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Help-Seeking Intentions Among Asian American and White American Students in Psychological Distress: Application of the Health Belief Model

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Objective: Underutilization of needed mental health services continues to be the major mental health disparity affecting Asian Americans (Sue, Cheng, Saad, & Chu, 2012). The goal of this study was to apply a social psychological theoretical framework—the health belief model (Rosenstock, 1966)—to understand potential reasons why Asian Americans underutilize mental health services relative to White Americans. ***Method:*** Using a cross-sectional online questionnaire, this study examined how perceived severity of symptoms, perceived susceptibility to mental health problems, perceived benefits of treatment, and perceived barriers to treatment influenced intentions to seek help among a sample of 395 Asian American and 261 White American students experiencing elevated levels of psychological distress. ***Results:*** Analyses using structural equation modeling indicated that Asian Americans in distress had relatively lower intentions to seek help compared with White Americans. Perceived benefits partially accounted for differences in help-seeking intentions. Although Asian Americans perceived greater barriers to help seeking than did White Americans, this did not significantly explain racial/ethnic differences in help-seeking intentions. Perceived severity and barriers were related to help-seeking intentions in both groups. ***Conclusions:*** Outreach efforts that particularly emphasize the benefits of seeking mental health services may be a particularly promising approach to address underutilization. The findings have implications in help-seeking promotion and outreach.

Keywords: Asian Americans, help seeking, psychological distress, underutilization, health belief model

Most individuals in psychological distress do not seek mental health treatment. Studies show that less than half of individuals who are in need of services receive them (e.g., Wang et al., 2005). Underutilization has been particularly problematic for Asian Americans (Sue, Cheng, Saad, & Chu, 2012). Although epidemiological studies have found that Asian Americans tend to have the lowest rates of diagnosable mental health problems compared with other racial/ethnic groups, Asian Americans considerably underutilize mental health services relative to their level of need (Alegría et al., 2008; Le Meyer, Zane, Cho, & Takeuchi, 2009). A better understanding of factors related to help seeking is needed to eventually eliminate inequities in access to and utilization of mental health care.

The experience of Asian American college students lends itself well to the study of mental health disparities. Asian American students tend to report more depression and anxiety symptoms compared with White American students (e.g., E. C. Chang, 2002; Young, Fang, & Zisook, 2010), yet they underutilize services relative to their level of need (Eisenberg, Golberstein, & Gollust, 2007). In a large study of college students with depression and/or anxiety symptoms, Asian Americans were the least likely of all racial/ethnic groups to perceive a need for services (Eisenberg et al., 2007). University settings are an opportune context in which to examine help seeking, because most universities provide free on-campus counseling services. Reduced structural barriers (e.g., availability, cost) relative to community settings allow for better study of the psychological factors that affect help-seeking intentions, which is an important correlate of help-seeking behavior (Wilson, Deane, Ciarrochi, & Rickwood, 2005). Although recent studies have examined factors related to help-seeking among Asian American students (e.g., P. Y. Kim & Lee, 2014), few have used theoretical models to examine what factors influence specific help-seeking intentions among those who are currently experiencing psychological distress. We aimed to fill this gap in understanding of why Asian Americans who are presumably in need of services still do not seek help.

The Health Belief Model for Mental Health Help-Seeking Intentions

Rosenstock's (1966) health belief model (HBM) posits that threat of illness and expectations of treatment affect people's decisions to undertake health-related behaviors. *Threat* involves

perceptions of being susceptible or vulnerable to a health problem (referred to as *perceived susceptibility*) and perceptions regarding the severity of that problem (*perceived severity*). *Expectations* involve perceptions about the benefits of and barriers to seeking and receiving treatment for a problem (*perceived benefits* and *perceived barriers*), and *cues to action* describe external determinants of health behaviors (e.g., family influences). The revised HBM (Rosenstock, Strecher, & Becker, 1988) includes self-efficacy within expectations, such that individuals believe they can change through appropriate help seeking. The HBM has been useful in understanding many types of health-related behaviors (Janz & Becker, 1984), particularly disease-prevention behaviors and treatment-adherence behaviors (e.g., Tanner-Smith & Brown, 2010).

Scholars have discussed the theoretical applicability of the HBM in examining mental health help-seeking (Henshaw & Freedman-Doan, 2009), though few studies to our knowledge have used it as such. One study found that the HBM was useful in predicting intentions to seek help for mental health among university students in Australia (O'Connor, Martin, Weeks, & Ong, 2014). However, this study did not account for level of need—a critical determinant of utilization (Pescosolido & Boyer, 2010)—nor did its authors examine group differences in help seeking. We aimed to fill these gaps by examining help-seeking intentions of Asian and White American students experiencing psychological distress. The HBM is a promising framework from a mental health disparities perspective (Henshaw & Freedman-Doan, 2009), because cultural beliefs and preferences in terms of illness perceptions and treatment expectations may interfere with receiving timely and effective care for Asian Americans (Leong & Lau, 2001).

We extended the HBM to further understand why Asian Americans in psychological distress would still underutilize mental health services relative to White Americans. To delineate a parsimonious model of help-seeking intentions, we examined the four main variables of the HBM (i.e., perceived severity, susceptibility, benefits, and barriers). We did not include cues to action, because we were mainly interested in examining the psychological aspects of the model. Our conceptual model is depicted in Figure 1, and in the following sections we discuss our rationale for selection of specific variables that were chosen to represent each factor.
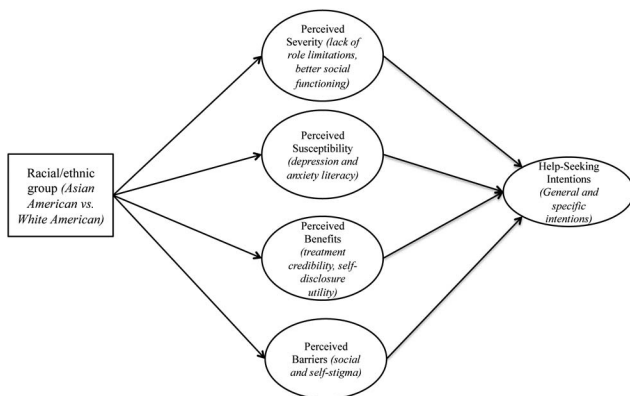

Figure 1. Conceptual model of help-seeking intentions.

Functioning as Perceived Severity

Functional impairment is a diagnostic criterion for many psychiatric disorders, often reflecting the severity of problems (Cauce et al., 2002). Because perceived severity in the HBM involves the extent to which people believe that a problem has serious consequences and will interfere with daily functioning (Henshaw & Freedman-Doan, 2009), we conceptualized it as individuals' appraisals of functioning (Saleeby, 2000). Psychological distress and functional impairment do not necessarily co-occur, but distress with impaired functioning may serve as a cue that problems warrant professional attention (Cauce et al., 2002). Krumrei, Newton, and Kim (2010) found that most college students who sought counseling reported decrements in academic and social functioning. Relatively few studies, however, have examined the role of functioning in help-seeking intentions. Asian Americans tend to delay seeking help until problems have become quite severe, such that they tend to have greater severity of symptoms, including reduced functioning, at the outset of mental health treatment relative to White Americans (Durvasula & Sue, 1996; Kearney, Draper, & Barón, 2005). We hypothesized that perceived severity, operationalized as functioning, may partly explain lower help-seeking intentions among Asian American students relative to White American students.

Mental Health Literacy as Perceived Susceptibility

Perceived susceptibility describes the extent to which individuals believe that they are susceptible or vulnerable to a health problem. This is closely associated with problem recognition, because those who do not recognize problems are unlikely to believe that they are susceptible (Henshaw & Freedman-Doan, 2009). The importance of problem recognition is underscored by other theoretical formulations of help seeking (e.g., Cauce et al., 2002; Saunders, 1993). It has been hypothesized that inadequate problem recognition partly accounts for underutilization (Jorm, 2012), because individuals who do not recognize psychological problems and/or do not know that symptoms are treatable are unlikely to seek help (Goldney, Fisher, Wilson, & Cheok, 2002). *Mental health literacy* describes knowledge and awareness of psychological symptoms and their treatment, and low mental health literacy among racial/ethnic minorities, such as Asian Americans, has been discussed as an explanation for differential rates of help seeking (Jorm, 2012; Li & Keshavan, 2010). We operationalized perceived susceptibility as mental health literacy, or problem recognition, and examined the extent to which it influences help-seeking intentions among individuals in distress. We hypothesized that lower mental health literacy among Asian Americans relative to White Americans would partially account for differences in help-seeking intentions.

Perceived Benefits of Seeking and Receiving Help

Perceived benefits involve the extent to which people believe that treatment will be effective in reducing symptoms. Moreover, perceived benefits and self-efficacy are related for psychological help seeking (Henshaw & Freedman-Doan, 2009), because one must believe that therapy can help relieve distress (perceived benefit) and that one is capable of making psychological and

behavioral changes (self-efficacy). Under the broad conceptualization of perceived benefits, we examined positive attitudes and beliefs regarding help-seeking (treatment credibility) and perceived benefits of self-disclosing to a mental health professional (anticipated self-disclosure utility). *Treatment credibility* refers to the general belief that therapy is effective and helpful (Zane et al., 2005), which is believed to influence subsequent engagement in treatment (Kung, 2004; Sue & Morishima, 1982). The extent to which credibility has influences on help-seeking intentions has not been well examined. Credibility is a domain in which there is likely to be racial/ethnic variation, because many Asian Americans may hold the belief that therapy is not a credible way to handle emotional problems (Kung, 2004; Sue & Zane, 1987). Akutsu, Lin, and Zane (1990) found that treatment credibility was particularly important in help-seeking intentions for Chinese American students, although they did not account for psychological distress.

Self-disclosure is a pivotal component of effective psychotherapy, and level of comfort with self-disclosing information influences help-seeking behavior (Hinson & Swanson, 1993). *Anticipated utility of self-disclosure* refers to the perceived value of the outcome of disclosing to a mental health professional (Vogel & Wester, 2003), which has been found to be strongly associated with positive attitudes toward help seeking (Nam et al., 2013). Individuals from Asian cultural backgrounds, however, may not perceive self-disclosure to be very valuable or beneficial to improving their mental health problems. Self-disclosure runs counter to Asian values placing emphasis on keeping problems within the family, maintaining social harmony, restraining emotions, and avoiding loss of face (B. S. K. Kim, 2007). For these reasons, we hypothesized that perceived benefits, as measured by treatment credibility and self-disclosure utility, would partially explain lower help-seeking intentions among Asian Americans relative to White Americans.

Help-Seeking Stigma as Perceived Barriers

Perceived barriers to help-seeking may be physical, financial, or psychological. One prominent psychological barrier is help-seeking stigma, which includes social stigma and self-stigma (Corrigan, 2004). *Social stigma* refers to the perception that a person who seeks help is undesirable or socially unacceptable (Komiya, Good, & Sherrod, 2000), whereas *self-stigma* involves a reduced sense of self-worth as a result of internalization of the notion that help seeking is socially unacceptable (Vogel, Wade, & Haake, 2006). Both types of stigma have been found to be related to less favorable help-seeking attitudes (Nam et al., 2013). Prior studies have demonstrated that Asian American students tend to report greater stigma about mental illness and help seeking compared with White American students (Golberstein, Eisenberg, & Gollust, 2008). Asian cultural values tend to emphasize avoidance of shame (B. S. K. Kim, 2007), and help seeking for mental health problems may be regarded as especially shameful or embarrassing. We expected that greater concerns about stigma might partially explain lower help-seeking intentions for Asian American students relative to White American students.

In sum, we used the HBM as a framework to further understand potential reasons why Asian Americans in psychological distress would have lower intentions to seek help relative to White Americans. Using an indirect-effects approach in structural equation modeling, we examined the extent to which perceived severity, susceptibility, benefits, and barriers accounted for lower help-seeking intentions among Asian Americans relative to White Americans.

Method

Participants

Participants were undergraduates enrolled in various psychology courses at a large, public university on the U.S. west coast. Initially, 1,005 participants were surveyed. Of these, 656 (65.3%; 39.8% White Americans, 60.2% Asian Americans) indicated at least moderate psychological distress and were included in further analyses. The majority of the sample was female (71.0%), with a mean age of 19.8 years ($SD = 1.9$). The Asian American participants included Chinese (40.0%), Vietnamese (14.9%), Korean (12.4%), Asian Indian (9.4%), Filipino (8.1%), and Japanese (2.3%) students. Approximately 15.9% indicated prior use of mental health services. Additional sample information is displayed in Table 1.

Procedure

The cross-sectional online survey lasted 30–45 min per participant. Participants were recruited via the university's Department of Psychology participant recruitment website. Individuals indicated their interest in participating by following a link, which routed them to the informed consent document. After the initial demographic questionnaire, study measures were administered in a random order. Participants received course credit. The university institutional review board approved the study.

Measures

Demographics. Respondents provided their age, gender, race/ethnicity, generation status, college major, academic standing (e.g., first year, second year), and any current or prior use of mental health services.

Psychological distress. The six-item Kessler Psychological Distress Scale (K6; Kessler et al., 2002) assessed nonspecific depressive and anxiety symptoms in the past 30 days. Participants responded to items on a scale ranging from 0 (*none of the time*) to 4 (*all of the time*). A sample item is "During the last 30 days, about how often did you feel hopeless?" Scores range from 0 to 24, with 13 or greater indicating probable serious mental illness (Kessler et al., 2002). The scale has been used with good reliability in samples of Asian Americans (Alegría et al., 2008) and Asian American college students (Bahrassa, Syed, Su, & Lee, 2011). We included respondents with a K6 score of 5 or greater, because scores between 5 and 12 have been found to be valid indicators of probable moderate psychological distress (Prochaska, Sung, Max, Shi, & Ong, 2012). Cronbach's alpha was .74.

Attributions of distress. Three questions assessed respondents' attributions of distress in areas related to financial concerns, academic concerns, and physical health concerns. Following the K6, participants were asked this question: "To what extent have *financial concerns or financial stress* [or *academic concerns* or *concerns about physical health*] been the main cause of these

Table 1
Sample Characteristics by Racial/Ethnic Group

Characteristic	White Americans (*n* = 261)	Asian Americans (*n* = 395)	Total (*N* = 656)	*p* (from *t* or chi-square test)
Female: %	71.6	70.6	71.0	.908
Age in years: *M* (*SD*)	19.7 (2.2)	19.9 (1.7)	19.8 (1.9)	.317
Born in foreign country: %	3.8	27.1	17.9	<.001
Academic standing: %				.039
First-year student	34.5	28.6	30.9	
Second-year student	29.5	24.6	26.5	
Third-year student	20.7	24.1	22.7	
Fourth-year student	15.3	22.8	19.8	
K6 score (0–4 scale): *M* (*SD*)	1.49 (0.59)	1.61 (0.63)	1.56 (0.61)	.013
Attributions of distress (1–5 scale): *M* (*SD*)				
Financial concerns	2.47 (1.18)	2.77 (1.26)	2.65 (1.24)	.002
Academic concerns	3.94 (1.01)	4.12 (0.92)	4.05 (0.96)	.019
Physical health concerns	2.53 (1.23)	2.42 (1.22)	2.47 (1.22)	.265
Indicating prior use of services: %	25.3	9.6	15.9	<.001

Note. K6 = six-item Kessler Psychological Distress Scale.

feelings?" They responded on a scale ranging from 1 (*not at all*) to 5 (*very much*).

Perceived severity. Perceived severity was measured by the Short Form–36 Health Survey (SF-36; Ware & Sherbourne, 1992), which consists of 36 items covering eight areas of health-related quality of life in the past month. We used the subscales of role limitations due to personal or emotional problems (RL; three items) and social functioning (SF; two items). A sample RL item is "During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)? Cut down the amount of time you spent on work or other activities." Participants answered with a *yes/no* response. A sample SF item is "During the past 4 weeks, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?" The response options were *not at all*, *a little bit*, *moderately*, *quite a bit*, and *extremely*. In accordance with scoring instructions, a score was assigned to each response option, and subscale scores were derived by computing the mean (Ware & Sherbourne, 1992). Both the RL and the SF scores range from 0 to 100, with higher scores indicating fewer limitations and greater functioning, respectively. McHorney, Ware, and Raczek (1993) found that mental health subscales of the SF-36 (e.g., RL) were able to distinguish groups with and without psychiatric disorders. The SF-36 was previously used in a study examining health-related quality of life among racial/ethnic minorities, including Asian Americans (Jackson-Triche et al., 2000). Cronbach's alphas in the current study were .83 (RL) and .70 (SF).

Perceived susceptibility. Perceived susceptibility, or problem recognition, was measured using mental health literacy vignettes for anxiety and depression. Anxiety literacy was assessed using a vignette by Coles and Coleman (2010), which described an individual with general anxiety disorder on the basis of *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; American Psychiatric Association, 1994) criteria. Respondents read the vignette and selected a diagnosis in a multiple-choice format with 12 choices (e.g., general life stress, general anxiety disorder). Respondents selected the primary cause of the problem (e.g., stress,

mental illness) and indicated their professional help-seeking recommendations (*yes*, *no*, or *undecided*). They then imagined themselves as the portrayed individual and responded with how they would personally deal with this experience. Coles and Coleman reported that their measure was developed on the basis of clinical experience, published case studies, and Jorm et al.'s (1997) depression vignette. We used Jorm et al.'s vignette, which used the same sequence of questions, to assess mental health literacy for depression. Goldney, Fisher, and Wilson (2001) reported that individuals with depression were nearly 10 times more likely than individuals without depression to indicate that they had similar problems to those of the portrayed person. Prior studies using both of these vignettes have assessed recognition as a dichotomous response (correct or incorrect) on each disorder. We created a continuous measure for each disorder by taking the sum of all correct responses, with a possible range of 0–9.

Perceived benefits. The Treatment Goals Measure (TGM; Zane et al., 2005) assessed credibility regarding therapy and attitudes and beliefs about the importance of focusing on certain issues/problems in therapy. The TGM includes 18 items (e.g., "How important is it that therapy helps you reduce your anxiety and discomfort?") rated on a scale from 1 (*unimportant*) to 5 (*important*). A factor analysis by Zane et al. showed that all items loaded onto a single factor reflecting the extent to which therapy had multiple benefits, with higher scores indicating greater benefits from therapy. Zane et al. used this measure with Asian American therapy clients and reported a reliability of .95. In the current study, we modified terminology for relevance (e.g., "How important *would it be* that therapy helps you reduce your anxiety and discomfort?"). Cronbach's alpha was .98.

The anticipated utility subscale of the Disclosure Expectation Scale (DES; Vogel & Wester, 2003) assessed beneficial attitudes toward self-disclosing to a counselor. It consists of four items (e.g., "Would you feel better if you disclosed feelings of sadness or anxiety to a counselor?") rated on a scale from 1 (*not at all*) to 5 (*very*). Vogel and Wester reported adequate construct validity and a reliability of .83. We modified terminology to reflect self-disclosing to a broader range of mental health professionals, and

the term *counselor* was replaced with *therapist/counselor/mental health professional*. Cronbach's alpha was .81.

Perceived barriers. The Social Stigma for Receiving Psychological Help Scale (SSRPH; Komiya et al., 2000) assessed perceived social stigma regarding help seeking. It consists of five items (e.g., "Seeing a psychologist for emotional or interpersonal problems carries social stigma") rated on a scale from 1 (*strongly disagree*) to 4 (*strongly agree*), with higher scores indicating greater social stigma. Komiya et al. reported that lower SSRPH scores were related to more favorable help-seeking attitudes, and they reported a reliability of .72. The SSRPH has been used with acceptable reliability in previous research with Asian American students (Shea & Yeh, 2008). We modified terminology in the current study by replacing *psychologist* with *therapist/counselor/ mental health professional*. Cronbach's alpha was .76.

The Self-Stigma for Seeking Help Scale (SSOSH; Vogel et al., 2006) measured one's internalized social stigma about help seeking. The SSOSH contains 10 items (e.g., "I would feel inadequate if I went to a therapist for psychological help") rated on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Vogel et al. (2006) reported that the SSOSH differentiated between those who had and had not sought help in a 2-month period and reported a reliability of .91. The SSOSH has been found to be cross-culturally valid (Vogel et al., 2013) and has been used previously with Asian American students (Cheng, Kwan, & Sevig, 2013). We modified terminology in the current study by replacing *therapist* with *therapist/counselor/mental health professional*. Cronbach's alpha was .86.

Intentions to seek help. The Intent to Seek Counseling Inventory (ISCI; Cash, Begley, McCown, & Weise, 1975) measured general help-seeking intentions. The ISCI consists of 17 items assessing likelihood of seeking counseling for certain problems. For each problem (e.g., academic problems, depression), respondents indicated their help-seeking intention on a scale ranging from 1 (*very unlikely*) to 6 (*very likely*), with higher scores indicating greater general intention. Cash et al. provided evidence of construct validity of the ISCI as it predicted likelihood of seeking psychological help when therapists are presented as more or less attractive. The ISCI has been used in previous research with Asian American students (Yakunina & Weigold, 2011). We used the total of all 17 items as a measure of general help-seeking intention. Cronbach's alpha was .87.

The Intent to Seek Help Scale, modeled after Hammer and Vogel (2013), measured specific help-seeking intentions. This scale consists of six items ("I would intend to seek help from a mental health specialist [for example, a psychologist, a psychiatrist, a clinical social worker, a counselor, etc.] in the next 3 months") rated on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores indicate greater specific help-seeking intentions. Hammer and Vogel reported that this scale was constructed following Ajzen's (2006) guidelines in assessing intentions of decision-based behaviors. It was significantly correlated with willingness and decision to seek help, with a reliability of .97. Cronbach's alpha in the current study was .98.

Data Analysis

We used structural equation modeling in Mplus Version 7.3 (Muthén & Muthén, 1998–2012), with each latent factor measured by two indicator variables. The measurement model was tested in each group separately to determine adequacy of model fit to each group's data. To establish a baseline measurement model, we used multiple-group confirmatory factor analysis, which examined whether latent constructs were comparable (Kline, 2011). To establish measurement invariance, a chi-square difference test compared the baseline measurement model with all factor loadings freely estimated against its equality-constrained nested model. To determine racial/ethnic differences in help-seeking intentions, we examined mean differences on latent factors. To determine mediators of help-seeking intentions, we used an indirect-effects multiple indicators multiple causes (MIMIC) model.

All estimation procedures used full-information maximum likelihood (FIML) with raw data. Less than 1% of item-level data were missing. FIML assumes multivariate normality, and transformations were not necessary because skewness and kurtosis were well within acceptable ranges (Kline, 2011). Adequacy of model fit was determined by root mean square error of approximation below .05 (Browne & Cudeck, 1993), comparative fit index and Tucker–Lewis Index above .95 (Hu & Bentler, 1999), and standardized root mean square residual below .08 (Hu & Bentler, 1999).

Results

The characteristics of the study sample are displayed in Table 1 by racial/ethnic group. Asian Americans indicated greater psychological distress than White Americans ($d = 0.20$) and less prior use of mental health services than White Americans (Cramér's $V = .21$). Asian Americans attributed greater financial concerns ($d = 0.24$) and academic concerns ($d = 0.19$) to their distress in comparison with White Americans.

Descriptions and partial correlations of indicator variables in the model are displayed in Table 2. We covaried prior use of services, which is a known predictor of future services use (Gulliver, Griffiths, & Christensen, 2010). Across both groups, lack of role limitations and better social functioning were negatively related to specific help-seeking intentions, whereas treatment credibility, self-disclosure utility, and general intentions were positively related. Self-disclosure risk and social stigma were negatively related to specific help-seeking intentions for White Americans but not for Asian Americans.

Measurement Model

As shown in Table 3, the separate measurement models for the Asian American and White American groups fit the data relatively well. The multigroup baseline measurement model (Model 1) also demonstrated good fit to the data. All factor loadings of the indicators to their respective factors were significant at $p < .001$ (see the standardized factor loadings in Table 4). To establish measurement invariance, the baseline measurement model with all factor loadings freely estimated was compared against its equality-constrained nested model (Model 2). A chi-square difference test between Models 1 and 2 was not significant, $\Delta\chi^2(5, N = 656) = 9.10, p > .05$, providing evidence of measurement invariance.

Structural Model

Racial/ethnic differences in help-seeking intentions. In a multigroup framework, it is possible to test the relative equivalence or

Table 2
Means, Standard Deviations, and Partial Correlations of Study Variables, Controlling for Prior Use of Services

Variable	1	2	3	4	5	6	7	8	9	10	11
				White Americans ($n = 261$)							
1. Psychological distress	—										
2. Role limitations (lack of)	−.39*	—									
3. Social functioning	−.48*	.55*	—								
4. Anxiety literacy	−.06	.15*	.09	—							
5. Depression literacy	−.06	.04	.08	.16*	—						
6. Treatment credibility	.10	−.02	−.11	.18*	.18*	—					
7. Self-disclosure utility	.09	−.05	−.12	.13*	.18*	.54*	—				
8. Social stigma	.09	−.02	.01	.02	−.07	−.06	−.24*	—			
9. Self-stigma	−.01	.05	.11	−.02	−.08	−.30*	−.41*	.49*	—		
10. Help-seeking intentions (gen.)	.15*	−.15*	−.19*	.05	.18*	.44*	.40*	−.16*	−.39*	—	
11. Help-seeking intentions (sp.)	.30*	−.20*	−.21*	.04	.08	.36*	.37*	−.17*	−.33*	.45*	—
M	1.49	54.02	70.07	1.73	2.78	3.34	3.52	2.29	2.48	2.31	3.29
SD	0.59	42.14	22.98	1.44	1.52	0.89	0.86	0.54	0.79	0.55	1.19
				Asian Americans ($n = 395$)							
1. Psychological distress	—										
2. Role limitations (lack of)	−.32*	—									
3. Social functioning	−.46*	.46*	—								
4. Anxiety literacy	.01	.04	.08	—							
5. Depression literacy	−.06	.05	.07	.22*	—						
6. Treatment credibility	.09	−.04	−.09	.14*	.14*	—					
7. Self-disclosure utility	.02	−.11*	−.04	.16*	.12*	.48*	—				
8. Social stigma	.22*	.05	−.06	.04	.01	−.10*	−.04	—			
9. Self-stigma	.18*	−.09	−.08	.03	.05	.01	.01	.01	—		
10. Help-seeking intentions (gen.)	.16*	−.09	−.08	.07	.06	.06	.06	.01	−.07	—	
11. Help-seeking intentions (sp.)	.32*	−.17*	−.33*	−.01	.02	.26*	.22*	−.04	−.08	.21*	—
M	1.61	52.22	67.88	1.80	2.51	3.30	3.30	2.28	2.69	2.26	2.69
SD	0.63	43.09	22.11	1.75	1.64	0.91	0.75	0.53	0.62	0.56	1.65

Note. gen. = general; sp. = specific.
* $p < .05$.

nonequivalence of latent factor means (Kline, 2011; Sörbom, 1974). After we established measurement invariance, Model 2 (all factor loadings constrained to be equal) was modified such that the factor means, which were initially set to zero for both groups, were set to zero only for the reference group (White Americans). Intercepts were allowed to be freely estimated for model-identification purposes (Byrne, 2012). Fit statistics are shown in Table 3. The results showed that Asian Americans had lower help-seeking intentions relative to White Americans ($\beta = -.44$, $SE = .13$, $p = .001$). Moreover, Asian Americans perceived less benefit ($\beta = -.26$, $SE = .11$, $p = .02$) and

greater barriers ($\beta = .33$, $SE = .09$, $p < .001$) than did White Americans.

HBM variables as mediators of help-seeking intentions. An indirect-effects analysis was conducted using a MIMIC model in which factors were regressed on a dichotomous indicator representing group membership (0 = White American, 1 = Asian American). We used a single-group analysis because it met the assumption of measurement invariance (Kline, 2011). The model demonstrated adequate fit to the data (see the fit statistics in Table 3 and standardized path coefficients and standard errors in Figure 2). Consistent with the latent factor means analysis, Asian Amer-

Table 3
Summary of Goodness-of-Fit Indices

Model	χ^2 (*df*)	CFI	TLI	RMSEA [90% CI]	SRMR
White American model ($N = 261$)	32.45 (26)	.99	.98	.03 [.00, .06]	.04
Asian American model ($N = 395$)	44.37 (26)	.97	.94	.04 [.02, .06]	.04
Model 1: Multigroup baseline measurement model without equality constraints ($N = 656$)	76.81 (52)	.98	.96	.04 [.02, .06]	.04
Model 2: Multigroup measurement invariance model (Model 1 with all factor loadings constrained equal)	85.91 (57)	.97	.96	.04 [.02, .06]	.05
Multigroup structural model testing equivalence of factor means	110.90 (62)	.96	.94	.05 [.03, .06]	.05
Single-group MIMIC model testing indirect effects	84.84 (32)	.95	.92	.05 [.04, .06]	.04

Note. CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root mean square error of approximation; CI = confidence interval; SRMR = standardized root mean square residual; MIMIC = multiple indicators multiple causes.

Table 4
Summary of Factor Loadings for the Measurement Model

Factor and indicator variable	Standardized factor loading (SE)	
	White American model (N = 261)	Asian American model (N = 395)
Perceived severity		
Role limitations	.75 (.07)	.56 (.06)
Social functioning	.79 (.07)	.85 (.07)
Perceived susceptibility		
Anxiety literacy	.41 (.11)	.55 (.09)
Depression literacy	.39 (.10)	.40 (.08)
Perceived benefits		
Treatment credibility	.75 (.04)	.69 (.05)
Self-disclosure utility	.75 (.04)	.71 (.05)
Perceived barriers		
Self-stigma	1.00	1.00
Social stigma	.46 (.05)	.47 (.04)
Help-seeking intentions		
General intentions	.69 (.05)	.68 (.08)
Specific intentions	.71 (.05)	.42 (.06)

Note. All factor loadings were significant at $p < .001$, with the exception of self-stigma, which was set to 1.00 for both groups.

icans perceived less benefit ($p < .001$) and greater barriers ($p < .001$) compared with White Americans. Path coefficients from racial/ethnic group to perceived severity and susceptibility were not significant. Perceived severity ($p < .001$), benefits ($p < .001$), and barriers ($p = .045$) were significantly related to help-seeking intentions.

We examined whether individually significant paths were indicative of an overall significant indirect effect, with significance being indicated by the 95% confidence interval (CI) not including zero (Shrout & Bolger, 2002). The overall indirect effect was not significant (95% CI [−.15, .01]), but the specific indirect effect of perceived benefits was significant (95% CI [−.15, −.01]). Asian Americans perceived less benefit from help seeking relative to White Americans, which partially explained differences in help-seeking intentions. Although Asian Americans perceived greater barriers than did White Americans, and barriers were negatively related to help-seeking, this was not a significant indirect effect.

Discussion

We found that Asian Americans had lower help-seeking intentions compared with White Americans, despite reporting greater psychological distress. Asian Americans perceived relatively less benefit from help seeking, which partially explained the group differences in help-seeking intentions. Although Asian Americans perceived relatively greater barriers, this did not significantly account for group differences in help-seeking intentions. Regardless of race/ethnicity, perceived severity, benefits, and barriers significantly influenced help-seeking intentions. Overall, our results revealed both common and unique influences of help-seeking intentions across Asian and White American students.

Many Asian Americans may not consider mental health treatment to be that beneficial or helpful for a number of reasons. Culture influences the perceived meaning and expression of distress (Hwang, Myers, Abe-Kim, & Ting, 2008). For example, Asian cultures tend to emphasize a more holistic mind–body view,

which may lead to a dual focus on the experience of physical and emotional symptoms of distress (Lin & Cheung, 1999). Treatment approaches viewed as targeting mostly the affective or cognitive symptoms of distress, such as psychotherapy, may not be perceived as credible ways to alleviate distress (Kung, 2004). Rather, help seeking from those who focus on treating bodily symptoms, such as physicians and traditional healers, may be viewed as more credible (Uba, 1994).

Further, individualistic ideals in psychotherapy (e.g., openly expressing emotions, seeking help outside of the family) may hold less value to individuals from Asian cultural backgrounds (B. S. K. Kim, Atkinson, & Yang, 1999; Sue & Morishima, 1982). Asian cultures place greater emphasis than Western cultures on secondary coping, such as acceptance of difficult situations, and less emphasis on primary coping, such as directly changing the source of a stressor (Hall, Hong, Zane, & Le Meyer, 2011; Lam & Zane, 2004). Emotional suppression and forbearance are common ways that Asian Americans handle stressors (J. Chang, 2014; Wei, Su, Carrera, Lin, & Yi, 2013). This difference in problem-solving orientation (cf. Sue & Zane, 1987) may also help explain why Asian Americans tended to perceive therapy as being less credible and regarded self-disclosure to a mental health professional as less useful than did White Americans.

There may be important cultural variations in the functional value of self-disclosure and what is considered an appropriate context for the disclosure of intimate information (B. S. K. Kim, 2007). Chen and Danish (2010) found that individuals who adhered to Asian values were more likely to disclose their distress to friends than to unrelated, trusted adults. The hierarchical nature of interpersonal relationships in Asian cultures often demands emotional modesty and restraint, especially in the presence of those with seniority and authority (Chen & Danish, 2010). In contrast, authority figures in treatment (i.e., mental health professionals) encourage clients to openly disclose their feelings and problems. Whereas this type of self-disclosure is considered important and therapeutic in mainstream cultural contexts, it may be perceived as
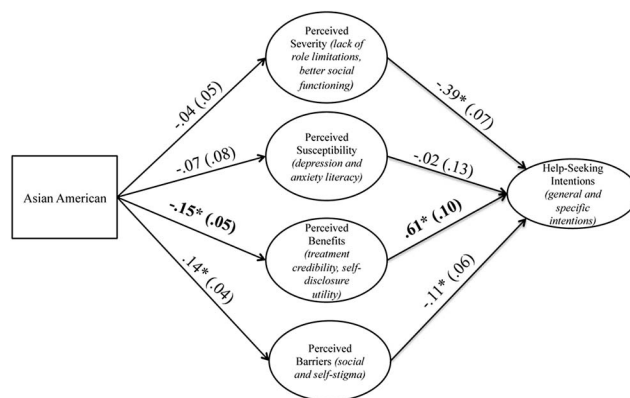

Figure 2. Summary of standardized path coefficients and standard errors (in parentheses) of the indirect-effects multiple indicators multiple causes model. The overall indirect effect was not significant (95% confidence interval [CI] [−.15, .01]; the specific indirect effect of perceived benefits was significant (95% CI [−.15, −.01]). Asterisks denote individually significant (at $p < .05$) path coefficients, whereas bolded figures denote significant indirect effects.

culturally gauche in Asian contexts. These factors may help explain why Asian Americans tended to perceive less benefit from therapy relative to White Americans.

We also found that Asian Americans perceived greater barriers to help seeking than did White Americans, such that they reported greater stigma related to help seeking. Prior findings have shown that Asian cultural values are positively related to social stigma and self-stigma, which then have influences on willingness to seek counseling (Choi & Miller, 2014). Although our study did not assess differences in Asian cultural values, importantly, our results showed that relatively greater stigma-related barriers among Asian Americans did not significantly explain racial/ethnic differences in help-seeking intentions. Rather, stigma-related barriers were negatively related to help-seeking intentions regardless of race/ethnicity. These results are consistent with a previous study using the HBM to examine the help-seeking intentions of university students in Australia, which found that both perceived benefits and barriers influenced help-seeking intentions (O'Connor et al., 2014). Our findings suggest that reducing the stigma associated with help seeking continues to be promising universal avenue to promote help-seeking.

We found that perceived severity, operationalized as lack of role limitations and better social functioning, significantly influenced help-seeking intentions, although we did not find racial/ethnic differences in severity. The experience of functional impairment alongside distress appears to drive help-seeking intentions, because impairment is an indicator of the severity of distress (Cauce et al., 2002). Prior findings have shown that educational concerns are the most common presenting problem among Asian American students seeking counseling, as opposed to interpersonal or emotional concerns among White American students (Tracey, Leong, & Glidden, 1986). This is congruent with our findings, in which Asian Americans attributed greater psychological distress from academic concerns than did White Americans. Individuals are most likely to seek help in areas that are most valued or salient to them (Tracey et al., 1986), and functional impairment in those areas may serve as an important indicator that help-seeking is warranted (Cauce et al., 2002). This suggests that efforts to promote timely help-seeking should consider emphasizing the gains in areas of functioning as a result of seeking help.

We did not find racial/ethnic differences in perceived susceptibility, nor did we find an effect on help-seeking intentions. A few possibilities may account for this null finding. The perceived susceptibility construct of the HBM originated from beliefs about being vulnerable to different types of physical conditions that warrant preventive-health behaviors (e.g., mammography screening for cancer). Perceived susceptibility may not readily translate to other health behaviors that are outside the realm of prevention-related health behaviors, such as mental health help seeking. In the current study, mental health literacy was the closest approximation of perceived susceptibility as it relates to mental health help-seeking. Although we used mental health literacy vignettes used in prior studies with similar samples, they may not have actually captured the essence of susceptibility, which may partially explain the null finding. We note that our null finding is consistent with O'Connor et al. (2014), which examined perceived susceptibility in terms of perceptions about developing mental health problems in the future. In our study, we examined recognition because we specifically sampled from individuals who already reported ele-

vated psychological distress. Overall, we acknowledge our choice of construct as a limitation, because mental health literacy is related to, but nonetheless distinct from, perceived susceptibility to mental health problems.

Our findings should be interpreted in light of other limitations. The study sample comprised 63.5% of all respondents who completed the study—those who scored 5 or greater on the K6. This percentage is relatively high but is very similar to that in a prior study that used the longer version of the K6 (i.e., the K10) among university students (Stallman, 2010). The cutoff score was based on population-based research demonstrating the validity of the K6 in screening for moderate mental distress (Prochaska et al., 2012). Prochaska et al. reported that respondents with K6 scores in the moderate range had greater rates of mental health care utilization and impairment than did respondents in the none/mild range. Population-based research has also shown that college-age individuals have higher levels of psychological distress than their noncollege-age counterparts (Substance Abuse and Mental Health Services Administration, 2012), but the extent to which the K6 may be overinclusive for this age group remains to be studied.

We assumed that help-seeking intention was an appropriate approximation of actual help seeking. Our cross-sectional methodology did not allow for direct testing of this, but previous findings have shown that intentions significantly influence behaviors (Ajzen, Joyce, Sheikh, & Cote, 2011). Another assumption was that help seeking is driven by a conscious and rational decision-making process, but some have argued that such a process does not adequately capture the complexity of help seeking (Pescosolido & Boyer, 2010). However, there are clear challenges to testing other types of models (e.g., Pescosolido's, 1992, network episode model), and this investigation was an attempt to empirically study the underutilization phenomenon from a theoretically relevant stance. Clearly, there is a need to test alternative models that include, but are not based solely on, a conscious and rational decision-making process.

In terms of measurement-related limitations, we applied the HBM to mental health help seeking by selecting representative operational variables for each construct, which captured specific elements of the HBM. For perceived barriers, for example, we did not consider possible nonstigma-related barriers (e.g., difficulty of setting appointments). Prior research has shown that college students have relatively low levels of help-seeking stigma (Eisenberg, Speer, & Hunt, 2012), which begs a careful consideration of what other factors are barriers to help seeking. Related to measurement limitations, each latent factor was measured by the required minimum of two indicators. These indicators were informed by prior research on help seeking, but it would be important from a measurement perspective to test models with three or more indicators per factor (Kline, 2011).

The present findings are also limited to college students with access to mental health services. The relative lack of structural barriers was an advantage to the current study, because barriers to care among college students have more to do with beliefs and attitudes than with access (Eisenberg et al., 2012). Thus, we were able to examine the psychological factors that affect help-seeking, but the extent to which these findings can generalize to community samples, in which structural barriers are an important consideration, is unknown. Moreover, the HBM construct of cues to action was not explicitly considered in our study. Consistent with Pesco-

solido (1992), it would be important for future research to incorporate the role of family, friends, and other social and outside influences in help-seeking intentions and behavior. Lastly, we examined intentions to seek help by using formal mental health services because that is known to be the area of the major mental health disparity affecting Asian American populations, but we acknowledge that this constitutes one of many ways that individuals can deal with psychological distress.

Underutilization of needed mental health services continues to be a major mental health disparity affecting Asian Americans, and our findings have implications for the promotion of use of mental health services. Alongside reduction of help-seeking stigma, outreach efforts particularly highlighting the benefits of help seeking appear to be a promising avenue with Asian Americans. This may involve enhancing overall perceptions of treatment credibility and the utility of self-disclosure as well as emphasizing the functional gains that result from help-seeking. It may also be worthwhile to incorporate information that more directly emphasizes the relationship between untreated psychological symptoms and eventual decrements in functioning. We also recognize the need for the development of culturally congruent ways to promote help-seeking. Our investigation, which uncovered similarities and differences in help-seeking intentions among Asian Americans and White Americans in psychological distress, contributes to the growing body of literature aimed at eventually eliminating one of the greatest disparities in mental health.

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