Seeking Professional Help: Etiology Beliefs About Mental Illness Across Cultures

Sylvia Xiaohua Chen The Hong Kong Polytechnic University Winnie W. S. Mak The Chinese University of Hong Kong

In the present study, the authors examined the contributions of cultural beliefs about the etiology of mental illness to the seeking of help from mental health professionals among college students in 4 cultural groups, European Americans, Chinese Americans, Hong Kong Chinese, and Mainland Chinese. Group differences were found in help-seeking history and likelihood, with European and Chinese Americans being more likely to seek help than Hong Kong and Mainland Chinese. Multiple-group path analysis showed that lay beliefs about causes of mental illness and prior help-seeking history significantly predicted help-seeking likelihood, which was related positively to environmental/hereditary causes but negatively to social-personal causes. Our findings demonstrate the importance of understanding help-seeking patterns within specific cultural contexts and the effects of Western influences on shaping help-seeking propensities.

Keywords: help-seeking, lay beliefs, culture, Chinese, Americans

In recent years, the emphasis of counseling psychology has moved from multiculturalism toward internationalization, to globalize research and practice (e.g., Leong & Leach, 2007; Savickas, 2007). This movement advocates reducing ethnocentric bias in theories and models by assessing psychological phenomena crossculturally and predicting behaviors not only for North Americans but also for non-Western populations. The movement promotes theory and research that are grounded in diverse cultural contexts and facilitates the development of treatment strategies that are practiced in such contexts. In this light, research is geared toward establishing models that are empirically tested in multicultural contexts and take cultural worldviews and beliefs into consideration (Pedersen & Leong, 1997). In the present study, we take this international perspective to investigate cross-cultural patterns of help-seeking and factors contributing to seeking help from mental health professionals.

Underutilization of mental health services has been a prevalent and severe issue across the globe. According to the Surgeon General's report (U.S. Department of Health and Human Services, 1999), approximately 28% of the adult population experienced mental health problems in a year. Among those with mental health problems, however, only 15% sought professional help, out of

which only 6% received specialty mental health services (Kessler et al., 1996; Regier, Narrow, Rae, Manderscheid, Locke, & Goodwin, 1993). A similar gap was found among European countries, with around one fifth of the individuals who sought help for mental health services actually receiving them (Alonso et al., 2004).

This gap in mental health services was evident among Asians and Asian Americans as well (Leong, 1994; Mak, Chen, Wong, & Zane, 2005; Matsuoka, Breaux, & Ryujin, 1997; Snowden & Cheung, 1990; Sue, Zane, & Young, 1994; Ying & Hu, 1994). In the National Latino and Asian American Study, Asian Americans were found to have lower rates of using mental health service than the general population, and the rates were lower among immigrants than among their U.S.-born counterparts (Abe-Kim et al., 2007). Such disparity in treatment need and use of mental health services was also found among Chinese across various Asian regions, including Hong Kong (Chiu, 2004; Rudowicz & Au, 2001), Taiwan (Lin, 2002), Mainland China (Boey, 1999; Boey, Mei, Sui, & Zeng, 1998; Chang, Tong, Shi, & Zeng, 2005; Jiang & Wang, 2003), and Singapore (Ow & Katz, 1999; Quah & Bishop, 1996).

Culture and Help-Seeking

To understand the underutilization of mental health services, cultural factors within individuals are important in determining service use (Sue, 1999). According to Lau and Takeuchi (2001), three general explanations exist in the literature for the underutilization among Asians and Asian Americans: (a) conflict between traditional Asian values and Western psychotherapy process, (b) cognitive appraisal of psychological problems, and (c) shame and stigma associated with mental illness. Among Chinese and Chinese Americans, cultural values may be in conflict with the expectations in counseling. Rather than encouraging emotional expression, traditional Chinese culture places much value on self-restraint. Individuals are expected to control and suppress their emotional problems, to place little importance on them, or to have

Sylvia Xiaohua Chen, Department of Applied Social Sciences, The Hong Kong Polytechnic University, Hong Kong, China; Winnie W. S. Mak, Department of Psychology, The Chinese University of Hong Kong, Hong Kong, China.

This study was supported by Direct Grant 2020722 of The Chinese University of Hong Kong. We are grateful to Amy G. Lam for her assistance in data collection and to Wai Chan and Wesley C. H. Wu for their helpful advice on statistical analysis.

Correspondence concerning this article should be addressed to Sylvia Chen, Department of Applied Social Sciences, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong, China. E-mail: ssxhchen@polyu.edu.hk

little concern over them (Tracey, Leong, & Glidden, 1986). Thus, the expectation of openly discussing personal issues in the counseling context may be unnatural to many Chinese and Chinese Americans. In addition, due to their concerns about shame and face loss, Chinese and Chinese Americans may not seek counseling so as to avoid being stigmatized, which not only affects themselves, but also affects their families (Kung, 2003; Mak & Chen, 2006; Pearson, 1993).

In the present study, we compared the attitudes toward seeking professional help by sampling four groups under various levels of Western influences: European Americans, Chinese Americans, Hong Kong Chinese, and Mainland Chinese. European Americans and Chinese Americans are two ethnic groups with different degrees of acculturation to Western cultures. European Americans are heavily influenced by Anglo-Saxon norms and practices; Chinese Americans are negotiating both Western and Eastern values and beliefs. Of the two Chinese groups, Mainland Chinese are deeply rooted in Chinese cultural traditions, whereas Hong Kong Chinese are more westernized due to Hong Kong's colonial background under British rule. Thus, with varying degrees of Western influences, the four cultural groups were hypothesized to show a gradation of increase in willingness to seek help: European Americans would be more likely to seek help from mental health professionals than would Chinese Americans, whereas Chinese Americans would be more likely to seek help than would Hong Kong Chinese and Mainland Chinese.

Cultural Beliefs About Causes of Mental Illness

Culture not only shapes the attitudes toward seeking help from mental health professionals but also influences the cognitive appraisal of psychological problems. Cultural differences have been documented in lay beliefs about the etiology of mental illness. People in collectivist cultures such as Asian Americans were more likely to attribute mental health problems to internal, personal causes, whereas counselors influenced by Western psychotherapeutic approaches perceived mental illness as arising from interactions between the person and the environment (Mallinckrodt, Shigeoka, & Suzuki, 2005). Such cultural differences may influence the perceived efficacy of Western-based psychological treatments. Clients who perceived their own etiology beliefs as similar to those of their counselors regarded their counselors as more credible and trustworthy, rated the counseling services as more effective, and desired future counseling more than did those who perceived dissimilarity (Atkinson, Worthington, Dana, & Good, 1991; Iselin & Addis, 2003; Worthington & Atkinson, 1996).

Having examined 10 universal and culture-bound psychological and social problems, Luk and Bond (1992) categorized lay beliefs about causes of mental illness into two factors, namely environmental/hereditary and social–personal causes. The environmental/hereditary factor encompasses both physical and somatic sources conducive to psychological problems, such as genetic predisposition, brain and nervous system, working environment, and health state, whereas the social–personal factor was related to social and psychological sources, such as life quality, past experience, formal education, and religious beliefs.

We postulate that the social-personal factor resembles the etiology beliefs held in collectivist mental health worldviews, in which psychological problems are regarded as personal failure, and that the environmental/hereditary factor parallels the etiology beliefs held by Western-based counselors who tend to emphasize the influence of the environment. As individuals with etiology beliefs similar to those of their counselors are more likely to perceive psychological treatments as effective, we hypothesized that environmental/hereditary causes would be positively related to help-seeking likelihood; conversely, we hypothesized that social–personal causes would be negatively related to help-seeking likelihood.

The Present Study

As Kung (2003) pointed out, a possible confound in help-seeking studies was that in many studies help-seeking intentions were examined without accounting for actual behaviors. Therefore, it is essential to examine not only the tendency to solicit help but also the actual behaviors of whether and where help was sought in the past. In this study, we examined both help-seeking history and help-seeking likelihood. As previous research showed that prior help increased the likelihood of seeking help and that treatment experiences are considered to facilitate care seeking for mental health issues (e.g., Dadfar & Friedlander, 1982; Deane & Todd, 1996; Friedman & West, 1987; Halgin, Weaver, Edell, & Spencer, 1987; Kelly & Achter, 1995; Mechanic, 1980), we anticipated a similar relation between help-seeking history and likelihood, with past history being predictive of greater likelihood.

Thus, based on the above conceptualizations, our hypothesized model constituted help-seeking history, environmental/hereditary causes, and social-personal causes as the predictors and help-seeking likelihood as the criterion variable. Using path analysis, we tested whether this hypothesized model could be applied in equal ways to the four groups and compared structural paths to evaluate the help-seeking process across cultures. We predicted that our model would be validated across cultures but that cultural differences would exist in the strengths of pathways from predictors to help-seeking likelihood, with pathways being stronger in European Americans than in Chinese Americans, Hong Kong Chinese, and Mainland Chinese.

Method

Participants

A total of 747 undergraduate students from the United States, Hong Kong, and Mainland China participated in the present study. Among them, there were 191 European Americans (87 males and 104 females) and 194 Chinese Americans (62 males and 132 females) from the University of California, 170 Hong Kong Chinese (72 males, 97 females, and 1 unspecified) from The Chinese University of Hong Kong, and 192 Mainland Chinese (96 males, 94 females, and 2 unspecified) from South China Normal University.

The mean age of the participants was 19.88 years (SD = 2.86) for European Americans, 19.34 years (SD = 1.52) for Chinese Americans, 19.66 years (SD = 1.15) for Hong Kong Chinese, and 19.57 years (SD = 1.38) for Mainland Chinese. Table 1 presents sample characteristics for these four cultural groups.

Procedure

Participants were invited to take part in this study on a voluntary basis. Instruments used in Hong Kong and Mainland China were

Table 1
Sample Characteristics

	Euro	European Americans		Chinese Americans			Hong	Hong Kong Chinese			Mainland Chinese		
Demographic	%	M	SD	%	M	SD	%	M	SD	%	M	SD	
				Е	ducation								
Freshmen	41.4			44.3			72.9			46.9			
Sophomores	25.1			27.8			18.8			20.3			
Juniors	20.9			15.5			6.5			31.8			
Seniors	7.3			11.3			1.8						
				Cour	try of birth								
U.S. born First generation	96.3			60.3									
Second generation	22.0			55.7									
Third generation	13.6			4.6									
Fourth generation	60.7												
Foreign-born	3.7			39.7									
Years of residence in United States		15.14	3.93		11.36	5.27							

Note. Hong Kong Chinese participants were born in Hong Kong. Mainland Chinese participants were born in Mainland China.

translated into Chinese and back-translated by independent, bilingual translators. Discrepancies between the two versions were rectified, and equivalence of meaning on all items was ensured through consultation. The questionnaire sets were administered in small groups in quiet classrooms. European Americans and Chinese Americans received the English version, whereas Hong Kong Chinese and Mainland Chinese received the Chinese version.

Measures

The following instruments were used in the present study.

Lay beliefs about mental illness. We used the 21 items in Luk and Bond's (1992) study to measure cultural beliefs about the causes of psychological problems. Participants were asked to make ratings on a 10-point scale ranging from 0 (not at all important) to 9 (extremely important). On the basis of the categorization by Luk and Bond (1992), we grouped the items into two factors: Environmental/hereditary causes consisted of 12 items (e.g., "There is something wrong with the person's brain or nervous system"); social-personal causes included 9 items (e.g., "The person lacks willpower"). The internal consistency of environmental/hereditary causes was .80, .77, .71, and .69, and that of social-personal causes was .73 .78, .72, and .55 for European Americans, Chinese Americans, Hong Kong Chinese, and Mainland Chinese, respectively. The alpha of social-personal causes for Mainland Chinese was low, suggesting that results for this variable should be interpreted with caution.

Help-seeking history and likelihood. As adopted from the Chinese American Psychiatric Epidemiologic Study (Kung, 2003; Takeuchi et al., 1998), four items were used to assess sources of help sought from mental health professionals. Participants were asked to rate from whom they would seek help for their psychological problems, including social workers or counselors, psychologists, psychiatrists, and university counseling centers. Because this article focuses on mental health professionals, we selected these four sources for analysis. Help-seeking history was measured by our asking participants whether they had ever turned to each

source for help, with 0 indicating *no* and 1 indicating *yes*. Help-seeking likelihood was rated on a 4-point scale ranging from 1 (*not at all likely*) to 4 (*highly likely*), with higher scores representing a greater likelihood of seeking help. The scores were summed and then averaged across the four items for help-seeking history and likelihood separately, with higher scores reflecting more help sought from professional services. The internal consistency of help-seeking likelihood was .80, .76, .83, and .75, for European Americans, Chinese Americans, Hong Kong Chinese, and Mainland Chinese, respectively.

Results

Descriptive statistics, including means and standard deviations of the measures, are presented in Table 2. Table 3 shows Pearson correlation coefficients among the measures. We first examined differences in help-seeking history and likelihood among the four groups. Then we used path analysis to test our hypothesized model and compare the strength of the pathways leading from help-seeking history, environmental/hereditary causes, and social-personal causes to help-seeking likelihood.

Help-Seeking Likelihood

We conducted an analysis of variance to examine differences in the magnitude of help-seeking likelihood. The analysis of variance showed significant differences across the four groups, F(3, 739) = 13.80, p < .001 (See Figure 1). Follow-up tests were conducted to evaluate pairwise differences among the means. Because the tests of homogeneity of variance were not significant (ps > .05), indicating that the variances of help-seeking likelihood were not significantly different across groups, we chose the Tukey test, a post hoc procedure that assumes homogenous variances.

As expected, the mean help-seeking likelihood for Hong Kong Chinese (M = 2.51, SD = 0.74) was significantly lower than that for Chinese Americans (M = 2.84, SD = 0.69) and European Americans (M = 2.99, SD = 0.73, ps < .05), partially confirming

Table 2
Means and Standard Deviations of the Measures For European Americans (EA), Chinese Americans (CA), Hong Kong Chinese (HC), and Mainland Chinese (MC)

		<i>M</i>				SD			
Measure	EA	CA	НС	MC	EA	CA	НС	MC	
Lay beliefs									
Environmental/hereditary causes	3.68	4.36	5.59	5.19	1.23	1.28	0.98	1.15	
Social-personal causes	2.86	3.29	3.84	4.10	1.30	1.47	1.25	1.17	
Help-seeking history	0.24	0.14	0.06	0.14	0.30	0.22	0.14	0.26	
Help-seeking likelihood	2.99	2.84	2.51	2.78	0.73	0.69	0.74	0.74	

the hypothesized gradation of increase from Hong Kong Chinese to Chinese Americans and European Americans. The difference between the latter two groups did not reach significance, but the trend was in the anticipated direction of increase. Intriguingly, Mainland Chinese ($M=2.78,\ SD=0.74$) scored significantly higher than Hong Kong Chinese (p<.05) but significantly lower than European Americans (p<.05) and not significantly different from Chinese Americans (p>.05). Overall, European and Chinese Americans were more likely to seek help than were Mainland and Hong Kong Chinese, whereas Chinese Americans were more likely to seek help than were Hong Kong Chinese, supporting the notion that exposure to Western influences contributed to help-seeking likelihood.

Help-Seeking History

As responses to each item assessing help-seeking history contained dichotomous answers, we computed the percentages of participants having sought help from each source in the past (see Table 4). Log-linear modeling was used to analyze these

categorical data, and then we examined cultural differences in each help-seeking source. We chose the Pearson chi-squared statistic, as it is a commonly used goodness-of-fit measure in log-linear modeling (e.g., Stevens, 2002). Significant differences emerged in all four sources across the cultural groups, suggesting a significant relationship between culture and help-seeking history, $\chi^2(4, N=747)=228.41, 466.58, 601.74$, and 542.86 for social workers and counselors, psychologists, psychiatrists, and university counseling centers, respectively (ps < .001).

Follow-up tests were conducted to evaluate pairwise differences among the proportions in the groups. The proportions of help-seeking for European Americans were significantly higher than were those for Chinese Americans and, in turn, significantly higher than were those for Hong Kong Chinese across all four sources (ps < .05), except that European Americans were marginally higher than Chinese Americans in seeking help from social workers and/or counselors (p = .59). Similar to help-seeking likelihood, pairwise comparisons confirmed a gradation of increase in

Table 3
Intercorrelations Among the Measures for the Four Cultural Groups

Measure	1	2	3	4
	Europe	an Americans		
1. Environmental/hereditary causes	_	.59**	.05	.18*
2. Social-personal causes		_	.09	.10
3. Help-seeking history			_	.30**
4. Help-seeking likelihood				_
	Chines	se Americans		
1. Environmental/hereditary causes	_	.62**	12	.08
2. Social-personal causes		_	.03	.03
3. Help-seeking history			_	.17*
4. Help-seeking likelihood				_
	Hong 1	Kong Chinese		
1. Environmental/hereditary causes	_	.49**	.14	.19*
2. Social-personal causes		_	03	03
3. Help-seeking history			_	.19*
4. Help-seeking likelihood				_
	Main	and Chinese		
1. Environmental/hereditary causes	_	.56**	17*	.14
2. Social-personal causes		_	05	.03
3. Help-seeking history			_	.01
4. Help-seeking likelihood				_

Note. For European Americans, n = 191; for Chinese Americans, n = 194; for Hong Kong Chinese, n = 170; and for Mainland Chinese, n = 192. * p < .05. ** p < .001.

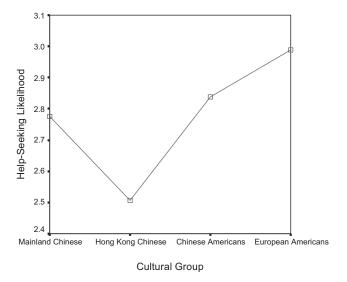


Figure 1. Mean help-seeking likelihood for the four cultural groups.

help-seeking history from Hong Kong Chinese to Chinese Americans and European Americans.

Again, Mainland Chinese displayed a different pattern across the four sources, inconsistent with our predictions. The proportions for Mainland Chinese were higher than were those for Hong Kong Chinese for help sought from psychologists, psychiatrists, and university counseling centers (ps < .05) but not for help sought from social workers and/or counselors (p > .05).

Model Testing

To test our hypothesized model, we conducted path analysis to predict help-seeking likelihood with help-seeking history, environmental/hereditary and social-personal causes as predictors. Environmental/hereditary and social-personal causes were allowed to covary. All model testing in this study was based on analysis of covariance structures with the EQS program (Bentler, 1995).

First, multigroup path analysis was used to test for equivalence of the model across cultural groups. We tested the baseline model across the four groups without any constraints. The baseline model yielded a good fit to the data: $\chi^2(4, N=747)=13.42$, comparative fit index (CFI) = .97, root-mean-square error of approximation (RMSEA) = .06 (see Figure 2), indicating that our hypothesized model was supported cross-culturally.

Second, in testing for equivalence across groups, sets of parameters were constrained to be equal. Then the model with added constraints was compared with the baseline model. If there was no significant difference between the two models, we could conclude that the groups were equivalent in the parameters of added equality constraints. Otherwise, the groups would not be regarded as equivalent when the constrained model was significantly different from the nonconstrained model. We constrained all the paths to be equal across the four groups, $\chi^2(16, N = 747) = 33.93$, CFI = .95, RMSEA = .04. The chi-square difference test was conducted, and it indicated that the constrained model was not significantly different from the baseline model, $\Delta\chi^2(12, N = 747) = 20.51$, p > .05, suggesting that the hypothesized model was equivalent across the four groups.

Third, in predicting help-seeking likelihood, we used a chi-square difference test to compare the strength of each path from the independent variable to the dependent variable across groups. Help-seeking history was a significant contributor. Its path coefficient was .29 for European Americans, not significantly different from those for Chinese Americans (.17), $\Delta \chi^2(1, N = 385) = 0.50$, p > .05, and Hong Kong Chinese (.15), $\Delta \chi^2(1, N = 361) = 0.03$, p > .05. The difference between the latter two paths did not reach significance, $\Delta \chi^2(1, N = 361) = 0.34$, p > .05, but it was in the expected direction. The path for Mainland Chinese (.02) was lower than were those for the other three groups; European Americans were significantly stronger, $\Delta \chi^2(1, N = 383) = 5.58$, p < .05, whereas Chinese Americans and Hong Kong Chinese were not significantly stronger, $\Delta \chi^2(1, N = 364) = 2.08$ and 2.91, ps > .05. Overall, the trend was in the expected gradation for all four groups.

The path coefficients from environmental/hereditary causes to help-seeking likelihood were not significantly different among European Americans (.19), Hong Kong Chinese (.25), and Mainland Chinese (.17; ps > .05) and were significantly stronger than was that for Chinese Americans (.10), $\Delta\chi^2(1, N = 386) = 7.32$, p < .05, whereas the pathway from social–personal causes to help-seeking likelihood did not differ by group (ps > .05). Environmental/hereditary causes were positively related to help-seeking likelihood and social–personal causes were negatively related to help-seeking likelihood, which were consistent with our predictions.

Environmental/hereditary and social-personal causes were significantly correlated, ranging from Chinese Americans (.62) and European Americans (.59) to Mainland Chinese (.56) and Hong Kong Chinese (.49). The linkages were not significantly different from their adjacent ones (ps > .05), but the coefficient for Main-

Table 4
Percentages of Participants Seeking Help From Each Source Within Cultures

Help-seeking source	Total sample	European Americans	Chinese Americans	Hong Kong Chinese	Mainland Chinese	Goodness of fit χ^2	p
Social worker or counselor	23.9	31.4	28.9	16.5	17.7	228.41	.000
Psychologist	14.2	27.2	9.3	3.6	15.6	466.58	.000
Psychiatrist	9.0	18.4	5.7	2.4	8.9	601.74	.000
University counseling center	11.0	17.4	13.4	1.2	11.0	542.86	.000

Note. N = 747. For European Americans, n = 191; for Chinese Americans, n = 194, for Hong Kong Chinese, n = 170; and for Mainland Chinese, n = 192.

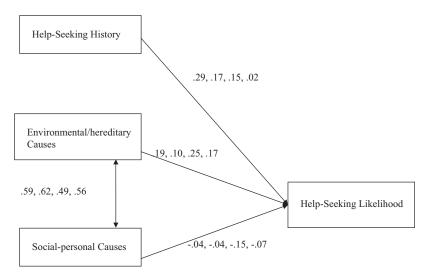


Figure 2. The path model for seeking help from mental health professionals. Standardized path coefficients are shown for European Americans, Chinese Americans, Hong Kong Chinese, and Mainland Chinese, respectively.

land Chinese was different from that for European Americans, $\Delta\chi^2(1, N=383)=4.58, p<.05$, and the coefficient for Hong Kong Chinese was different from those for European Americans and Chinese Americans, $\Delta\chi^2(1, N=385)=3.88$ and 9.56, ps<.05.

Discussion

In the present study, we sampled four cultural groups with a gradation of Westernization and examined group differences in seeking help from mental health professionals. European Americans and Chinese Americans scored significantly higher in both help-seeking history and likelihood than did Hong Kong Chinese. Our results confirmed that the hypothesized patterns of helpseeking increased from Hong Kong Chinese to Chinese Americans and European Americans. Though Mainland Chinese did not score lower than Hong Kong Chinese as predicted, their patterns were in the expected direction, being lower than Chinese Americans and European Americans in help-seeking history and likelihood. This trend supported our conceptualization of greater willingness to seek help being associated with Western influences. Individuals exposed to and influenced by Western norms and practices held more positive attitudes toward seeking professional help and actually used more mental health services. These findings demonstrate the importance of cultural beliefs about the etiology of mental health problems in shaping help-seeking attitudes and behaviors.

The Role of Culture

In the traditional Chinese perspective, emotions are regarded as pathogenic factors disturbing normal functioning of the body, thus discouraging the expression of emotional extremes (Bond, 1993; Veith, 1972). Chen, Cheung, Bond, and Leung (2005) found that ambivalence over emotional expression (i.e., conflict over expressing one's emotions) was predicted by some Chinese personality constructs such as face. Because individuals who are concerned

about face loss care about their public image and are very conscious about how others view them, they may inhibit the expression of feelings of distress to avoid losing face. This view makes it less likely for Chinese to take the initiative in discussing personal problems with counselors and expressing emotions in the counseling session (Mak & Chen, 2006).

Likewise, Asian Americans who endorse more traditional Asian values have less favorable attitudes toward seeking professional help and are less willing to see a counselor (B. S. K. Kim & Omizo, 2003). Their cultural conceptions of how best to manage mental health problems are at odds with Western psychotherapy, which emphasizes expressing emotions and discussing problems openly (Lau & Takeuchi, 2001). Conversely, acculturation has been found to link with favorable attitudes toward psychological treatments among Asian Americans (Atkinson & Gim, 1989; Tata & Leong, 1994; Zhang & Dixon, 2003). Mallinckrodt and colleagues (2005) found that higher acculturation was associated with a greater level of match between Asian Americans' etiology beliefs and those of their counselors. Although the present study did not measure acculturation directly, our findings generally support the inference that the likelihood of seeking professional help increases with Western cultural influences.

In accounting for culture in the understanding of professional help-seeking, not only can Western modes of helping be tested, culturally sensitive approaches and interventions can also be designed with an empirical basis. Cross-cultural study of help-seeking enables researchers to identify psychological factors that are shared or distinctive in the process of help-seeking among cultural groups. With the increasing diversity of the American population and the internationalization of counseling psychology, cross-cultural knowledge and application, such as examining cultural beliefs held by lay people to explain certain events and social behaviors, are becoming increasingly important. It is suggested that lay beliefs about the causes of psychological and social problems provide implications for guiding behaviors (e.g., Furnham & Henley, 1988; Henley & Furnham, 1988).

Understanding how people attribute mental health problems may illuminate whether and where they solicit professional care. Moreover, beliefs of the general public about mental illness may reflect societal attitudes and behaviors toward individuals with those illnesses, and these attitudes and behaviors in turn facilitate or inhibit help-seeking likelihood. Cultural beliefs about the etiology of mental illness have been found to predict lay concepts of mental disorders, and perceived causes of psychological symptoms impact every stage of the treatment process, from the initiation of seeking professional help to the adherence with clinical management (N. S. Kim & Ahn, 2002; Sensky, 1990, 1997; Sensky & Catalan, 1992).

Cultural Diversity

Compared with Mainland and Hong Kong Chinese, Chinese Americans may espouse more Western values due to constant negotiation between American culture and Chinese culture in their daily lives. As to Mainland Chinese and Hong Kong Chinese, although Mainland China and Hong Kong are categorized as collectivistic cultures (Hofstede, 1980), each region has its unique political systems and socioeconomic environments. Owing to Hong Kong's colonial history and its function as an economic and geographic bridge between China and Western countries, people in Hong Kong are believed to socialize with Western norms and to adopt a Western lifestyle more than do their Mainland counterparts. Thus, it is intriguing to find Mainland Chinese scored higher in help-seeking likelihood and resorted more to psychologists and psychiatrists in the past.

A plausible explanation lies in the composition of helping professionals in Mainland China. In the Chinese educational system, three sources provide help to college students: administrators who carry out political-and-thought education in the role of political instructors, graduate students from psychology programs, and medical doctors working in college and university clinics. University counseling centers are directed by the department of student affairs (Hou & Zhang, 2007). Chinese students may seek guidance from these sources for an array of issues, such as academic, family, and relationship issues, including mental health problems. The involvement of administrative staff may broaden the base of helping sources. Consulting with them might be included in the help-seeking rates as well, thus resulting in higher help-seeking rates than among other cultural groups.

The practice of the medical model of counseling might blur the distinctions of mental health professionals in Mainland China. As counseling psychology in China is heavily influenced by medical science, most professionals who practice counseling and psychotherapy are medical doctors who work in the hospitals, thus being identified as psychological doctors (Zhang, Li, & Yuan, 2001). Chinese regard doctors who treat mental health problems in hospitals as therapists and regard professionals in university counseling centers as psychologists (Hou & Zhang, 2007), which might explain the higher percentage of psychologists and psychiatrists as sources for help among Mainland Chinese. Nevertheless, these interpretations are post hoc, tentative, and contingent on future replications with these and other groups in similar cultural contexts.

Implications for Practice

Though the hypothesized model could be supported across the four cultural groups, the relationships among perceived causes and help-seeking were stronger in European Americans than in the Chinese groups. The variations in the strength of pathways suggest that lay beliefs might exert a different impact on determining one's help-seeking across cultures. Thus, strategies to enhance help-seeking need to be grounded in specific cultural contexts to maximize cultural sensitivity and effectiveness in promoting help-seeking for mental health professionals.

Integration of mental health services with primary care is one of the possible ways to break the resistance of individuals seeking specialty care. Individuals can access mental health care without having to explicitly seek mental health services. This service arrangement can possibly reduce the stigma attached to mental illness by people regarding mental health issues as part of their overall health concerns. Effectiveness of such integrated services has been noted in Chinese American communities in New York and Boston (Fang & Chen, 2004; Yeung et al., 2004). Such integration can also be experimented on and tested in university health centers in the United States as well as in Chinese regions.

Besides integrating with health services, mental health services can also be incorporated into academic advising, programs for international students in universities, and programs for social services in the communities (Constantine, Chen, & Ceesay, 1997). Certainly, such integration would require training of frontline staff and professionals on mental health issues for proper referrals and interventions. Thus, rather than resorting to the traditional counseling models, innovative and culturally sensitive approaches must be implemented to maximize the effectiveness of service provision to the underserved populations.

In addition to possible rearrangement of services, counselors and therapists also need to raise their awareness of clients' beliefs about mental illness and be sensitive to making culturally appropriate adjustments in the counseling session. The results of our path analysis indicate that help-seeking likelihood was positively related to perceiving mental health problems as arising from environmental/hereditary causes but negatively related to socialpersonal causes, though the magnitude of path coefficients was small. In fact, Luk and Bond's (1992) study found that environmental/hereditary causes were perceived as more important in producing psychological or behavioral disturbances than were social-personal causes. Environmental/hereditary causes are usually taken as not within one's responsibility and thus involve less psychological cost that threatens self-worth. Counselors should attend to such concerns in the communication of presenting problems, coping methods, and treatment goal expectations and should avoid attributing the causes to clients' personal failures, which is particularly important in treatment retention and outcomes.

Given the importance of lay beliefs in affecting help-seeking, educating the general public about causes of mental illness and correcting their misconceptions may be important in promoting professional services. Moreover, as the present findings showed differences among Chinese subgroups in their lay beliefs about mental illness and help-seeking likelihood, mental health professionals should be sensitive to within-group heterogeneity. With increasing cultural knowledge and cultural competence, counselors and therapists can design treatment plans and adapt their counsel-

ing styles accordingly to accommodate the special needs of culturally diverse groups.

As counseling psychology develops beyond the framework of multiculturalism toward an emerging interest in internationalization, researchers need to incorporate an international perspective in counseling psychology and need to embed their models in multicultural contexts (Leong & Leach, 2007; Pedersen & Leong, 1997). We hope that the present work raises this awareness empirically. Understanding the nature, significance, and impact of help-seeking patterns is only the first step to combating mental health problems. How to build on these findings and to implement effective interventions are further challenges to researchers and practitioners.

References

- Abe-Kim, J., Takeuchi, D. T., Hong, S., Zane, N., Sue, S., Spencer, M. S., et al. (2007). Use of mental health-related services among immigrant and U.S.-born Asian Americans: Results from the National Latino and Asian American Study. *American Journal of Public Health*, 97, 91–98.
- Alonso, J., Angermeyer, M. C., Bernert, S., Bruffaerts, R., Brugha, T. S., Bryson, H., et al. (2004). Use of mental health services in Europe: Results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. *Acta Psychiatrica Scandinavica*, 109(Suppl. 420), 47–54.
- Atkinson, D. R., & Gim, R. H. (1989). Asian-American cultural identity and attitudes toward mental health services. *Journal of Counseling Psychology*, 36, 209–212.
- Atkinson, D. R., Worthington, R. L., Dana, D. M., & Good, G. E. (1991). Etiology beliefs, preferences for counseling orientations, and counseling effectiveness. *Journal of Counseling Psychology*, 38, 258–264.
- Bentler, P. M. (1995). *EQS: Structural equations program manual.* Encino, CA: Multivariate Software.
- Boey, K. W. (1999). Help-seeking preference of college students in urban China after the implementation of the "open-door" policy. *International Journal of Social Psychiatry*, 45, 104–116.
- Boey, K. W., Mei, J., Sui, Y., & Zeng, J. (1998). Help-seeking tendency of undergraduate students. *Chinese Journal of Clinical Psychology*, 6, 210–215.
- Bond, M. H. (1993). Emotions and their expression in Chinese culture. *Journal of Nonverbal Behavior*, 17, 245–262.
- Chang, D. F., Tong, H., Shi, Q., & Zeng, Q. (2005). Letting a hundred flowers bloom: Counseling and psychotherapy in the People's Republic of China. *Journal of Mental Health Counseling*, 27, 104–116.
- Chen, S. X., Cheung, F. M., Bond, M. H., & Leung, J. P. (2005). Decomposing the construct of ambivalence over emotional expression in a Chinese cultural context. *European Journal of Personality*, 19, 185– 204
- Chiu, M. Y. L. (2004). Why Chinese women do not seek help: A cultural perspective on the psychology of women. *Counseling Psychology Quar*terly, 17, 155–166.
- Constantine, M. G., Chen, E. C., & Cessay, P. (1997). Intake concerns of racial and ethnic minority students at a university counseling center: Implications for developmental programming and outreach. *Journal of Multicultural Counseling & Development*, 25, 210–218.
- Dadfar, S., & Friedlander, M. L. (1982). Differential attitudes of international students toward seeking professional psychological help. *Journal of Counseling Psychology*, 29, 335–338.
- Deane, F. P., & Todd, D. M. (1996). Attitudes and intentions to seek professional psychological help for personal problems or suicidal thinking. *Journal of College Student Psychotherapy*, 10, 45–59.
- Fang, L., & Chen, T. (2004). Community outreach and education to deal with cultural resistance to mental health services. In N. B. Webb (Ed.),

- Mass trauma and violence: Helping families and children cope (pp. 234–255). New York: Guilford Press.
- Friedman, M. J., & West, A. N. (1987). Current need versus treatment history as predictors of use of outpatient psychiatric care. American Journal of Psychiatry, 144, 355–357.
- Furnham, A., & Henley, S. (1988). Lay beliefs about overcoming psychological problems. *Journal of Social and Clinical Psychology*, 6, 423–438.
- Halgin, R. P., Weaver, D. d., Edell, W. S., & Spencer, P. G. (1987).Relation of depression and help-seeking history to attitudes toward seeking professional psychological help. *Journal of Counseling Psychology*, 34, 177–185.
- Henley, S., & Furnham, A. (1988). The attribution of cure: Lay beliefs about overcoming problems. *British Journal of Clinical Psychology*, 27, 384–386.
- Hofstede, G. (1980). Culture's consequences: International differences in work-related values. Beverly Hills, CA: Sage.
- Hou, Z. J., & Zhang, N. (2007). Counseling psychology in China. Applied Psychology: An International Review, 56, 33–50.
- Iselin, M.-G., & Addis, M. E. (2003). Effects of etiology on perceived helpfulness of treatments for depression. Cognitive Therapy and Research, 27, 205–222.
- Jiang, G.-R, & Wang, M. (2003). A study on help-seeking propensity of Chinese undergraduates. Chinese Journal of Clinical Psychology, 11, 180–184
- Kelly, A. E., & Achter, J. A. (1995). Self-concealment and attitudes toward counseling in university students. *Journal of Counseling Psychology*, 42, 40–46
- Kessler, R. C., Berglund, P. A., Zhao, S., Leaf, P. J., Kouzis, A. C., Bruce,
 M. L., et al. (1996). The 12-month prevalence and correlates of serious mental illness. In R. W. Manderscheid, & M. A. Sonnernschein (Eds.),
 Mental health, United States, 1996 (DHHS Publication No. SMA 96–3098, pp. 59–70). Washington, DC: U.S. Government Printing Office.
- 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.
- Kim, N. S., & Ahn, W. K. (2002). The influence of naïve causal theories on lay concepts of mental illness. *American Journal of Psychology*, 115, 23, 65
- Kung, W. W. (2003). Chinese American's help seeking for emotional distress. Social Service Review, 77, 111–133.
- Lau, A., & Takeuchi, D. (2001). Cultural factors in help-seeking for child behavior problems: Value orientation, affective responding, and severity appraisals among Chinese American parents. *Journal of Community Psychology*, 29, 675–692.
- Leong, F. T. L. (1994). Asian Americans' differential patterns of utilization of inpatient and outpatient public mental health services in Hawaii. *Journal of Community Psychology*, 22, 82–96.
- Leong, F. T. L., & Leach, M. M. (2007). Internationalising counseling psychology in the United States: A SWOT analysis. Applied Psychology: An International Review, 56, 165–181.
- Lin, Y. N. (2002). Taiwanese university students' perspectives on helping. Counseling Psychology Quarterly, 15, 47–58.
- Luk, C.-L., & Bond, M. H. (1992). Chinese lay beliefs about the causes and cures of psychological problems. *Journal of Social and Clinical Psychology*, 11, 140–157.
- Mak, W. W. S., & Chen, S. X. (2006). Face concern: Its role on stressdistress relationships among Chinese Americans. *Personality and Indi*vidual Differences, 41, 143–153.
- Mak, W. W. S., Chen, S. X., Wong, E. C., & Zane, N. W. S. (2005). A psychosocial model of stress-distress relationship among Chinese Americans. *Journal of Social and Clinical Psychology*, 24, 422–444.
- Mallinckrodt, B., Shigeoka, S., & Suzuki, L. A. (2005). Asian and Pacific Island American students' acculturation and etiology beliefs about typ-

ical counseling presenting problems. Cultural Diversity and Ethnic Minority Psychology, 11, 227–238.

- Matsuoka, J. K., Breaux, C., & Ryujin, D. H. (1997). National utilization of mental health services by Asian Americans/Pacific Islanders. *Journal* of Community Psychology, 25, 141–145.
- Mechanic, D. (1980). Mental health and social policy. Prentice Hall, Englewood Cliffs, New Jersey.
- Ow, R., & Katz, D. (1999). Family secrets and the disclosure of distressful information in Chinese families. *Families in Society*, 80, 620–628.
- Pearson, V. (1993). Families in China: An undervalued resource for mental health. *Journal of Family Therapy*, 15, 163–185.
- Pedersen, P., & Leong, F. T. L. (1997). Counseling in an international context. The Counseling Psychologist, 25, 117–121.
- Quah, S. H., & Bishop, G. D. (1996). Seeking help for illness: The roles of cultural orientation and illness cognition. *Journal of Health Psychology*, 1, 209–222.
- Regier, D. A., Narrow, W. E., Rae, D. S., Manderscheid, R. W., Locke, B. Z., & Goodwin, F. K. (1993). The de facto US mental and addictive disorders service system. Epidemiologic Catchment Area prospective 1-year prevalence rates of disorders and services. Archives of General Psychiatry, 50, 85–94.
- Rudowicz, E., & Au, E. (2001). Help-seeking experiences of Hong Kong social work students. *International Social Work*, 44, 75–91.
- Savickas, M. L. (2007). Internationalisation of counseling psychology: Constructing cross-national consensus and collaboration. Applied Psychology: An International Review, 56, 182–188.
- Sensky, T. (1990). Patients' reactions to illness: Cognitive factors determine responses and are amenable to treatment. *British Medical Journal*, 300, 622–623.
- Sensky, T. (1997). Causal attributions of physical illness. *Journal of Psychosomatic Research*, 43, 565–573.
- Sensky, T., & Catalan, J. (1992). Asking patients about their treatment: Why their answers should not always be taken at face value. *British Medical Journal*, 305, 1109–1110.
- Snowden, L. R., & Cheung, F. H. (1990). Use of inpatient mental health services by members of ethnic minority groups. *American Psychologist*, 45, 347–355.
- Stevens, J. P. (2002). Applied multivariate statistics for the social sciences (4th ed.). Mahwah, NJ: Erlbaum.
- Sue, S. (1999). Asian American mental health: What we know and what we don't know. In D. L. Dinnel & W. J. Lonner et al. (Eds.), Merging past, present, and future in cross-cultural psychology: Selected papers from the Fourteenth International Congress of the International Association

- for Cross-Cultural Psychology (pp. 82–89). Lisse, the Netherlands: Swets & Zeitlinger.
- Sue, S., Zane, N., & Young, K. (1994). Research on psychotherapy with culturally diverse populations. In S. L. Garfield & A. E. Bergin (Eds.), *Handbook of psychotherapy and behavior change* (4th ed., pp. 783– 817). Oxford, England: John Wiley & Sons.
- Takeuchi, D. T., Chung, R. C., Lin, K. M., Shen, H., Kurasaki, K., Chun, C. A., et al. (1998). Life-time and twelve-month prevalence rates of major depressive episodes and dysthymia among Chinese Americans in Los Angeles. *American Journal of Psychiatry*, 155, 1407–1414.
- Tata, S. P., & Leong, F. T. L. (1994). Individualism-collectivism, social-network orientation, and acculturation as predictors of attitudes toward seeking professional psychological help among Chinese Americans. *Journal of Counseling Psychology*, 41, 280–287.
- Tracey, T. J., Leong, F. T. L., & Glidden, C. (1986). Help seeking and problem perception among Asian Americans. *Journal of Counseling Psychology*, 33, 331–336.
- U.S. Department of Health and Human Services. (1999). 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, National Institutes of Health, National Institute of Mental Health.
- Veith, I. (1972). Huang Ti Nei Ching Su Wen [The yellow emperor's classic of internal medicine]. Berkeley, CA: University of California Press.
- Worthington, R. L., & Atkinson, D. R. (1996). Effects of perceived etiology attribution similarity on client ratings of counselor credibility. *Journal of Counseling Psychology*, 43, 423–429.
- Yeung, A., Kung, W. W., Chung, H., Rubenstein, G., Roffi, P., Mischoulon, D., & Fava, M. (2004). Integrating psychiatry and primary care improves acceptability to mental health services among Chinese Americans. General Hospital Psychiatry, 26, 256–260.
- Ying, Y., & Hu, L. (1994). Public outpatient mental health services: Use and outcome among Asian Americans. American Journal of Orthopsychiatry, 64, 448–455.
- Zhang, N., & Dixon, D. N. (2003). Acculturation and attitudes of Asian international students toward seeking psychological help. *Journal of Multicultural Counseling and Development*, 31, 3, 205–222.
- Zhang, N., Li, J., & Yuan, Y. G. (2001). Investigation of counseling in China. *Journal of Health Psychology*, 9, 389–391.

Received March 2, 2007
Revision received May 7, 2008
Accepted May 11, 2008