

Asian Americans' Lay Beliefs About Depression and Professional Help-Seeking

Y. Joel Wong

Indiana University Bloomington

Kimberly K. Tran

Seong-Hyeon Kim

Valerie Van Horn Kerne

Nicolina Ann Calfa

The University of Texas at Austin

Correspondence concerning this article should be addressed to: Y. Joel Wong, Department of Counseling and Educational Psychology, Indiana University, 201, N. Rose Ave., School of Education, Bloomington, IN 47405; email: joelwong@indiana.edu.

Journal of Clinical Psychology (in press – March 2010)

Key words: Asian American, lay beliefs, Asian values, depression, enculturation

Abstract

Guided by a culturally-informed illness representation self-regulation model (CIRSRM), this study analyzed the relations among 223 Asian Americans' lay beliefs about depression, enculturation to Asian values, and their likelihood of seeking professional help for depression. Participants' lay beliefs were assessed through an analysis of written responses to open-ended questions about depression. Enculturation as well as beliefs in biological causes, situational causes, and a short duration of depression were significantly related to the likelihood of professional help-seeking. In addition, enculturation moderated the association between several lay beliefs and the endorsement of professional help-seeking. The findings are discussed in light of how clinicians can incorporate mental illness lay beliefs in their work with Asian Americans.

Asian Americans' Lay Beliefs About Depression and Professional Help-Seeking

The way lay people conceptualize mental illnesses is inextricably linked to their cultural background (Hwang, Myers, Abe-Kim, & Ting, 2008; Kleinman, 1988). Cultural groups have culture-specific ways of explaining abnormal human behavior (Sue & Sue, 2008). In particular, scholars have proposed that Asian conceptualizations of mental illnesses differ markedly from those of Western notions, and that they profoundly shape the subjective meanings Asians and Asian Americans ascribe to mental illness experiences (Cheung, 1986; Leong & Lau, 2001; Ryder, Yang, & Heini, 2002).

The study of Asian Americans' lay beliefs about mental illnesses is important to mental health clinicians because such beliefs have been theorized to influence the expression of psychological distress, coping strategies, and mental health help-seeking patterns (Hwang et al., 2008). Hence, an understanding of culturally-informed conceptualizations of mental illness might help clinicians better address the mental health needs of Asian Americans. Against this backdrop, a growing number of studies have examined Asian Americans' lay beliefs about mental health problems (e.g., Chen & Mak, 2008; Fry & Grover, 1982; Kawanishi, 1995; Mori, Panova, & Keo, 2007; Narikiyo & Kameoka, 1992). For example, Kawanishi found that compared to their Caucasian counterparts, Japanese white-collar immigrants living in Southern California were more likely to attribute the causes of stress to a lack of carefulness and bad luck.

Several limitations in the extant research are noteworthy. First, research has been largely confined to comparing differences between Asian Americans and other cultural groups, especially European Americans (e.g., Kawanishi, 1995), instead of exploring how these beliefs might be related to coping processes, such as professional help-seeking. In particular, professional help-seeking among Asian Americans is a pertinent topic because of accumulating

evidence indicating that Asian Americans tend to underutilize professional mental health services (U.S. Department of Health & Human Services, 2001). Specifically, some scholars have attributed Asian Americans' underutilization of professional help for mental health problems to culturally-informed beliefs about mental illnesses (Kung, 2004; Leong & Lau, 2001).

Another limitation of previous studies on Asian Americans' lay beliefs about mental illnesses is that they have focused mainly on beliefs about causes of mental illnesses (e.g., Narikiyo & Kameoka, 1992) rather than on a more comprehensive range of beliefs. In contrast, scholars have proposed that culture influences a wide range of mental illness beliefs, including beliefs about the consequences and cure of mental illness (Angel & Thoits, 1987; Hwang et al., 2008; Leong & Lau, 2001). Research on Asian Americans' conceptualizations of mental illness can benefit from theoretical frameworks that examine a variety of beliefs in addition to causal beliefs. In the following section, we discuss one such framework, namely, the illness representation self-regulation model (Leventhal, Nerenz, & Steele, 1984).

Illness Representation Self-Regulation Model

The illness representation self-regulation model (Leventhal et al. 1984) is currently the most widely applied theoretical model in the study of lay beliefs about physical illnesses. The model is based on the premise that individuals are active problem-solvers who use their beliefs about illnesses to make meaning out of illness experiences. These beliefs, in turn, guide how individuals cope with their illnesses (Cameron & Leventhal, 2003). The key beliefs in this model are comprised of five categories: (a) identity or label assigned to the illness; (b) causes of the illness, (c) duration of the illness; (d) consequences of the illness, and (e) coping with or cure of the illness.

Although originally developed around physical illnesses, recently, researchers have applied the illness representation self-regulation model to mental illness experiences (Fortune, Barrowclough, & Lobban, 2004; Lobban et al., 2003). A key benefit of this model is that it examines a more comprehensive range of beliefs than those found in previous studies on beliefs about mental illnesses (Lobban et al., 2003). In a recent study that applied the model to the study of depression among Latino immigrants, beliefs about depression were found to be associated with informal and formal help-seeking patterns (Cabassa, Lester, & Zayas, 2007). In two other studies (Karasz, 2005; Karasz & McKinley, 2007), the model was used as the basis for a qualitative investigation of South Asian immigrant women's beliefs about depression and fatigue. However, no known quantitative study has analyzed Asian Americans' mental illness lay beliefs using the illness representation self-regulation model.

Culturally-Informed Illness Representation Self-Regulation Model

Although the illness representation self-regulation model provides a useful framework for examining lay beliefs about mental illnesses, it does not explicitly account for the influence of culture on mental illness lay beliefs and coping. To describe how culturally-informed beliefs about mental illnesses influence Asian Americans' professional help-seeking, we propose a new model based on an integration of the illness representation self-regulation model with Asian cultural worldviews. We label this integrated model the culturally-informed illness representation self-regulation model (CIRSRM). Defined as a set of fundamental assumptions about social and physical reality that have profound influence on cognition and behavior (Koltko-Rivera, 2004), the construct of worldview has been recognized in the multicultural psychological literature as playing an integral role in coping and psychotherapeutic processes (Fischer, Jome, & Atkinson, 1998; Ibrahim, Roysircar-Sodowsky, & Ohnishi, 2001).

Accordingly, within the CIRSRM, Asian cultural worldviews influences mental illness lay beliefs which, in turn, influences Asian Americans' professional help-seeking (see Figure 1).

We propose three propositions that undergird the CIRSRM. First, Asian cultural worldviews may exert contrasting influences on mental illness beliefs and professional help-seeking; that is, some worldviews might inhibit the seeking of professional help while others might facilitate professional help-seeking. This proposition dovetails with scholarly observations that different Asian cultural values (e.g., avoidance of family shame versus deference to authority figures) might be differentially related to attitudes toward seeking professional psychological help (Kim & Omizo, 2003) as well as the notion that individuals from Eastern cultures are capable of embracing paradoxical beliefs that influence coping (P. Wong, L. Wong, & Scott, 2006). Second, it is important to acknowledge that Asian Americans vary in the extent to which they embrace each of these worldviews. Some Asian Americans may embrace a particular worldview more strongly than other worldviews because of differences in the type of cultural influences they are exposed to.

Third, the CIRSRM incorporates the influence of enculturation to Asian values on professional help-seeking. Enculturation differs from acculturation in that enculturation refers to the extent to which ethnic minority individuals retain and are socialized to the norms of their indigenous culture, whereas acculturation refers to the extent to which these individuals adopt the norms of the dominant (e.g., European American) culture (Kim, 2007a). An Asian American who is highly enculturated to Asian values is one who adheres strongly to traditional Asian cultural values. Enculturation to cultural values can be further distinguished from mental illness lay beliefs in that the former refers to adherence to shared beliefs about the types of behavior considered desirable or undesirable in an indigenous culture (cf., Schwartz, 1999; e.g., belief that

it is inappropriate to express strong emotions). In contrast, mental illness lay beliefs focus on perceptions about the reality of mental illness (e.g., belief that mental illness is a result of biological causes).

The importance of enculturation was demonstrated in a recent study in which the values dimension of enculturation, but not acculturation, was inversely related to attitudes toward seeking professional psychological help among Asian Americans (Kim, 2007b). In addition, Kim and Omizo (2003) have called for researchers to address possible moderating effects between enculturation to Asian values and other variables on helping-seeking attitudes and behaviors. Therefore, within the CIRSRM, enculturation to Asian values is viewed as having main as well as moderating effects on coping. Aligning with previous research (Kim, 2007b), enculturation to Asian values is theorized to be inversely related to professional help-seeking. In addition, the degree to which mental health lay beliefs are related to professional help-seeking is posited to be moderated by enculturation to Asian values. Asian Americans who are highly enculturated to Asian cultural values may be more attuned to the Asian worldviews embedded within their mental illness beliefs. Consequently, within the CIRSRM, enculturation to Asian values serves the function of strengthening the relationship between mental illness lay beliefs and professional help-seeking.

Asian Cultural Worldviews

In the current study, we focused on the Asian worldviews of mind-body holism, collectivism, and the naïve dialectical principles of change and holism because the theoretical and empirical literature provides support for the notion that these worldviews might play a crucial role in determining mental illness lay beliefs and professional help-seeking. One of the most well-known Asian worldviews is the concept of mind-body holism (Cheung, 1986; Conrad

& Pacquiao, 2005; Kleinmann, 1988; Leong & Lau, 2001; Ryder et al., 2002). Within this worldview, psychological and physical problems are inseparable, and psychological problems are viewed as caused by as well as resulting in physical illnesses. Studies have indicated that Asians and Asian Americans are more likely than Caucasians to report somatic complaints for mental health problems (see Ryder et al., 2002; U.S. Department of Health & Human Services, 2001, for reviews) and have a tendency to believe mental illnesses are caused by biological factors (McKelvey, Baldassar, Sang, & Roberts, 1999; Mori et al., 2007). The adoption of mind-body holism may facilitate professional help-seeking among Asian Americans because biological problems and somatic symptoms are viewed as socially legitimate complaints that warrant external help (Conrad & Pacquiao, 2005; Kung & Lee, 2008). In line with this perspective, the tendency to somatize psychological distress and a biological attribution for depression have been shown to be positively related to professional help-seeking among Chinese Americans (Kung & Lu, 2008) and Taiwanese college students (Han, Chen, Hwang, & Wei, 2006) respectively.

In addition to the mind-body holistic worldview, scholars have noted that Asian conceptualizations of mental health concerns are linked to a collectivistic worldview (Yeh, Inman, Kim, & Okubo, 2006). Included in this worldview is the need to maintain interpersonal harmony (Kim, Atkinson, Umemoto, 2001; Triandis, 1995). Relationships are characterized by loyalty, obligations, and the need to save face, especially with regard to one's family (Leong & Lau, 2001). These cultural notions may have profound influences on mental illness lay beliefs and help-seeking. Chen and Mak (2008) posited that beliefs in social-personal causes of mental illnesses are rooted in collectivistic mental health worldviews; these authors found that such beliefs were inversely related to professional help-seeking among Chinese Americans. Beliefs in personal failure and interpersonal causes of psychological problems might inhibit professional

help-seeking among Asian Americans because of a desire to save face by not drawing attention to one's personal weaknesses and perceived failure to preserve relational harmony respectively.

Finally, naïve dialecticism is a set of worldviews that has been described as prevalent in many Asian cultures (Peng & Nisbett, 1999; Spencer-Rodgers & Peng, 2005). An important facet of naïve dialecticism is the principle of change, the perception that reality is a dynamic process and that the world is in a constant state of flux (Spencer-Rodgers & Peng). Hence, positive and negative life experiences, including psychopathology, tend to be viewed as relatively short-term and subject to change. For instance, in a cross-cultural study of lay beliefs about fatigue, Karasz and McKinley (2007) found that South Asian immigrant women were more likely than European American women to view fatigue as episodic and transient. Aligning with this perspective, studies have shown that Asian Americans tend to delay seeking professional mental health services until their symptoms are severe (U.S. Department of Health and Human Services, 2001). Consequently, Asian Americans' belief in the transient nature of mental illnesses might discourage professional help-seeking due to the perception that it is not worth seeking help or bothering others for a problem that is relatively short-term.

Another key facet of naïve dialecticism is the principle of holism, which emphasizes that a part is not meaningful except in connection to the whole and that it is important to pay attention to one's environment and situational context (Peng & Nisbett, 1999; Spencer-Rodgers & Peng, 2005). Nisbett, Peng, Choi and Norenzanan (2001) reviewed several studies indicating that Asians were more likely than Westerners to explain human behavior in terms of contextual rather than dispositional factors. Applied to the context of mental illness lay beliefs, Asian Americans who embrace the dialectical principle of holism might be more attuned to situational causes of depression. Moreover, situational causes of psychological problems (e.g., change in life events

such as a new job) might be viewed as not within one's responsibility and is, therefore, considered less stigmatizing than personal failure and interpersonal causes; consequently, belief in situational causes might facilitate professional help-seeking (cf. Chen & Mak, 2008). Partial support for this view was shown in Chen and Mak's study in which Chinese Americans' beliefs in environmental/hereditary causes of mental illnesses were positively related to the likelihood of professional help-seeking, although it should be noted that Chen and Mak's study did not distinguish between environmental and hereditary causes.

Hypotheses

The theoretical underpinnings of this study are based, in part, on the CIRSRM. Specifically, we sought to investigate the relations among Asian Americans' lay beliefs about depression, enculturation to Asian values, and the likelihood of seeking professional help. Drawing from the illness-representation self-regulation model, we focused on the following lay beliefs about depression: (a) four potential causes of depression – biological causes, personal failure causes, interpersonal causes, and non-interpersonal situational causes (hereafter known as “situational causes”); (b) effects of depression, focusing specifically on somatic consequences (e.g., poor appetite); and (c) duration of depression, because these beliefs appear to be most closely aligned with the Asian cultural worldviews discussed in the foregoing literature review. First, we examined the association between lay beliefs about depression and the likelihood of professional help-seeking. We hypothesized that beliefs in biological causes, situational causes, and somatic consequences would be positively associated with professional help-seeking, whereas beliefs in personal failure causes, interpersonal causes, and a short duration of depression would be inversely related to professional help-seeking. Second, we expected that enculturation to Asian values would be inversely related to professional help-seeking. Third, we

predicted that enculturation to Asian values would moderate the relations between lay beliefs about depression and professional help-seeking; that is, the association between lay beliefs and professional help-seeking would be stronger among highly enculturated Asian Americans as compared with less enculturated Asian Americans.

Lay Beliefs and Narrative Responses

Previous quantitative studies on lay beliefs about mental illnesses have relied mostly on self-report rating scales to assess individuals' beliefs. For example, the Illness Perception Questionnaire (Moss-Morris et al., 2002) is used to measure belief categories of the illness representation self-regulation model. In contrast, the present study systematically coded narrative responses to open-ended questions associated with the belief categories of the CIRSRM. Such an approach has the advantage of allowing participants the latitude to respond to questions as they see fit rather than limit their responses to whether they agree with specific statements (Levi & Haslam, 2005).

Method

Participants and Procedure

This study was part of a larger project on Asian Americans' enculturation and mental health. The original sample consisted of 238 Asian Americans recruited from the undergraduate subject pool of a large public university and electronic mailing lists of Asian American organizations throughout the United States. After deleting incomplete data, the final sample was comprised of 223 Asian Americans (69.9 % female, 30.1% male). The criteria for participation included being at least 18 years old and of East, South, and/or Southeast Asian descent. Psychology/counseling graduate students and psychologists/therapists were ineligible for participation. Participants' average age was 23.57 (SD = 6.76) years. Most participants were

born in the U.S. (63.9%) with first-generation participants living in the U.S. for an average of 13.38 years ($SD = 8.94$). In terms of ethnicity, participants identified as Chinese (30.6%), Indian (14.6%), Vietnamese (14.2%), Filipino/Filipina (11.9%), Taiwanese (9.1%), Korean (4.1%), and other Asian (15.5%). Participants were fairly well educated (94% had at least some college experience). The study was administered online via an internet-based computer program.

Instruments

Asian American Values Scale-Multidimensional. The Asian American Values Scale (AAVS-M; Kim et al., 2005) is a measure of enculturation to common cultural values across Asian Americans ethnic groups. Developed using samples of diverse Asian ethnic groups, this 42-item measure has a 7-point Likert-type scale with 5 subscales: Conformity to Norms, Family Recognition Through Achievement, Emotional Self-Control, Collectivism, and Humility. Scores are determined by calculating the average item mean, with high scores indicating greater enculturation to Asian values. Sample questions include, “One's personal needs should be second to the needs of the group.” Because we were interested in exploring the relations between enculturation and a diverse range of mental illness lay beliefs, we used the overall scale - representing the general construct of enculturation - rather than specific AAVS-M subscales. Concurrent validity was reported via associations with measures of loss of face and interdependence (Kim et al., 2005). The 2-week test-retest reliability coefficient and the coefficient alpha for the overall scale was .92 and .89 respectively (Kim et al., 2005). In the present study, the coefficient alpha for the overall scale was .88.

Depression Vignette. The authors created a vignette that described symptoms consistent with the diagnosis of Major Depressive Disorder as defined by the DSM-IV. The depressive

symptoms described in the vignette included affective and somatic symptoms. Participants were asked to imagine they experienced the following problem in their lives:

For the past 4 weeks, you have felt that something is wrong with your life. You feel intense sadness and fatigue throughout the day. You no longer have interest in anything that you once enjoyed. Despite feeling tired, you have great difficulty sleeping each night. In addition, you have difficulty concentrating and increasing feelings of worthlessness nearly every day. Because of these experiences, you have difficulty functioning in important areas of your life.

As part of a manipulation check, eight counseling psychology doctoral students, blind to the study's hypotheses, were asked to provide a DSM-IV diagnosis for the vignette. All eight of them provided the diagnosis of either "depression" or "Major Depressive Disorder." Participants provided written responses to several open-ended questions about the problem described in the vignette. Guided by the five belief categories of the illness representation self-regulation model (Leventhal et al., 1985), questions included participants' opinions about the (a) label they would assign to the problem, (b) causes, (c) expected duration, (d) probable effects on their lives, and (e) most effective way(s) to resolve the problem.

Data Analysis and Results

Coding of Lay Beliefs

The authors created a coding manual (available upon request from the first author) to categorize lay beliefs about depression. Although the manual consists of 24 lay beliefs, we focused on 7 lay beliefs relevant to our hypotheses: biological causes, personal failure causes, interpersonal causes, situational causes, somatic consequences, duration, and professional help. Dichotomous variables were created for each of the lay beliefs: participants' narrative responses

to the open-ended questions on the vignette were coded 1 if they satisfied the criteria of the category and 0 otherwise.

In terms of causes of the problem, responses were coded for whether they identified biological causes (e.g., diet, sleep problems, diseases, neurological processes, and hormonal imbalances), personal failure causes (e.g., failure to achieve one's goals, attributing fault to self, shame or guilt, and failure to meet others' expectations), interpersonal causes (e.g., interpersonal conflicts and a lack of social network), and situational causes (non-interpersonal situational causes, e.g., traumatic events, life transitions, and other events in participants' environment). With regard to the effects of the problem, responses were coded for whether they identified somatic consequences (e.g., poor appetite and health problems). The duration category distinguished between responses that indicated the problem would last for a long time (coded 0; defined as at least one month or a generic reference to a long duration, e.g., "long term problem") versus a short duration (coded 1; e.g., "it could be for a few days"). Finally, with regard to resolving the problem, responses were coded for whether participants mentioned seeking professional help (e.g., a physician or a mental health professional) as an effective way to resolve the problem. The coding process could not distinguish between seeking help from a medical versus a mental health professional because many participants indicated they would seek professional help without specifying whether they would see a physician or a mental health provider. Responses to the question on the label for the problem were not analyzed because belief about the identity of the problem was not included in the current study's hypotheses.

Two counseling psychology doctoral students, blind to the study hypotheses, coded the data based on the coding manual and a 3-hour training by the first and second authors. The final interrater reliabilities of the beliefs were as follows: .93 for biological causes, .90 for personal

failure, .89 for interpersonal causes, .80 for situational causes, .91 for somatic consequences, .84 for duration and .92 for professional help-seeking. Residual coding discrepancies were resolved through discussion and consensus. The following excerpt from a participant's response to the question about the causes of the problem in the vignette illustrates how the coding manual was applied: "Could be a number of things -- relational or family problems. Something traumatic that happened recently to trigger the depression. Something stressful that is coming soon (major life change, etc) or possibly an [sic] mental chemical problem." With regard to beliefs about causes, the response was assigned codes of 1, 0, 1, 1 for biological causes, personal failure, interpersonal causes, and situational causes respectively.

Preliminary Analyses

The mean AAVS-M score of 4.24 (SD = .60) in our sample was comparable to the mean AAVS-M scores of 4.21 and 3.98 in studies 1 and 2 of Kim et al.'s (2005) project that developed the AAVS-M. The Kolmogorov-Smirnov test statistic indicated no evidence that the distribution of AAVS-M scores in our study was non-normal, $D(223) = .049, p = .200$.

With regard to lay beliefs about depression, 25.1% endorsed biological causes, 35.4% endorsed causes associated with personal failure, 57.4% endorsed interpersonal causes, 52.5% endorsed situational causes, 40.8% endorsed somatic consequences, 41.3% expected the problem to last for a short duration, and 36.3% endorsed seeking professional help. The number of beliefs participants endorsed was not significantly related to AAVS-M, $p > .05$, and was, hence, not included as a variable in subsequent analyses.

To investigate the bivariate relations among the seven lay beliefs, a series of chi-square analyses were conducted using a Bonferroni-corrected significance level of $p < .002$. A belief in biological causes was related to endorsing professional help-seeking, $\chi^2(1) = 11.71, p = .001$. A

belief in situational causes was also related to endorsing professional help-seeking, $\chi^2(1) = 10.29, p = .001$. All other relationships among lay beliefs were not significant.

Main Analysis

A hierarchical logistic regression analysis was performed to assess factors associated with endorsing professional help-seeking. Logistic regression is the statistical method of choice for research involving dichotomous outcome variables (e.g., endorsement versus non-endorsement of professional help-seeking) because, unlike linear regression, there is no requirement that the relationship between the predictor and outcome variables is linear (Cizek & Fitzgerald, 1999). Logistic regression results are interpreted using an odds ratio (OR). An OR of less than 1.00 indicates that a 1-unit increase in the predictor variable is associated with decreased odds of the outcome variable occurring. In contrast, when the OR exceeds 1.00, a 1-unit increase is related to increased odds of the outcome variable occurring. A one-tailed test was used for this analysis because our hypotheses were directional in nature. In step 1, the six lay beliefs - namely, biological causes, personal failure causes, interpersonal causes, situational causes, somatic consequences, duration - and AAVS-M were added. In step 2, the interactions between AAVS-M and biological causes, personal failure causes, interpersonal causes, situational causes, somatic consequences, and duration were included. Scores were standardized to reduce multicollinearity.

The overall model was significant, $\chi^2(13) = 51.55, p < .001$, and the Nagelkerke R^2 indicated that 28.3% of the variance in seeking professional help was accounted for by the predictor variables. In addition, the interaction terms at step 2 contributed significantly to the overall model, block $\chi^2(6) = 16.50, p = .011$. The model correctly predicted 89.4% and 46.9% of those who did not endorse seeking professional help and those who did respectively, resulting in

an overall classification success rate of 74.0%. None of the VIF scores exceeded 10, indicating there was no evidence that multicollinearity biased the logistic regression model (Myers, 1990).

The results of the logistic regression analysis are presented in Table 1. At step 1, four predictor variables were significantly related to the likelihood of professional help-seeking. Consistent with our hypothesis, participants who endorsed biological causes of depression were 1.65 times ($p = .001$) as likely to endorse professional help-seeking as those who did not endorse such beliefs. Similarly, belief in situational causes of depression was positively related to the likelihood of professional help-seeking ($OR = 1.66, p = .001$). As predicted, AAVS-M was inversely related to the likelihood of seeking professional help ($OR = -.66, p = .004$). Duration was also inversely related to the likelihood of professional help-seeking ($OR = .78, p = .048$); that is, participants who believed depression would last for a short duration had reduced odds of endorsing professional help than those who believed in a long duration.

At step 2, three interaction effects, AAVS-M x personal failure, AAVS-M x interpersonal causes, and AAVS-M x somatic consequences were significant. To interpret the interactions, the odds ratios for personal failure causes, interpersonal causes, and somatic consequences were examined at high AAVS-M (1 SD above the AAVS-M mean) and low AAVS-M (1 SD below the AAVS-M mean) scores. Among participants with high AAVS-M scores, belief that depression was caused by personal failure causes was significantly related to lower odds of endorsing professional help-seeking, $OR = .63, p < .05$. In contrast, among low AAVS-M participants, belief that depression was caused by personal failure was not significantly related to endorsing professional help-seeking, $OR = 1.30, p > .05$. Contrary to our hypothesis, among high AAVS-M participants, belief in interpersonal causes was not significantly related to endorsing professional help-seeking, $OR = 1.25, p > .05$. However, belief in interpersonal

causes was significantly and inversely related to endorsing professional help-seeking among low AAVS-M participants, $OR = .52, p < .05$. Finally, among high AAVS-M participants, the odds of endorsing professional help-seeking were significantly higher if they also endorsed somatic consequences of depression, $OR = 1.80, p < .05$. In contrast, belief in somatic consequences was not significantly related to endorsing professional help-seeking among low AAVS-M participants, $OR = .71, p > .05$. None of the other main and interaction effects was significant.

Discussion

Our findings provide preliminary support for applying the culturally-informed illness representation self-regulation model to the study of Asian Americans' lay beliefs about depression. The first goal of our study was to examine the relations between lay beliefs about depression and professional help-seeking. Asian Americans who believed in biological and situational causes of depression had a greater likelihood of endorsing professional help-seeking, findings that are consistent with the mind-body holism worldview (Ryder et al., 2002) and the naïve dialectical principle of holism (Spencer-Rodgers & Peng, 2005) respectively. Taken together, our findings on beliefs in biological and situational causes align with Chen and Mak's (2008) study in which Chinese Americans' beliefs in environmental/ hereditary causes of mental illnesses were positively related to the likelihood of professional help-seeking. Furthermore, in accordance with the naïve dialectical principle of change (Spencer-Rodgers & Peng), Asian Americans who believed depression would last for a short duration had lower odds of endorsing professional help than those who believed in a long duration.

The second goal of our study was to investigate the association between enculturation to Asian values and the endorsement of professional help-seeking. Supporting previous research on Asian Americans' attitudes toward seeking professional psychological help (Kim, 2007b; Kim &

Omizo, 2003), enculturation to Asian values was found to be inversely associated with the likelihood of professional help-seeking.

Our third goal was to explore interaction effects involving enculturation and lay beliefs about depression. A combination of high enculturation and belief that depression resulted in somatic consequences was associated with a greater likelihood of Asian Americans endorsing professional help-seeking. Enculturation to Asian values might reinforce the cultural notion that it is socially acceptable to seek help for problems related to physical illnesses. Further, Asian Americans who believed depression was caused by personal failure causes had reduced odds of endorsing professional help if they were also highly enculturated to Asian values. Enculturation to Asian values might inhibit professional help-seeking by drawing attention to the shame of personal failure and the potential for losing face through the disclosure of one's perceived weaknesses. Our findings also revealed a significant enculturation by belief in interpersonal causes interaction effect, although it was contrary to our hypothesis. Among highly enculturated Asian Americans, belief in interpersonal causes of depression was not related to the endorsement of professional help-seeking; instead, a combination of low enculturation and belief in interpersonal causes was significantly and inversely related to seeking professional help. One possible explanation for this finding is that Asian Americans with low levels of enculturation might have been less bothered by interpersonal causes of depression because traditional Asian values such as interpersonal harmony and family obligations were less important to them; consequently, belief in interpersonal causes of depression provided little motivation for them to seek professional help.

To our knowledge, this is the first quantitative study to synthesize previous theoretical and empirical work on Asian conceptualizations of psychopathology with the illness

representation self-regulation model, a widely applied theoretical model used in the study of lay beliefs about physical and mental illnesses. Other studies have found that Asian Americans' level of enculturation to Asian values was related to poorer attitudes toward seeking professional psychological help (Kim, 2007b; Kim & Omizo, 2003). However, as predicted by the CIRSRM, our findings suggest a greater level of complexity in the relation between enculturation to Asian values and professional help-seeking. Depending on the type of lay beliefs endorsed by Asian Americans, a high level of enculturation to Asian values could either facilitate help-seeking (e.g., when combined with a belief in somatic consequences of depression) or inhibit help-seeking (e.g., when combined with a belief in personal failure causes of depression).

This is also the first known quantitative study to rely on an analysis of Asian Americans' narratives to examine their mental illness lay beliefs. One benefit of using narrative data is that it captures spontaneous and naturalistic explanations that might be difficult to assess through self-report rating scales (Levi & Haslam, 2005). For example, in the question about the most effective way to resolve the problem of depression, participants were not prompted to describe their views of professional help. Nevertheless, 36.3% of participants wrote that they would seek some form of professional help if they experience the problem described in the depression vignette.

Limitations and Recommendations for Future Research

There were several limitations in our study. First, although the CIRSRM proposes a mediation model in which Asian cultural worldviews influences professional help-seeking via mental illness lay beliefs, we did not analyze the influence of Asian cultural worldviews on lay beliefs and help-seeking. Future studies should explore the possibility that Asian Americans' mental illness lay beliefs mediates the association between Asian cultural worldviews and professional help-seeking. Second, our coding of professional help did not distinguish between

medical and psychological help-seeking. Hence, the number of participants who would have been willing to seek psychotherapeutic services for depression is likely lower than the total number of participants who endorsed seeking professional help.

Third, our findings were limited by the use of a non-clinical, relatively young, educated, and internet-savvy Asian American sample. Future studies should examine more diverse samples, including Asian Americans who currently experience mental health problems as well as less educated and older Asian Americans. Moreover, the inclusion of other cultural groups (e.g., European Americans) and larger samples of diverse Asian American ethnic groups would enable researchers to study between-group and within-group ethnic differences (e.g., Chinese versus Asian Indian Americans) in mental illness lay beliefs. Fourth, because participants' responses to the depression vignette may have been a function of the types of symptoms described in the vignette, future studies can test whether the presentation of different symptoms (e.g., cognitive-affective versus somatic) elicits different beliefs about depression. Fifth, in using a coding manual to code participants' responses to the open-ended questions, we inevitably left out other findings that may have emerged from a qualitative approach to data analysis. Sixth, mental illness lay beliefs and enculturation are not the only factors that might determine whether Asian Americans seek professional help for mental illnesses. For instance, Asian Americans might perceive mental health services to be culturally insensitive to their concerns (Kung, 2004).

Implications for Clinicians

An overarching clinical implication of our findings is that a one-size-fits-all approach to clinical work with Asian Americans is potentially problematic. Instead, it is important for clinicians to identify within-group differences among their Asian American clients based on their mental illness lay beliefs and level of enculturation. With regard to mental illness lay beliefs,

scholars have observed that acknowledging minority clients' beliefs about their presenting concerns would improve therapeutic outcomes by enhancing the therapeutic relationship and increasing levels of therapeutic collaboration (Fischer et al., 1998). In this regard, therapists could use the CIRSRM as a heuristic to examine similarities and differences between their beliefs and those of their Asian American clients. For example, in the first session of psychotherapy, therapists are encouraged to ask their clients about their perceptions of the causes, consequences, and expected duration of their problems.

In addition, our findings point to the potential value of therapists assessing Asian American clients' level of enculturation to Asian values in conjunction with their mental illness lay beliefs to understand their perceptions of professional help-seeking. As suggested by Wong and Poon (in press), an assessment of clients' level of enculturation can include questions about clients' role in their families (e.g., do they believe their actions reflect the reputation of their families?), how they relate to loved ones (e.g., are they concerned about preserving interpersonal harmony?), and beliefs about appropriate behavior in interpersonal contexts (e.g., the need to control their emotions when talking to individuals outside their families). Alternatively, clinicians can administer the AAVS-M to their Asian American clients and then discuss the meaning of their scores within the context of their mental health beliefs and perceptions of help-seeking.

Further, when working with Asian Americans, therapists can consider appropriate modifications to their therapeutic strategies based on their clients' lay beliefs about mental illnesses. For example, therapists should treat Asian Americans' somatic complaints as real problems that can be potentially distressing instead of simply viewing them as defense mechanisms (Sue & Sue, 2008). Additionally, when working with highly enculturated Asian

American clients who present with somatic complaints, therapists can take advantage of their willingness to seek professional help by prioritizing their somatic complaints in their treatment plans. An understanding of Asian cultural worldviews and mental illness beliefs can also contribute to culturally-sensitive medical practice. Given Asian Americans' tendency to underutilize professional services for psychological problems, medical doctors and nurses who work with Asian American patients could explore the possibility that their patients' somatic complaints might be related to psychological distress and that they might benefit from referrals to mental health services (Kung & Lu, 2008).

Finally, our findings provide clues on how clinicians can help increase the likelihood of Asian Americans seeking professional help for psychological problems. Asian Americans who have stigmatizing beliefs about mental illnesses can be invited to consider less stigmatizing etiologies - for example, biological and situational causes - that might improve their willingness to seek professional help. Overall, our findings draw attention to the need for clinicians to consider the intersection of culture, mental illness lay beliefs, and help-seeking when working with Asian American clients.

References

- Angel, R., & Thoits, P. A. (1987). The impact of culture on the cognitive structure of illness. *Culture, Medicine and Psychiatry, 11*, 465-494.
- Cabassa, L. J., Lester, R., & Zayas, L. H. (2007). "It's like being in a labyrinth:" Hispanic Immigrants' perceptions of depression and attitudes toward treatments. *Journal of Immigrant Health, 77*, 231-242.
- Cameron, L. D., & Leventhal, H. (Eds.) (2003). *The self-regulation of health and illness behaviour*. London and New York : Routledge.
- Chen, S. X., & Mak, W. W. S. (2008) Seeking professional help: Etiology beliefs about mental illness across cultures. *Journal of Counseling Psychology, 55*, 442-450.
- Cheung, F. M. C. (1986). Psychopathology among Chinese people. In M. H. Bond (Ed.), *The psychology of the Chinese people* (pp. 171-212). Hong Kong: Oxford University Press.
- Cizek, G. J., & Fitzgerald, S. M. (1999). An introduction to logistic regression. *Measurement and Evaluation in Counseling and Development, 31*, 223-245.
- Conrad, M. M., & Pacquiao, D. F. (2005). Manifestation, attribution, and coping with depression among Asian Indians from the perspectives of health care practitioners. *Journal of Transcultural Nursing, 16*, 32-40.
- Fisher, A. R., Jome, L. M., & Atkinson, D. R. (1998). Reconceptualizing multicultural counseling: Universal healing condition in a culturally specific context. *The Counseling Psychologist, 26*, 525-588.
- Fortune, G., Barrowclough, C., & Lobban, F. (2004). Illness representations in depression. *British Journal of Clinical Psychology, 43*, 347-364.
- Fry, P. and Grover, S.C. (1982) Cognitive appraisal of life stress and depression in the elderly:

- A cross-cultural comparison of Asians and Caucasians, *International Journal of Psychology*, 17, 437-454.
- Han, D.-Y., Chen, S.-H., Hwang, K.-K., & Wei, H.-L. (2006). Effects of psychoeducation for depression on help-seeking willingness: Biological attribution versus destigmatization. *Psychiatry and Clinical Neurosciences*, 60, 662-668.
- Hwang, W. C., Myers, H. F., Abe-Kim, J., & Ting, J. Y. (2008). A conceptual paradigm for understanding culture's impact on mental health: The cultural influences on mental health (CIMH) model. *Clinical Psychology Review*, 28, 211-227.
- Ibrahim, F. A., Roysircar-Sodowsky, G., & Ohnishi, H. (2001). Worldview: Recent developments and needed directions. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (2nd ed., pp. 425-456). Thousand Oaks, CA: Sage.
- Karasz, A., (2005). Cultural differences in conceptual models of depression. *Social Science and Medicine*, 60, 1625-1635.
- Karasz, A., & McKinley, P. S. (2007). Cultural differences in conceptual models of everyday fatigue: A vignette study. *Journal of Health Psychology*, 12, 613-626.
- Kawanishi, Y. (1995). The effects of culture on beliefs about stress and coping: Causal attribution of Anglo-American and Japanese persons. *Journal of Contemporary Psychotherapy*, 25, 49-60.
- Kim, B. S. K. (2007a). Acculturation and enculturation. In F. T. L. Leong, A. G. Inman, A. Ebreo, L. Yang, L. Kinoshita, & M. Fu (Eds.), *Handbook of Asian American psychology* (pp. 141-158). (2nd ed.). Thousand Oaks, CA: Sage.
- Kim, B. S. K. (2007b). Adherence to Asian and European American cultural values and attitudes

- toward seeking professional psychological help among Asian American college students. *Journal of Counseling Psychology*, 54, 474-480.
- Kim, B. S. K., Li, L. C., & Ng, G. F. (2005). The Asian American values scale-Multidimensional: Development, reliability, and validity. *Cultural Diversity & Ethnic Minority Psychology*, 11, 187-201.
- Kim, B. S. K., & Omizo, M. M. (2003). Asian cultural values, attitudes toward seeking professional psychological help, and willingness to see a counselor. *The Counseling Psychologist*, 31, 343-361.
- Kleinman, A. (1988) *Rethinking Psychiatry: From Cultural Category to Personal Experience*. New York: Free Press.
- Koltko-Rivera, M. E. (2004). The psychology of worldviews. *Review of General Psychology*, 8, 3-58.
- Kung, W. W. (2004). Cultural and practical barriers to seeking mental health treatment for Chinese Americans. *Journal of Community Psychology*, 32, 27-43.
- Kung, W. W., & Lu, P.-C. (2008). How symptom manifestations affect help seeking for mental health problems among Chinese Americans. *The Journal of Nervous and Mental Disease*, 196, 46-54.
- Leong, F. T. L. & Lau, A. S. L. (2001). Barriers to providing effective mental health services to Asian Americans. *Mental Health Services Research*, 3, 201-214.
- Leventhal, H., Nerenz, D. R. and Steele, D. J. (1984) Illness representations and coping with health threats. In Baum, A., Taylor, S. E. and Singer, J. E. (Eds.), *Handbook of Psychology and Health*. (Vol. 4; pp. 219-252). Hillsdale, NJ: Lawrence Erlbaum Associates.

- Levi, M., & Haslam, N. (2005). Lay explanations of mental disorder: A test of the folk psychiatry model. *Basic and Applied Social Psychology, 27*, 117-125.
- Lobban, F., Barrowclough, C., & Jones, S. (2003) A review of the role of illness models in severe mental illness. *Clinical Psychological Review, 23*, 171–196.
- McKelvey, R. S., Sang, D. L., Baldassar, L., Davies, L., Roberts L., & Cutler, N. (2002). The prevalence of psychiatric disorders among Vietnamese children and adolescents. *Medical Journal of Australia, 177*, 413-7.
- Mori, L., Panova, A., & Keo, Z. S. (2007). Perceptions of mental illness and psychotherapy in a sample of Asian, Hispanic, and White American college students. *Journal of Psychiatry, Psychology, and Mental Health, 1*, 1-13.
- Moss-Morris, R., Weinman, J., Petrie, K. J., Horne, R., Cameron, L.D., & Buick, D. (2002). The Revised Illness Perception Questionnaire (IPQ-R). *Psychology and Health, 17*, 1-16.
- Myers, R. (1990). *Classical and modern regression with applications*. (2nd Ed.). Boston, MA: Duxbury.
- Narikiyo, T. & Kameoka, V. (1992). Attributions of mental illness and judgments about help seeking among Japanese American and White American students. *Journal of Counseling Psychology, 39*, 363-369.
- Nisbett, R., Peng, K., Choi, I., & Norenzanan, A. (2001). Culture and system of thoughts: Holistic versus analytic cognition. *Psychological Review, 108*, 291-310.
- Peng, K. & Nisbett, R. (1999). Culture, dialectics, and reasoning about contradiction. *American Psychologist, 54*, 741-754.
- Ryder, A. G., Yang, J., & Heini, S. (2002). Somatization vs. psychologization of emotional

- distress: A paradigmatic example for cultural psychopathology. In W. J. Lonner, D. L. Dinnel, S. A. Hayes, & D. N. Sattler (Eds.), *Online Readings in Psychology and Culture* (Unit 9, Chapter 3), (<http://www.wvu.edu/~culture>), Center for Cross-Cultural Research, Western Washington University, Bellingham, Washington USA.
- Schwartz, S. H. (1999). A theory of cultural values and some implications for work. *Applied Psychology: An International Review*, 48, 23 - 47.
- Spencer-Rodgers, J. & Peng, K. (2005). The dialectical self: Contradiction, change, and holism in the East Asian self concept. In R. M. Sorrentino, D. Cohen, J. M. Olson, & M. P. Zanna. (Eds.). *Culture and social behavior: The Ontario Symposium*, (Vol. 10; pp. 227-249). Mahwah, NJ: Lawrence Erlbaum Associates.
- Sue, D., & Sue, D. W. (2008). *Counseling the culturally diverse: Theory and practice*. (5th ed.). New York: John Wiley & Sons.
- Triandis, H. C. (1995). *Individualism and collectivism*. San Francisco, CA: Westview Press.
- U.S. Department of Health and Human Services. (2001). *Mental Health: Culture, Race, and Ethnicity—A Supplement to Mental Health: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services.
- Wong, Y. J., & Poon, M.-L. (in press). Counseling Asian Americans with suicidal behavior. In W. M. Liu, D. Iwamoto, & M. Chae (Eds.), *Culturally responsive counseling with Asian American men*. New York: Routledge.
- Wong, P. T. P., Wong, L. C. J., & Scott, C. (2006). Beyond stress and coping: The positive psychology of transformation. In P. T. P. Wong, and L. C. J. Wong (Eds.), *Handbook of multicultural perspectives on stress and coping*. (pp. 29-54). New York: Springer.

Yeh, C. J., Inman, A., Kim, A. B., & Okubo, Y. (2006). Asian American collectivistic coping in response to 9/11, *Cultural Diversity and Ethnic Minority Psychology, 12*, 134-148.

Table 1

Logistic Regression Analysis Predicting the Likelihood of Professional Help-Seeking

Variable	<i>B</i>	<i>SE</i>	Odds ratio
Step 1			
Biological causes	.50	.15	1.65**
Personal failure causes	-.15	.16	.87
Interpersonal causes	-.21	.16	.81
Situational causes	.51	.16	1.66**
Somatic consequences	.11	.15	1.12
Duration (short)	-.26	.15	.78*
AAVS-M	-.42	.16	.66**
Step 2			
Biological causes	.55	.17	1.73**
Personal failure causes	-.10	.17	.90
Interpersonal causes	-.21	.17	.81
Situational causes	.50	.17	1.65**
Somatic consequences	.12	.16	1.13
Duration (short)	-.32	.16	.73*
AAVS-M	-.55	.19	.58**
AAVS-M x biological causes	-.13	.18	.88
AAVS-M x personal failure causes	-.37	.18	.69*
AAVS-M x interpersonal causes	.44	.20	1.54*
AAVS-M x situational causes	-.22	.18	.80
AAVS-M x somatic consequences	.46	.18	1.59**
AAVS-M x duration	-.27	.18	.76

Note: AAVSM-M = Asian American Values Scale-Multidimensional.

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

Figure Caption

Figure 1. Culturally-Informed Illness Representation Self-Regulation Model. Enculturation to Asian values is theorized to moderate the relationship between mental illness lay beliefs and professional help-seeking. In the current study, professional help-seeking was operationalized in terms of whether participants spontaneously mentioned that they would seek professional help.

