo & Yoo, 2000).

Finally, Korean international students' preferences for mental health professionals are relatively unknown. Research with Asian Americans revealed that the preferred counseling styles among Asians frequently differ from the assumptions of western psychotherapies (Byon, et al., 1999). Considering the high termination rate for Asian American counseling clients (Sue & Sue, 1990), it is important to understand Korean clients' preferences for professionals when they finally seek for professional help. It is hypothesized that Korean college students in U.S may have different preferences for types of mental health professionals such as psychologist, psychiatrist, and clinical social worker. Their preferences may also vary according to the demographic characteristics (e.g., gender, age, level of education, and years of experiences) of the mental health professionals. According to Byon et al. (1999), Korean international students have high expectations regarding counselor attitudes and behavior and low expectations for counselors' physical attributes (e.g., attractiveness). Byon et al. (1999) also reported a high resistance for Korean international students to seek help from mental health professionals. Given this high propensity of not seeking help from professionals, it is imperative for mental health researchers to identify mental health professionals that are most acceptable to Korean college students in U.S., as part of the outreach efforts. In order to effectively meet the mental health needs of Korean college students in U.S. and help with their adjustments, mental health professionals need to step out of the traditional role of a counselor and to develop better understanding of outreach and treatment approaches in the context of cultural differences.

Increased knowledge regarding Korean college students' mental health problems and their help-seeking behaviors could enhance both the therapy process and outcome with this population.

The objectives of this study are: (a) to study stigma as a mediating and moderating factor between acculturative stress and help-seeking behaviors of Korean college students in U.S., and (b) to study factors influencing these students' preferences for mental health professionals. Specifically, we are interested in identifying typical help-seeking behaviors these students have; the interaction between acculturative stress and cultural stigma towards help-seeking and help-seeking behavior; and specific therapist characteristics factors that influence help-seeking behavior of Korean college students. Specifically, two research hypotheses are posed for this study.

1. Korean college students in U.S. with high acculturative stress are more likely to seek professional psychological help and the relationship between stress and help-seeking behavior is mediated by perceived stigma of seeking psychological help.
2. Therapist-related characteristics are positively related to Korean college students' preferences for therapists they will be more willing to seek psychological help.

## Method

### *Participants*

One hundred and fourteen Korean international students (68 women and 46 men) enrolled at a major public research university and at a private research university in Chicago area were recruited on a volunteer basis to participate in this study. The ages of the students ranged from 18 to 45 years, with a mean age of 25.47 years ( $SD = 4.9$ ). On the average, these students had been in the United States for 4.24 years ( $SD=5.44$ ). Seventy-six percent of the participants

were undergraduate students. The students who ranged from the undergraduates to doctoral levels, had a variety of academic majors, including business, engineering sciences, physical sciences, social sciences, and education.

### *Instruments*

The students completed a research packet that included a demographics information form, the Inventory of Common Problems, the Center for Epidemiologic Studies Depression Scale, and a conjoint measurement of preferences for therapists.

*Acculturative Stress Scale for International Students (ASSIS)*. The ASSIS was developed by Sandhu and Asrabadi (1994) to assess acculturative stress of international students. It is composed of a 36 items and seven factors: Perceived Discrimination, Homesickness, Perceived hate, Fear, Stress due to Change/Cultural Shock, Guilt, and Nonspecific concerns. Each item is rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

*Self-Stigma of Seeking Help Scale (SSSHS)*. The SSSHs was developed by Vogel et al. (2006) to assess self-stigma regarding counseling. It is a 10-item measure that uses a 5-point Likert-type rating scale for each item.

*Intentions to Seek Counseling Inventory (ISCI)*. The ISCI was developed by Cash, Begley, McCown, and Wiese (1975) to assess a person's willingness to seek counseling for psychological and interpersonal issues. It is comprised of 17 items on which respondents rate how likely they would be to seek counseling for each problem listed (e.g., depression, relationship difficulty, drug problems). Items are answered on a 4-point Likert scale.

*Willingness to See a Counselor (WSC)*. The WSC was used to measure one's willingness to see a counselor for a specified list of problems. It is comprised of 24-item attitudinal measure

which is based on the Personal Problems Inventory (Cahs, Beagley, McCown, & Weise, 1975). The scores range from 1(not willing) to 4 (willing).

*Conjoint Measurement of Preferences for Therapist (CMPT)*. The CMPT was developed to measure factors affecting Korean international students' preferences for therapists. Because of a potential information overload problem, conjoint measurement is generally confined to no more than five or six attributes (Green & Srinivasan, 1978). Five therapist characteristic attributes were used: (a) gender (two attribute levels: man, woman); (b) race/ethnicity (five levels: European American, African American, Asian, Hispanic, American Indian), (c) age (four levels: 26-35, 36-45, 46-55, 56-65), (d) professional identity (three levels: psychiatrist, counseling psychologist, and clinical social worker); and (e) training institution (three levels: Harvard University, University of Maryland, and Indiana State University). These therapist characteristics were chosen because they are hypothesized to affect the preferences of Korean international students in choosing a therapist. For the current study, if a complete set of combinations (Gender  $\times$  Race/Ethnicity  $\times$  Age  $\times$  Professional Identity  $\times$  Training Institution) were used, a conjoint measurement would consist of 360 possible combinations of therapist characteristics ( $2 \times 5 \times 4 \times 3 \times 3 = 360$  hypothetical combinations). According to Green and Srinivasan (1978), most people would have difficulty ranking or rating a set of combinations consisting of more than 30 stimuli. An alternative to the full factorial design, called an orthogonal array, was used which is the most parsimonious way to estimate all main effects. These types of designs assume there are no interaction effects among variables. The conjoint procedure of the Statistical Package for the Social Science (SPSS) program generated 38 hypothetical combinations (32 cards were used for validation and six holdout cards were used for cross-validation) as sufficiently representative of the model (SPSS, 1997).

The conjoint measurement was presented to the Korean international students as a listing of 38 therapists in a managed behavioral health care network that they could choose to see if they have any mental health problem. The listing is designed to look like a computer directory of behavioral health providers with name, professional identity, training institution, gender, race/ethnicity, and age as headings. For example, in item#1 the information about the therapist is listed as: Daniel Johnson, DSW; clinical social worker; Harvard University graduate; African American; male; and 56 years old. The students were asked to rate their preferences for the therapists in the listing using a preference rating of 1 to 100 with 1 the least preferred to 100 being the most preferred.

A split-half procedure was conducted to examine the reliability of the conjoint measurement. The sample was randomly divided into two groups. Spearman rank correlation between the preference ranking of the 38 cards for the split groups was .74 ( $p < .001$ ), indicating that the conjoint measurement had moderately high reliability in the present study.

### *Data Analysis*

First, Descriptive statistics were computed for every measure in this study. In addition, the mean acculturative stress scores of the Korean students in this study were compared to the normative data reported in the test manual.

For Hypothesis No. 1, a hierarchical regression analysis was computed. The intention to seek help total score was the dependent variable in this analysis. In step 1, acculturative stress variables were entered as predictors and the  $\Delta R^2$  was computed. In step 2, the two stigma variables were entered as predictors and the  $\Delta R^2$  for the stigma variables after controlling for the effect of stress variables was computed.

For Hypothesis No. 2, conjoint analysis was used to determine the relative importance of each demographic factor in the preferences formation for the therapists in help-seeking.

Conjoint analysis can be conceptualized as a non-parametric statistical procedure that is a counterpart to multiple regression analysis. The data obtained from the conjoint measurement provide two important kinds of information:

1. The UTILITY of each level of each attribute, and
2. The IMPORTANCE of each attribute in the decision process.

Utilities are sometimes referred to as “part-worth utilities.” The *utilities* are usually derived using Ordinary Least Squares dummy variable regression analysis (SPSS, 1997). Utilities are the numerical expressions of the values that respondents place on attribute *levels* (e.g., man vs. woman). Attribute *importance* deals with the relative importance of each *attribute* (e.g., gender). Specifically, relative importance (the *importance* score) is calculated by first determining the range of utilities (*part-worth* score) for each attribute. Then, the sum of the ranges of all attributes is determined. Finally, the importance for each attribute is calculated in terms of its range as a percentage of the sum of the ranges across attributes.

The conjoint analysis procedure 8.0 (SPSS, 1997) was used to compute the utility scores for each level of the five attributes and the importance score for each of the five attributes. A discrete model was specified, with the assumption that the factor levels are categorical and no assumption is made about the relationship between the levels and the data (SPSS, 1997). Utility scores for each level of the five attributes and the relative importance scores of the attributes were computed.

## Results

### *Descriptive Statistics*

Mean, standard deviations, ranges, and zero-order intercorrelations are presented in table 1. As the table shows, the associations among acculturative stress, self-stigma of seeking help, and willingness to seek a counselor were all highly related ( $ps < .05$ ).

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 Insert Table 1  
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### *The mediational effect of self stigma*

Complete mediation is established if (a) the predictor (i.e., acculturative stress) is related to the criterion (i.e., willingness to seek a counselor); (b) the predictor is related to the mediator (i.e., self-stigma); (c) the mediator is related to the criterion; and (d) when the mediator is controlled for statistically, the previously significant relationship between the predictor and the criterion is no longer significant (Baron and Kenny, 1986; Frasier, Tix, and Barron, 2004). Mediation of self-stigma between each major acculturative stress variable and willingness to seek for help was tested with a series of hierarchical regression analysis. To test the mediator hypothesis, we used the total scores of acculturative stress to measure cultural stress and computed mediational analyses. As can be observed from the correlation matrix in Table 2, stress domains were significantly correlated with both self-stigma and willingness to seek for help. Self-stigma and willingness to seek for help were also correlated ( $r = .66, p < .01$ ). The significant results indicated that, at the bivariate level, each of the conditions necessary to test for the possible role of a mediator has been met.

Regression analyses were performed to examine whether self-stigma mediated the relation between acculturative stress and willingness to seek for help. As shown in Table 2, in

Regression 1, stress accounted for 11% of the variance in willingness to seek for help when it was entered alone in the regression analysis. In Regression 2, self-stigma was entered in step 1 of the analysis, contributing 15% of the variance in willingness scores. Stress was entered in step 2, contributing an additional 0.6% of variance to the prediction of willingness to seek for help.

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Insert Table 3 about here.

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#### *Conjoint analysis: Relative Importance Scores*

The relative importance scores for the five therapist characteristic attributes pertaining to the context of preferences for therapists provide information about the relative importance of each attribute in the preference formation process. To compute the relative importance score for each attribute, each individual Korean international student's importance score for that attribute was first computed. Then, all students' importance scores for that attribute were added together and averaged by the number of participants in the group. Importance scores for each student were computed by taking the utility (part-worth scores) range for the particular attribute and dividing it by the sum of the utility ranges of all the attributes. The importance scores of the five attributes for each student sum to equal 100. The higher the score, the more important is the factor in influencing the individual student's preference formation for choosing a therapist for mental health problems.

The Kendall's tau (correlation between observed and estimated preferences) was computed to be .81,  $p < .00001$ , indicating a good fit between the model and the data. The relative importance score (the mean importance score) of the attribute race was computed to be 29.87, age was 21.14, professional identity was 20.62, training institution was 17.26, and gender

was 11.11. The rank order of attribute importance is, therefore, race/ethnicity, age, professional identity, training institution, and gender. To investigate the statistical differences among the relative importance scores of the five attributes, all possible (10) planned pair-wise comparisons, using paired samples  $t$ -tests, were performed. The Holm's sequential Bonferroni procedure was used to control for Type I errors ( $p < .05$ ), yielding  $.05/10 = .005$  for each individual pair to be significant.

Based on the results from 10 pair-wise comparisons, the relative importance scores of the race/ethnicity, age, professional identity, training institution were significantly higher than the importance scores for gender ( $p < .001$ ). Race/ethnicity was significantly higher than age, professional identity, and training institution. Age, professional identity and training institution did not differ from each other. Gender was not a significant factor in the present study.

#### *Part-Worth Scores*

Part-worth scores indicate the influence of each attribute level on the Korean international students' preferences for therapists. Higher scores indicate more favorable attitudes for that attribute level. A summary of the results is provided in Table 3.

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Insert Table 3 about here.

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Six of the 38 cards in each social context were holdout cards. Although as part of the study the participants rated these six cards in each scenario, the conjoint procedure did not use them when estimating the utilities. Instead, the conjoint procedure computes correlations between the observed and the predicted rank orders for these profiles as a check on the validity of the utilities. Since the holdout cards were not used to estimate utility scores, the holdouts will

usually produce lower correlation coefficients (SPSS, 1997). The Kendall's tau for the six holdout cards was 0.87 ( $p < .01$ ), indicating a moderately high correlation between the observed and the predicted rank orders of the attribute levels for these profiles.

The utility scores indicated that in the race attribute levels, Asian therapists (part-worth score of 4.84) were preferable to European American therapists (1.53), American Indian therapists (-0.15), and African American therapists (-1.50). Hispanic therapists (-4.72) was seen as the least preferable. In the age attribute levels, people over 45 were (part-worth scores of .48 for age 46-55 and .49 for age 56-65) were preferred to therapists in the age range of 36-45 (-0.28) and therapists in the age range of 26-35 (-0.70). In the professional identity attribute levels, psychologists (part-worth score of 2.36) were preferred to psychiatrists (0.72) and psychiatrists were preferred to social workers (-3.08). In the training institution attribute levels, therapists with a Harvard degree (part-worth score of 3.46) were preferred over those with a University of Maryland degree (-1.85) or an Indiana State University degree (-1.61).

### Conclusion

This study found that self-stigma of seeking professional help was found to be significantly related to willingness to seek for help. The relationship between self-stigma and willingness to seek for help is significantly higher than the relationships between acculturative stress and willingness to seek for help. This result indicates that students who experience a great amount of stress would not go and seek for professional help when they have stigma toward getting professional mental health service. However, the second part of study examined the preferences for mental health professional under the condition each participant seeks for professional help. The finding indicates that Korean students prefer to have a mental health profession who is older and has similar ethnic background. It reflects if Korean students meet a

professional who may have better understanding about Korean culture and have more counseling experience, they may feel more comfortable, have less stigma of getting help, and be more willing to continue having professional services. In fact, while this study was conducting, some of students asked if Korean counselors are available at IIT.

Clinically, it will be more appropriate for students from minority background to have a counselor who has more experiences in multi-cultural counseling. In addition, it will be important to promote the importance of having professional mental health services and develop a program to reduce stigma toward mental illness and stigma of seeking mental health services.

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Table 1.  
Means, Standard Deviations, and Zero-Order Correlations

| Measure     | M     | SD    | 1 | 2     | 3     |
|-------------|-------|-------|---|-------|-------|
| Willingness | 26.03 | 3.49  | - | .162* | .19*  |
| Stress      | 88.62 | 18.16 |   | -     | .172* |
| Self-stigma | 11.8  | 2.87  |   |       | -     |

Note: N=171. Willingness=Willingness to Seek a Counselor Scale; Stress= Acculturative Stress Scale; Self-stigma=Self-stigma of seeking Help Scale.

\*  $p < .05$

Table 2.

*Regression analysis examining the mediating role of self-stigma for the relation between stress and willingness to seek for help*

| Variable   | Beta  | R2   | F      | P     |
|--|-------|------|--------|-------|
| Regression 1: Stress predicting Willingness to seek for help                             |       |      |        |       |
| Stress   | 0.105 | .108 | 10.222 | 0.000 |
| Regression 2: Stress predicting willingness to seek for help controlling for self-stigma |       |      |        |       |
| Self-stigma  | 0.192 | .035 | 6.774  | 0.000 |
| Stress   | 0.062 | .01  | 1.923  | 0.01  |

Table 3

*Relative Importance and Part-Worth Utility Scores and Preference Orderings of Attribute Levels Ranked by Korean International Students*

| Attribute Level          | Importance Score | Part-worth Score | Rank |
|--------------------------|------------------|------------------|------|
| Race/Ethnicity           | 29.87            |                  |      |
| European American        |                  | 1.53             | 2    |
| African American         |                  | -1.50            | 4    |
| Hispanics                |                  | -4.72            | 5    |
| Asian American           |                  | 4.84             | 1    |
| American Indian          |                  | -0.15            | 3    |
| Gender                   | 11.11            |                  |      |
| Male                     |                  | -.81             | 2    |
| Female                   |                  | .81              | 1    |
| Age                      | 21.14            |                  |      |
| 26-35                    |                  | -.70             | 4    |
| 36-45                    |                  | -.28             | 3    |
| 46-55                    |                  | .48              | 2    |
| 56-65                    |                  | .49              | 1    |
| Professional Identity    | 20.62            |                  |      |
| Psychiatrist             |                  | .72              | 2    |
| Counseling Psychologist  |                  | 2.36             | 1    |
| Clinical Social Worker   |                  | -3.08            | 3    |
| Training Institution     | 17.26            |                  |      |
| Harvard                  |                  | 3.46             | 1    |
| University of Maryland   |                  | -1.85            | 3    |
| Indiana State University |                  | -1.61            | 2    |

## Budget Report

The total funds required to operate the project was \$23,116. Approximately 78% of funds was allocated for student support.

### **Personnel**

*Principal Investigator (PI):* Nothing is budgeted for the PI. The PI was responsible for advertising the study to Korean students associations in Chicago area colleges and universities, training a graduate assistant, participating in data collection, analyzing data, reporting the results, presenting at the professional conferences, and publishing findings of this study.

*Graduate Student Research Assistant:* One graduate student was budgeted for total 21 credit hours during the full academic year: 6 credit hours in each Spring and Summer and 9 credit hours in Fall semester. The graduate student was responsible for assisting the PI with research activities related to this project including advertising the study, recruiting study participants, collecting data, and managing database.

**Other:** Funds were requested for tuition support. One graduate student is budgeted for total 21 credit hours during full academic year: 6 credit hours in each Spring and Summer and 9 credit hours in Fall semester.

Each study participants received \$25 instead of \$30 due to tuition increase in 2008. In order to support 9 credit hours for RA, the budge change was necessary. This study recruited 193 participants. However, only 171 used for the analysis due to age, incomplection, or visa status.