

Mental Health Stigma, Self-Concealment, and Help-Seeking Attitudes among Asian American and European American College Students with No Help-Seeking Experience

Akihiko Masuda · Matthew S. Boone

© Springer Science+Business Media, LLC 2011

Abstract The present study examined whether mental health stigma (i.e., negative attitudes toward people with a psychological disorder) and self-concealment are unique predictors of help-seeking attitudes in Asian American and European American college students with no history of seeking professional psychological services. The Asian American group had less favorable help-seeking attitudes overall, lower levels of stigma tolerance and interpersonal openness, greater mental health stigma, and greater self-concealment than the European American group. Mental health stigma and self-concealment were unique predictors of help-seeking attitudes overall in both groups. However, mental health stigma was not a unique predictor of recognition of need for psychotherapeutic help and confidence in mental health practitioners, the components of help-seeking attitudes theorized to be most associated with actual help-seeking behavior. Self-concealment was a unique predictor of confidence in mental health practitioners in the Asian American group, but not in the European American group.

Keywords Asian Americans · European Americans · Attitudes toward seeking professional psychological help · Self-concealment · Mental health stigma

Introduction

The psychological health and service utilization of Asian American college students in the U.S. warrants further study. Despite their “model minority” status (cf., Mok 1998), Asian Americans are found to be at least as distressed as European Americans and those from other ethnic backgrounds (cf., Hall 1995; Sue and Chu 2003). Some studies suggest that Asian American college students may be more vulnerable to psychological distress (cf., Lau *et al.* 2009; Liao *et al.* 2005; Okazaki 1997, 2000; Okazaki *et al.* 2002) and less likely to

A. Masuda (✉)
Georgia State University, Atlanta, GA, USA
e-mail: amasuda@gsu.edu

M. S. Boone
Gannett Health Services, Cornell University, Ithaca, NY, USA

utilize psychological services (cf., Kearney *et al.* 2005; Masuda *et al.* 2009a) than European Americans.

A construct that is especially relevant to this area of research is *attitudes toward seeking professional psychological help*. According to Fischer and Turner (1970), such attitudes are multidimensional and include four components: (1) recognition of a need for psychotherapeutic help, (2) stigma tolerance associated with professional help, (3) interpersonal openness regarding one's problems, and (4) confidence in the ability of mental health practitioners to be of assistance. Fischer and Turner posit that recognition of need and confidence in mental health practitioners are most closely associated with actual help-seeking behavior.

Studies have consistently demonstrated that being female and having previous help-seeking experience (i.e., seeking services from a psychological professional, such as a psychiatrist, psychologist, counselor or similar, for personal problems) are associated with positive help-seeking attitudes (cf., Fischer and Farina 1995; Fischer and Turner 1970; Masuda *et al.* 2005). Research has also shown that Asian American college students tend to have less favorable help-seeking attitudes than European American college students (Atkinson and Gim 1989; Masuda *et al.* 2009a). According to some theorists, these attitudes are influenced by culturally-shaped beliefs that self-disclosure, an inevitable part of engaging in professional psychological services, is a sign of weakness and is likely to bring shame to one's family (e.g., Root 1985). Given the likely relationship between help-seeking attitudes and help-seeking behavior, a better understanding of the factors associated with such attitudes could inform efforts to increase service utilization among Asian American college students, particularly those who have no previous experience of seeking professional psychological services for their own emotional and psychological issues.

One such factor is mental health stigma, which can be roughly defined as a set of negative attitudes toward people with a psychological disorder (Corrigan 2004; Komiti *et al.* 2006). As discussed elsewhere (Corrigan and Penn 1999; Link and Phelan 2001; Link *et al.* 1999), mental health stigma is pervasive, and greater mental health stigma is associated with less favorable help-seeking attitudes (Leong and Zachar 1999; Masuda *et al.* 2009b; Vogel *et al.* 2005). Masuda and colleagues (Masuda *et al.* 2009a) found that Asian American college students, regardless of help-seeking history, had greater mental health stigma and less favorable help-seeking attitudes than European American students. Asian American college students were also found to have less favorable attitudes across all of the dimensions described by Fischer and Turner (1970) — that is, recognition of need, stigma tolerance, interpersonal openness, and confidence in psychological professionals.

Self-concealment is another factor associated with help-seeking attitudes (Cramer 1999). Self-concealment is a behavioral tendency to keep distressing and potentially embarrassing personal information hidden from others (Cramer and Barry 1999; Larson and Chastain 1990). Self-concealment is especially relevant to Asian American college students because it overlaps with emotional control and the maintenance of individual and family reputations; cultural practices that are highly valued by many Asian and Asian American communities (Kim *et al.* 1999, 2001; Komiya *et al.* 2000). In these cultural contexts, excessive self-disclosure and strong emotional expression are devalued because they are regarded as disruptive acts against collective harmony and personal and family honor. Evidence suggests that Asian American college students have greater self-concealment than European American college students (Masuda *et al.* 2009a) and that self-concealment is more negatively related to attitudes toward seeking professional psychological services for Asian and Asian American students (Liao *et al.* 2005).

Mental Health Stigma and Self-Concealment as Unique Predictors of Help-Seeking Attitudes

Prior research (e.g., Vogel, Wester, and Larson 2007a) suggests that mental health stigma and self-concealment are unique predictors of help-seeking attitudes overall and may be predictors of Fischer and Turner's (1970) four specific dimensions of help-seeking attitudes. Nevertheless, whether these findings can be generalized to Asian American college students, especially those without prior experience with seeking professional help, has not been fully investigated. Investigating this population could lead to outreach efforts better tailored to their unique experiences and attitudes.

Present Study

The present study examined whether mental health stigma and self-concealment were unique predictors of help-seeking attitudes, both when considered overall and when considered with regard to the specified four individual dimensions of help-seeking attitudes, in Asian American college students with no history of seeking professional psychological services compared to European American students who similarly had no help-seeking history. The study first investigated whether the two groups differed from one another in help-seeking attitudes overall, specific help-seeking attitudes, mental health stigma, and self-concealment. Subsequently, the study investigated whether mental health stigma and self-concealment were unique predictors of both help-seeking attitudes overall and the specific help-seeking attitudes in each group.

The impact of gender was taken into consideration in the data analyses because being female is consistently found to be a predictor of help-seeking attitudes (e.g., Fischer and Farina 1995). European American students who had no prior history of seeking professional psychological services were included in the study as a comparison group because much of the existing evidence on the dynamics of help-seeking is derived from European American samples.

Method

Participants

The study was conducted at a large public 4-year university located in a metropolitan area of Georgia, USA. Participants from undergraduate psychology courses offered at the university were recruited through a web-based research participant tool, which was created by the Department of Psychology. Approximately 1,400 participants from all ethnic backgrounds completed an anonymous web-based survey package. All participants fulfilled a course requirement and received extra credit for their participation. Given the purpose of the study, data from Non-Hispanic European American and Asian American students who had no history of seeking professional psychological services were initially selected ($n_{Asian} = 166$; $n_{European} = 300$).

The mean completion time for the instrument among the participants was approximately 26 min ($SD=12.87$). Those who completed the survey in less than 15 min or more than 45 min (89 individuals) were removed from the study due to the questionable validity of their responses. The ages of the remaining participants ranged from 17 to 52 years old ($M=19.87$,

$SD=3.31$), but those aged 26 years and older (20 participants) were subsequently excluded based on outlier analyses of age. The final sample consisted of 122 Asian Americans ($n_{Female} = 80$) and 235 European Americans ($n_{Female} = 164$).

The average age of the Asian American students was 19.16 years ($SD=1.53$). The sample was religiously diverse: Buddhism = 17%, Hinduism = 13%, Roman Catholic = 13%, Protestant = 11%, Islam = 10%, Eastern Orthodox = 1%, other = 18%, and no religion = 16%. Approximately 42% identified their families as middle-class, 37% as working-class, and 14% as upper-middle-class. Their specific Asian American ethnic background (e.g., Korean, Indian, or Japanese) was not determined.

The average age of the European American students was 19.31 years ($SD=1.43$). This group had a greater representation of Christian religious denominations: Protestant = 26%, Roman Catholic = 16%, Eastern Orthodox = 4%, Islam = 2%, Jewish = 1%, Buddhism = 1%, others = 26%, and no religion = 24%. Fifty-one percent identified their families as middle-class, 20% as working-class, and 27% as upper-middle-class.

Measures

Help-Seeking Attitudes

The 29-item version of Attitudes toward Seeking Professional Psychological Help (ATSPPH; Fischer and Turner 1970) questionnaire was used to measure various help-seeking attitudes. This version of the ATSPPH Scale has been regularly used and each item consists of a statement scored on a 4-point scale ranging from 0 (*strongly disagree*) to 3 (*strongly agree*). Using the modifications made by Atkinson and Gim (1989), the words *psychologist-counselor* and *psychological counseling center* were substituted for *psychiatrist* and *mental health center*, respectively. The modified version was used because the present study was conducted with college students, who are more likely to have mild psychological conflicts rather than severe mental illness.

Five scores were computed — a total score and four subscale scores: Recognition of Need; Stigma Tolerance; Interpersonal Openness; and Confidence. The total scale score consists of the sum of all subscale scores. The ATSPPH Scale has moderately high reliability (Fischer and Turner 1970). In the present study, Cronbach's alpha coefficients for the total scale were .86 and .85 for Asian Americans and European Americans, respectively.

The Recognition of Need Subscale consists of eight items and is designed to measure awareness of need for psychological help (e.g., "A person with a strong character can get over mental conflicts by him or herself, and would have little need of a psychologist-counselor"). Cronbach's alpha coefficients of the subscale were .73 for the Asian American group and .69 for the European American group.

The Stigma Tolerance Subscale, consisting of five items, assesses tolerance of stigma associated with seeking professional psychological help (e.g., "I would feel uneasy going to a psychologist-counselor because of what some people would think"). Cronbach's alphas of the subscale were .67 for the Asian American group and .66 for the European American group.

The Interpersonal Openness Subscale contains seven items and measures interpersonal openness with respect to sharing one's personal problem with a psychological professional (e.g., "I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family"). Cronbach's alpha coefficients of the subscale were .54 and .61 for the Asian American group and European American group, respectively.

Finally, the Confidence Subscale, including nine items, is designed to measure an individual's confidence in mental health practitioners ("If a good friend asked my advice about a mental problem, I might recommend that he or she see a psychologist-counselor"). Cronbach's alphas of the subscale were .75 for the Asian American group and .79 for the European American group.

Mental Health Stigma

The Stigmatizing Attitudes-Believability (SAB; Masuda *et al.* 2009c) instrument is an 8-item self-report questionnaire developed by the first author to measure stigmatizing attitudes toward people with psychological disorders (e.g., "Those with psychological disorders are dangerous to others," "A person with a psychological disorder is unpredictable"). These items were drawn from previous survey studies on mental health stigma (e.g., Crisp *et al.* 2000). Participants are asked to rate a series of a negative statements about individuals with various psychological disorders on a 7-point Likert scale ranging from 1 (*not at all believable*) to 7 (*completely believable*). Item responses are summed to an overall score ranging from 8 to 56. The scale has shown acceptable internal consistency with a Cronbach's α = .78 (Masuda *et al.* 2009c). Cronbach's alpha coefficients in the present study were .83 and .79 for the Asian American group and European American group, respectively.

Self-Concealment

The Self Concealment Scale (SCS; Larson and Chastain 1990) was administered to measure a person's tendency to conceal personal information that is distressing or negatively-evaluated (e.g., "There are lots of things about me that I keep to myself"). The SCS is a 10-item self-report measure that uses a 5-point Likert-scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) for each item. Participants' responses to the 10 items were summed, with greater values indicating greater self-concealment. The SCS is a reliable measure of self-concealment, with test-retest (over 4 weeks) and inter-item reliability estimates of .81 and .83, respectively (Larson and Chastain 1990). Cronbach's alphas of the measure in the present study were .89 for the Asian American group and .88 for the European American group.

Procedure

Participants who enrolled in the study were asked to complete an anonymous web-based survey. Prior to beginning the survey, the purpose of the study and instructions for responding were presented. Participants anonymously provided demographic information and completed the measures.

Results

Means and standard deviations of all measures by ethnic group x gender are presented in Table 1. A 2 (ethnic group: European American, Asian American) by 2 (gender: male, female) multivariate analysis of variance (MANOVA) was performed on attitudes toward seeking professional psychological help (ATSPPH total scale and subscales), mental health stigma (SAB), and self-concealment (SCS). Statistical significance was set at .05. Significant effects for ethnic group, gender, or the combination of ethnic group and gender

Table 1 Means and standard deviations of attitudinal measure by ethnic group x gender

	European American			Asian American		
	Male (n=71)	Female (n=164)	Total (n=235)	Male (n=42)	Female (n=80)	Total (n=122)
Means (Standard Deviations)						
ATSPPH Overall	47.94 (10.04)	51.20 (12.10)	50.22 (11.59)	41.40 (8.89)	46.25 (12.47)	44.58 (11.56)
ATSPPH-RN	10.69 (3.64)	12.23 (4.34)	11.77 (4.20)	10.21 (3.83)	10.85 (4.52)	10.63 (4.29)
ATSPPH-ST	10.24 (2.60)	10.13 (3.09)	10.17 (2.95)	8.10 (2.22)	8.91 (3.34)	8.63 (3.02)
ATSPPH-IPO	12.23 (3.63)	12.71 (3.73)	12.56 (3.70)	9.69 (2.62)	10.77 (3.52)	10.40 (3.27)
ATSPPH-C	14.79 (4.89)	16.13 (4.92)	15.72 (4.94)	13.40 (3.56)	15.71 (4.55)	14.92 (4.36)
SAB	23.06 (7.83)	22.60 (6.31)	22.74 (6.79)	27.86 (7.52)	25.29 (7.60)	26.17 (7.60)
SCS	27.25 (7.72)	26.94 (9.21)	27.03 (8.77)	32.79 (7.93)	29.84 (8.76)	30.85 (8.57)

ATSPPH Attitudes toward Seeking Professional Psychological Help, *RN* Recognition of Need, *ST* Stigma Tolerance, *O* Openness, *C* Confidence, *SAB* Stigmatizing Attitude-Believability, *SCS* Self-Concealment Scale

were followed by pairwise comparisons with a Bonferroni correction to maintain overall alpha at .05.

Given the lower Cronbach's alphas of the ATSPPH subscales, the following results should be interpreted carefully. The MANOVA results revealed a significant multivariate effect for ethnic group and gender (see Table 2). There were no significant Wilks' Lambda F statistic for ethnic group x gender.

Subsequent univariate analyses revealed a main effect of ethnic group in overall help-seeking attitudes ($F(1, 353)=17.77, p<.001$), stigma tolerance regarding seeking professional psychological services ($F(1, 353)=22.73, p<.001$), interpersonal openness ($F(1, 353)=28.01, p<.001$), mental health stigma ($F(1, 353)=19.84, p<.001$), and self-concealment ($F(1, 353)=16.68, p<.001$). Pairwise comparisons revealed that the Asian American group had significantly less favorable overall help-seeking attitudes, lower stigma tolerance and lower interpersonal openness with respect to seeking professional psychological services, greater mental health stigma, and greater self-concealment than the European American group ($ps<.01$).

Univariate analyses also showed a main effect of gender on overall help-seeking attitudes ($F(1, 353)=8.83, p<.01$), recognition of personal need for professional psychological service ($F(1, 353)=4.77, p<.05$), and confidence in mental health practitioners ($F(1, 353)=10.69, p<.01$). The female group was found to have significantly

Table 2 Ethnic group x gender multivariate analysis of variance for overall and specific attitudes toward seeking professional psychological services, stigmatizing attitudes toward people with a psychological disorder, and self-concealment

Source	Λ	F	dfs	p
Ethnic Group (A)	0.88	7.89	6, 348	.000
Gender (B)	0.96	2.36	6, 348	.031
A x B	0.98	1.25	6, 348	.280

more favorable overall attitudes toward seeking professional psychological services, greater recognition of need, and greater confidence in mental health practitioners than the male group ($p < .05$).

Mental Health Stigma and Self-Concealment as Unique Predictors of Help-Seeking Attitudes

Table 3 contains a correlation matrix of all variables used in the subsequent set of data analyses. These data are presented separately for Asian Americans and European Americans. In the correlational analyses and the following sets of regression analyses, gender was dummy coded as 1 = male and 2 = female. In the Asian American group, mental health stigma (i.e., SAB scores) was found to be significantly and negatively related to help-seeking attitudes overall, as well as the specific help-seeking attitudes, except for confidence in mental health practitioners. Self-concealment was significantly and negatively related to help-seeking attitudes overall, as well as all of the specific help-seeking attitudes except for recognition of need for professional psychological services. Gender was found to be significantly related to help-seeking attitudes overall and confidence in psychological professionals. Being female was found to be associated with more positive help-seeking attitudes overall and greater confidence in psychological professionals.

Table 3 Zero-order relations of all study variables by ethnic group

	1	2	3	4	5	6	7	8
Asian American ($n=122$)								
1. ATSPPH Overall	–							
2. ATSPPH-RN	.82**	–						
3. ATSPPH-ST	.69**	.41**	–					
4. ATSPPH-IPO	.71**	.37**	.44**	–				
5. ATSPPH-C	.84**	.62**	.40**	.46**	–			
6. SAB	–.33**	–.19*	–.41**	–.30**	–.17	–		
7. SCS	–.33**	–.10	–.29**	–.38**	–.28**	.27**	–	
8. Gender	.20*	.07	.13	.16	.25**	–.16	–.16	–
European American ($n=235$)								
1. ATSPPH Overall	–							
2. ATSPPH-RN	.80**	–						
3. ATSPPH-ST	.60**	.31**	–					
4. ATSPPH-IPO	.64**	.25**	.39**	–				
5. ATSPPH-C	.83**	.65**	.27**	.32**	–			
6. SAB	–.22**	–.12	–.33**	–.12	–.12	–		
7. SCS	–.27**	–.00	–.32**	–.42**	–.12	.08	–	
8. Gender	.13*	.17**	–.02	.06	.13	–.03	–.02	–

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

ATSPPH Attitudes toward Seeking Professional Psychological Help, RN Recognition of Need, ST Stigma Tolerance, IPO Interpersonal Openness, C Confidence, SAB Stigmatizing Attitude-Believability, SCS Self-Concealment Scale

In the European American group, mental health stigma was significantly and negatively related to help-seeking attitudes overall and stigma tolerance in help-seeking. Self-concealment was found to be negatively related to favorable help-seeking attitudes overall, stigma tolerance in help-seeking, and interpersonal openness. Gender was significantly related to help-seeking attitudes overall and to recognition of need, suggesting that being a female was associated with greater overall positive attitudes toward seeking professional psychological help and greater recognition of need for professional psychological help.

Subsequently, standard multiple regressions were performed for each ethnic group using predictor variables of mental health stigma, self-concealment and gender with help-seeking attitudes overall, as well as each of the specific components of help-seeking attitudes. In the Asian American group (see Table 4), mental health stigma and self-concealment were found to be unique predictors of help-seeking attitudes overall. Greater mental health stigma and greater self-concealment were associated with less favorable help-seeking attitudes overall.

Table 4 Investigations of mental health stigma, self-concealment, and gender as a unique predictor of overall and specific help-seeking attitudes in the Asian American group: summary of regression analysis

Variables	β	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p</i>
Overall Help-seeking Attitudes (ATSPPH Total)					
Mental Health Stigma (SAB)	-.24	-.36	.13	-2.78	.006
Self-Concealment (SCS)	-.24	-.32	.12	-2.74	.007
Gender	.12	2.95	2.06	1.43	.155
$R^2 = .18^{**}$					
Recognition of Need (ATSPPH-RN)					
Mental Health Stigma (SAB)	-.17	-.09	.05	-1.78	.078
Self-Concealment (SCS)	-.05	-.02	.05	-.48	.636
Gender	.04	.33	.83	.39	.694
$R^2 = .04$					
Stigma Tolerance (ATSPPH-ST)					
Mental Health Stigma (SAB)	-.35	-.14	.03	-4.06	.000
Self-Concealment (SCS)	-.19	-.07	.03	-2.23	.028
Gender	.04	.26	.53	.50	.619
$R^2 = .20^{**}$					
Interpersonal Openness (ATSPPH-IPO)					
Mental Health Stigma (SAB)	-.21	-.09	.04	-2.40	.018
Self-Concealment (SCS)	-.31	-.12	.03	-3.54	.001
Gender	.08	.51	.58	.88	.380
$R^2 = .19^{**}$					
Confidence in Psychological Professional (ATSPPH C)					
Mental Health Stigma (SAB)	-.08	-.05	.05	-.88	.383
Self-Concealment (SCS)	-.23	-.12	.05	-2.52	.013
Gender	.20	1.85	.80	2.31	.023
$R^2 = .13^{**}$					

** $p < .01$

ATSPPH Attitudes toward Seeking Professional Psychological Help, RN Recognition of Need, ST Stigma Tolerance, IPO Interpersonal Openness, C Confidence, SAB Stigmatizing Attitude-Believability, SCS Self-Concealment Scale

Mental health stigma and self-concealment had almost an identical amount of standardized weight in the regression equation. In stigma tolerance and interpersonal openness regarding seeking professional psychological services, mental health stigma and self-concealment were found to be unique predictors. Greater mental health stigma and greater self-concealment were associated with diminished stigma tolerance and lower interpersonal openness. Mental health stigma had greater standardized weight in the equation than self-concealment in stigma tolerance, and self-concealment had greater standardized weight than mental health stigma in interpersonal openness. Self-concealment and gender were found to be significant predictors of confidence in mental health practitioners. Greater self-concealment and being a male were associated with lower confidence in mental health practitioners. Finally, no variables were found to be unique predictors of recognition of need in help-seeking.

In the European American group (see Table 5), results of regression analyses were consistent with those of correlational analyses. Mental health stigma and self-concealment were found to be unique predictors of help-seeking attitude overall. The analysis revealed that self-concealment had a greater standardized weight in the regression equation than stigmatizing attitudes. In recognition of need, gender was found to be the only unique predictor. Being female was associated with greater recognition of need for professional psychological services. In stigma tolerance, both mental health stigma and self-concealment were found to be unique predictors, and the two predictors had appropriately the same amount of standardized weight in the regression equation. In interpersonal openness, self-concealment was the only unique predictor; greater self-concealment was associated with diminished interpersonal openness. No variables were found to be unique predictors of confidence in mental health practitioners in the European American group.

Discussion

The present study revealed that Asian American students with no history of seeking professional psychological services had a less favorable help-seeking attitude overall, lower stigma tolerance and interpersonal openness regarding help-seeking, greater mental health stigma, and greater self-concealment than non-Hispanic European American students who similarly had no history of seeking professional psychological services. The two groups did not differ in recognition of need of psychological services and confidence in mental health practitioners; subsets of help-seeking attitudes that are theorized to be most closely related to help-seeking behavior (Fischer and Turner 1970).

In the Asian American group, both mental health stigma and self-concealment were found to be unique predictors of help-seeking attitudes overall, and of stigma tolerance and interpersonal openness. Self-concealment was also a unique predictor of confidence in mental health practitioners. In the European American group, mental health stigma and self-concealment were shown to be unique predictors of help-seeking attitudes overall and of stigma tolerance. Self-concealment was also found to be a unique predictor of interpersonal openness.

These findings suggest that the Asian American group, though having greater stigma, being less interpersonally open, and being less favorably inclined toward help-seeking, did not differ from the European American group in the help-seeking attitudes that may be most closely associated with actually seeking help: recognition of need and confidence in mental health practitioners. Mental health stigma and self-concealment, which could easily be presumed to be predictors of all help-seeking attitudes, only predicted the specific help-seeking attitudes that may have less influence on actual help-seeking.

Table 5 Investigations of mental health stigma, self-concealment, and gender as a unique predictor of overall and specific help-seeking attitudes in the European American group: summary of regression analysis

Variables	β	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p</i>
Overall Help-seeking Attitudes (ATSPPH Total)					
Mental Health Stigma (SAB)	-.20	-.34	.11	-3.18	.002
Self-Concealment (SCS)	-.25	-.33	.08	-4.06	.000
Gender	.12	3.00	1.55	1.94	.054
$R^2 = .13^{**}$					
Recognition of Need (ATSPPH-RN)					
Mental Health Stigma (SAB)	-.12	-.07	.04	-1.78	.076
Self-Concealment (SCS)	.01	.00	.03	.11	.911
Gender	.17	1.51	.59	2.57	.011
$R^2 = .04^*$					
Stigma Tolerance (ATSPPH-ST)					
Mental Health Stigma (SAB)	-.31	-.14	.03	-5.28	.000
Self-Concealment (SCS)	-.29	-.10	.02	-4.95	.000
Gender	-.03	-.20	.38	-.53	.600
$R^2 = .20^{**}$					
Interpersonal Openness (ATSPPH-IPO)					
Mental Health Stigma (SAB)	-.09	-.05	.03	-1.44	.151
Self-Concealment (SCS)	-.41	-.17	.03	-6.88	.000
Gender	.05	.41	.48	.85	.397
$R^2 = .18^{**}$					
Confidence in Psychological Professional (ATSPPH C)					
Mental Health Stigma (SAB)	-.11	-.08	.05	-1.73	.084
Self-Concealment (SCS)	-.11	-.06	.04	-1.74	.084
Gender	.20	1.28	.69	1.86	.065
$R^2 = .04^*$					

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

ATSPPH Attitudes toward Seeking Professional Psychological Help, *RN* Recognition of Need, *ST* Stigma Tolerance, *IPO* Interpersonal Openness, *C* Confidence, *SAB* Stigmatizing Attitude-Believability, *SCS* Self-Concealment Scale

While stigma is usually described as a major barrier to seeking professional help (Vogel, Wade, and Hackler 2007b), these data suggest that other, as yet undetermined, factors may account for the help-seeking attitudes of the groups in this study. One potential factor may be knowledge, or lack of knowledge, of available services: it is possible that help-seeking attitudes were influenced by whether or not students in the sample knew about the university's counseling services or other similar services, how to access such services, and whether those services were affordable. Although knowledge about services does not necessarily lead to actual help-seeking behavior, previous studies have shown that lack of knowledge is likely to prevent an individual from seeking services (Bram 1997; Loo *et al.* 1989; Yorgason *et al.* 2008). Therefore, counseling center outreach programs may be more effective if focused not just on reducing mental health stigma or overcoming greater self-concealment, but also on providing basic information about what services are available and how to access them.

Another factor involved may be accessibility of psychological services: though students may recognize a need for help and believe that help would be effective, the steps needed to access help, such as scheduling an appointment, walking through the door of the counseling service, and going through an intake process, may be too cumbersome. Some students might benefit from alternatives to the traditional 50-min hour spent with a relative stranger in the unfamiliar space of a counseling center. Psychoeducation programs might benefit those who do not want to admit to a psychological problem or to reveal anything about themselves.

Counselor-in-residence programs (Davis *et al.* 2001; Halstead and Derbort 1988; Harris 1994; Rawls *et al.* 2004), which position mental health professionals in students' living environments, and off-site walk-in hours (Boone and Eells 2008; Boone *et al.* 2010) may also provide alternatives. For example, Boone and Eells (2008) describe one such off-site walk-in program, which offers informal conversations with counselors at familiar locations within students' communities. The service is intended to remove barriers to help-seeking by providing students a chance to "test the waters" in a familiar setting before committing to formal counseling. Students are encouraged to walk in and talk about whatever concerns them, much as they might do with a friendly professor, residence assistant, or academic advisor. Students who need ongoing counseling can be more easily referred to the counseling center after building a connection with a counselor in an informal way.

The present study has several notable limitations. One limitation is that these findings were derived from a single state university located in an urban area of the southeastern United States. The university culture, the availability and promotion of psychological services, and counseling center outreach activities might have been confounding factors.

A second limitation is that the relatively small number of Asian American participants did not allow for an examination of the relationship between other possible predictor variables and help-seeking related attitudes; this is best done in conjunction with a research methodology that allows for hypothesis generation based on experiences within a cultural group, and not simply as a comparison to the dominant cultural group. Additionally, the participants were recruited from psychology courses, which may have resulted in a biased sample with regard to attitudes toward people with psychological disorders. However, the psychology courses used for recruitment were introductory, thus participants were not necessarily psychology majors.

A third limitation is the lack of investigation of within-group differences. Given the amount of within-group variability among ethnic minority groups, it is critical to consider the socio-cultural factors to understand help-seeking behavior of ethnic minority college students (e.g., Tjihuis *et al.* 1990). Examples are commitment to one's own cultural values, religious practices, socio-economic status, and acculturation (Atkinson and Gim 1989; Kim and Omizo 2006; Tata and Leong 1994; Zhang and Dixon 2003).

The present study grouped all Asian American students together into one category. Because the label "Asian" refers to people whose ancestors originated in a variety of regions with vastly different cultural values and practices (e.g., Southeast Asia, Korea, China, Pakistan, India), creating one group labeled "Asian American" is likely to obscure important variability within the group (e.g., Frey and Roysircar 2006).

Although the measures used in the present study were previously used to assess ethnic minority students (e.g., Masuda *et al.* 2009a), the validity and reliability of these scales have not been fully tested across a variety of ethnic groups. This limitation was particularly relevant to the ATSPPH subscales. The present study used the overall scale as well as the four subscales to capture the multidimensional nature of help-seeking attitudes. However, previous literature (Ang *et al.* 2007; Fischer and Farina 1995) reported the instability of the

four-factor structures of the ATSPPH scale, recommending the use of overall attitudinal scale only. Future studies should investigate the multi-faceted nature of help-seeking attitudes by employing psychometrically sound measures.

Finally, the study did not include actual help-seeking behavior, the intention to utilize professional psychological services, or the association between actual help-seeking behavior and the attitudinal variables measured in the present study. Furthermore, the study did not attempt to experimentally account for stigma, self-concealment, or the variables that control them. Therefore, it does not clarify the causal relationship among these events or suggest interventions to modify them.

Despite these limitations, these data provide useful information about group differences on help-seeking attitudes and mental health-related stigma. The data also show that among those students with no history of seeking psychological services, Asian American and European American students did not differ from each other in the subset of help-seeking attitudes most closely related to actual help-seeking behavior or in the impact of mental health stigma and self-concealment on these specific help-seeking attitudes. From a practical point of view, the present findings suggest that psychosocial programs targeting Asian American and others with no prior history of seeking professional psychological services may promote service utilization if they target not only mental-health stigma and self-concealment, but also other factors that were not investigated in this study.

References

- Ang, R. P., Lau, S., Tan, A., & Lim, K. (2007). Refining the attitudes toward seeking professional psychological help scale: factorial invariance across two Asian samples. *Measurement and Evaluation in Counseling and Development*, 40(3), 130–141.
- Atkinson, D. R., & Gim, R. H. (1989). Asian-American cultural identity and attitudes toward mental health services. *Journal of Counseling Psychology*, 2, 209–212.
- Boone, M. S., & Eells, G. T. (2008). Reaching students who won't walk in: innovative outreach programs offer options. *Leadership Exchange*, 6, 13–17.
- Boone, M. S., Edwards, G. R., Haltom, M., Hill, J. S., Liang Y., Mier, S. M., et al. (2010). *Let's talk: getting out of the counseling center to serve hard-to-reach students*. Manuscript submitted for publication (in press).
- Bram, A. D. (1997). Perceptions of psychotherapy and psychotherapists: Implications from a study of undergraduates. *Professional Psychology: Research and Practice*, 28, 170–178.
- Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist*, 59, 614–625.
- Corrigan, P. W., & Penn, D. L. (1999). Lessons from social psychology on discrediting psychiatric stigma. *American Psychologists*, 54, 765–776.
- Cramer, K. M. (1999). Psychological antecedents to help-seeking behavior: A reanalysis using path model structures. *Journal of Counseling Psychology*, 46, 381–387.
- Cramer, K. M., & Barry, J. E. (1999). Psychometric properties and confirmatory factor analysis of the Self-Concealment Scale. *Personality and Individual Differences*, 27, 629–637.
- Crisp, A. H., Gelder, M. G., Rix, S., Meltzer, H. I., & Rowlands, O. J. (2000). Stigmatisation of people with mental illnesses. *The British Journal of Psychiatry*, 177, 4–7.
- Davis, H., Jr., Kocet, M. M., & Zozone, M. S. (2001). Counselor-in-residence: a counseling service model for residential college students. *Journal of College Counseling*, 4(2), 190–192.
- Fischer, E. H., & Farina, A. (1995). Attitudes toward seeking professional psychological help: A shortened form and considerations for research. *Journal of College Student Development*, 36, 368–373.
- Fischer, E. H., & Turner, J. L. (1970). Orientations to seeking professional help: Development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology*, 35, 79–90.
- Frey, L. L., & Roysircar, G. (2006). South Asian and East Asian international students' perceived prejudice, acculturation, and frequency of help resource utilization. *Journal of Multicultural Counseling and Development*, 34, 208–222.
- Hall, C. C. I. (1995). Asian eyes: Body image and eating disorders of Asian and Asian American women. *Eating Disorders: The Journal of Treatment and Prevention*, 3, 8–19.

- Halstead, R. W., & Derborn, J. J. (1988). Counselor-in-residence: a proactive and early intervention program for delivery of counseling services. *Journal of College Student Development, 29*, 378–379.
- Harris, S. (1994). The counselor-in-residence program. *Journal of College Student Development, 35*, 140.
- Kearney, L. K., Draper, M., & Baron, A. (2005). Counseling utilization by ethnic minority college students. *Cultural Diversity and Ethnic Minority Psychology, 11*, 272–285.
- Kim, B. S. K., & Omizo, M. M. (2006). Behavioral acculturation and enculturation and psychology functioning among Asian American college students. *Cultural Diversity and Ethnic Minority Psychology, 12*, 245–258.
- Kim, B. S. K., Atkinson, R. D., & Yang, P. H. (1999). The Asian Values Scale: Development, factor analysis, validation, and reliability. *Journal of Counseling Psychology, 46*, 342–352.
- Kim, B. S. K., Atkinson, R. D., & Umemoto, D. (2001). Asian cultural values and the counseling process: Current knowledge and directions for future research. *The Counseling Psychologist, 29*, 342–352.
- Komiti, A., Judd, F., & Jackson, H. (2006). The influence of stigma and attitudes on seeking help from a GP for mental health problems: A rural context. *Social Psychiatry and Psychiatric Epistemology, 41*, 738–745.
- Komiya, N., Good, G. E., & Sherrod, N. B. (2000). Emotional openness as a predictor of college students' attitudes toward seeking professional psychological help. *Journal of Counseling Psychology, 47*, 138–143.
- Larson, D. G., & Chastain, R. L. (1990). Self-concealment: Conceptualization, measurement, and health implications. *Journal of Social and Clinical Psychology, 9*, 439–455.
- Lau, A. S., Fung, J., Wang, S., & Kang, S. (2009). Explaining elevated social anxiety among Asian Americans; Emotional Attunement and a cultural double bind. *Cultural Diversity and Ethnic Minority Psychology, 15*, 77–85.
- Leong, F. T. L., & Zachar, P. (1999). Gender and opinions about mental illness as predictors of attitudes toward seeking professional psychological help. *British Journal of Guidance and Counseling, 25*, 123–132.
- Liao, H. Y., Rounds, J., & Klein, A. G. (2005). A test of Cramer's (1999) help-seeking model and acculturation effects with Asian and Asian American college students. *Journal of Counseling Psychology, 52*, 400–411.
- Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology, 27*, 363–385.
- Link, B. G., Phelan, J. C., Bresnahan, M., Stueve, A., & Pescosolido, A. (1999). Public conceptions of mental illness: Labels, causes, dangerousness, and social distance. *American Journal of Public Health, 89*, 1328–1333.
- Loo, C., Tong, B., & True, R. (1989). A bitter bean: Mental health status and attitudes in Chinatown. *Journal of Community Psychology, 17*, 283–296.
- Masuda, A., Suzumura, K., Beauchamp, K. L., Howells, G. N., & Clay, C. (2005). United States and Japanese college students' attitudes toward seeking professional psychological help. *International Journal of Psychology, 40*, 303–313.
- Masuda, A., Anderson, P. L., Twohig, M. P., Feinstein, A. B., Chou, Y., Wendell, J. W., et al. (2009a). Help-seeking experiences and attitudes among African American, Asian American, and European American college students. *International Journal for the Advancement of Counseling, 31*, 168–180.
- Masuda, A., Hayes, S. C., Twohig, M. P., Lillis, J., Fletcher, L. B., & Gloster, A. T. (2009b). Comparing Japanese international students and U. S. college students' mental health related stigmatizing attitudes. *Journal of Multicultural Counseling and Development, 37*, 178–189.
- Masuda, A., Price, M., Anderson, P. L., Schmertz, S. K., & Calamaras, M. R. (2009c). The role of psychological flexibility in mental health stigma and psychological distress for the stigmatizer. *Journal of Social and Clinical Psychology, 28*, 1244–1262.
- Mok, T. A. (1998). Getting the message: Media images and stereotypes and their effects on Asian Americans. *Cultural Diversity and Mental Health, 4*, 185–202.
- Okazaki, S. (1997). Sources of ethnic differences between Asian American and White American college students on measures of depression and social anxiety. *Journal of Abnormal Psychology, 106*, 52–60.
- Okazaki, S. (2000). Asian American and White American differences on affective distress symptoms: Do symptom reports differ across reporting methods? *Journal of Cross-Cultural Psychology, 31*, 603–625.
- Okazaki, S., Liu, J. F., Longworth, S. L., & Minn, J. Y. (2002). Asian American-White American differences in expression of social anxiety: A replication and extension. *Cultural Diversity and Ethnic Minority Psychology, 8*, 234–247.
- Rawls, D. T., Johnson, D., & Bartels, E. (2004). The counselor-in-residence program: reconfiguring support services for a new millennium. *Journal of College Counseling, 7*, 162–169.
- Root, M. P. P. (1985). Guidelines for facilitating therapy with Asian American clients. *Psychotherapy, 22*, 349–356.

- Sue, S., & Chu, J. Y. (2003). The mental health of ethnic minority groups: Challenges posed by the supplement to the surgeon general's report on mental health. *Culture, Medicine and Psychiatry*, 27, 447–465.
- Tata, S. P., & Leong, T. L. (1994). Individualism-collectivism, social-network orientation, and acculturation as predictors of attitudes toward seeking professional psychological help among Chinese American. *Journal of Counseling Psychology*, 41, 280–287.
- Tijhuis, M. A. R., Peters, L., & Foets, M. (1990). An orientation toward help-seeking for emotional problems. *Social Science & Medicine*, 31, 989–995.
- Vogel, D. L., Wester, S. R., Wei, M., & Boysen, G. A. (2005). The role of outcome expectations and attitudes on decisions to seek professional help. *Journal of Counseling Psychology*, 52, 459–470.
- Vogel, D. L., Wester, S. R., & Larson, L. M. (2007a). Avoidance of counseling: psychological factors that inhibit seeking help. *Journal of Counseling and Development*, 85, 410–422.
- Vogel, D. L., Wade, N. G., & Hackler, A. H. (2007b). Perceived public stigma and the willingness to seek counseling: The mediating role of self-stigma and attitudes toward counseling. *Journal of Counseling Psychology*, 54, 40–50.
- Yorgason, J. B., Linville, D., & Zitzman, B. (2008). Mental health among college students: Do those who need services know about and use them? *Journal of American College Health*, 57(2), 173–181.
- Zhang, N., & Dixon, D. M. (2003). Acculturation and attitudes of Asian International students toward seeking psychological help. *Journal of Multicultural Counseling and Development*, 31, 205–222.