

Is It Cultural Context or Cultural Value?

Unpackaging Cultural Influences on Stigma toward Mental Illness and Barrier to Help-Seeking

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Abstract

There have been growing interests in sampling underrepresented populations to test whether psychological processes are universal. The present cross-sectional study examined cultural influences on stigma toward mental illness and perceived barrier to help-seeking among Hong Kong Chinese, Chinese Americans, and European Americans ($N = 555$ university students). Significant cultural differences were found in the mean levels, with the two Chinese groups reporting higher levels of stigma toward mental illness and perceived barrier to help-seeking than European Americans, and these cultural differences were accounted for by face concern. In addition, the strengths of paths from face concern to stigma toward mental illness and perceived barrier to help-seeking were equivalent across the three cultural groups. These findings tease apart the source of cultural influences and underscore the importance of comparing cultural differences both at the mean level and at the structural level, but more importantly, to unpackage the observed differences by testing the mediating role of cultural values.

Keywords: culture, face concern, stigma, help-seeking barrier, unpackaging

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The sampling of people from Western, Educated, Industrialized, Rich, and Democratic (WEIRD) societies prevails in the majority of psychological studies, even in cognitive, social, personality, and clinical research (Henrich, Heine, & Norenzayan, 2010). It raises questions about the generalizability of findings and calls for testing psychological phenomena in underrepresented populations. However, merely examining research questions in non-WEIRD cultures and identifying cultural differences are not sufficient to understand cultural influences. It is unclear which cultural dynamics sustain the psychological process under study, as cultural influences conflate a set of cultural meanings, cultural practices, and cultural experiences (Heine, 2016). For instance, a growing body of research investigating how culture influences mental health, such as manifestations of symptoms, perceptions of mental illness, stigma and shame around mental illness, and help-seeking attitudes and behaviors, has documented cultural diversity within multiethnic/multiracial societies and cultural differences between various nations (e.g., Fabrega, 1989; Yen, Robins, & Lin, 2000; Sue, 1999).

Though previous studies have identified cultural factors contributing to help-seeking propensities (e.g., Atkinson & Gim, 1989; Leong, 1986), are cultural influences manifested in the mean levels of these variables or the relations between them? The present research attempts to unpackage cultural influences on stigma and help-seeking by examining two culturally different groups, Hong Kong Chinese and European Americans, and an intermediate group, Chinese Americans, who may espouse both Chinese and American values. Leung and Cohen (2011) categorized cultures in which prevailing values prioritize dignity, honor, or face. European Americans belong to dignity culture that emphasizes an egalitarian

system, a sense of worth, and individual autonomy, whereas Hong Kong Chinese belong to face culture that values hierarchy, humility, and harmony. Dignity versus face cultures parallel individualistic versus collectivistic cultures (Smith, Easterbrook, Celikkol, Chen, Hu, & Rizwan, 2016), and would differ in perceived barrier to help-seeking, stigma toward mental illness, and face concern.

Perceived Barrier to Help-Seeking

This study serves as an important starting point to disentangle the cultural factors that may hinder seeking help for mental health problems. Researchers have been investigating help seeking as an aspect of illness behavior, which includes the way individuals experience, interpret, and cope with a disease (Mak & Chen, 2010). People from different cultures vary in their views about mental illness, the manifestations of psychological distress, and the treatment options that they solicit (Mechanic, 1986). Attitudes of the population toward help seeking affect both the utilization and success of mental health services (e.g., Grenavage & Norcross, 1990; Stiles, Shapiro & Elljot, 1986).

Accordingly, an increasing interest has emerged in the field to identify barriers to seeking help for mental health issues (e.g., Chen & Mak, 2008). Past research has examined possible explanations for reluctance to solicit help (e.g., Issakidis & Andrews, 2002; Thompson, Hunt, & Issakidis, 2004). Some barriers involve more subjective attitudes toward and beliefs about mental illness and its treatment, whereas other barriers involve logistical reasons such as lack of time, financial concerns, and unavailability of treatment opportunities. Other than practical barriers, such as cost of treatment, time, knowledge of access, and language, cultural barriers also inhibit Chinese and Chinese Americans from seeking mental health treatment, such as credibility of treatment, recognition of need, and fear of loss of face (Kung, 2004).

Stigma toward Mental Illness

Stigma has complex and multi-leveled effects on mental health conditions. On one level, stigma affects individual perceptions and comprehension of people with these conditions. At the same time, it influences the sociocultural structures in which people with mental health problems may live and seek care for their problems. Public stigma represents a set of prejudicial attitudes, discriminatory behaviors, and biased social structures that result when a sizeable group endorses a stigma about a sub-group (Corrigan & Watson, 2002). Stigma toward mental illness is related to perceived barrier toward seeking counseling, as individuals internalize stigmatization by others and view seeking treatment as less socially acceptable (Vogel et al., 2003; Vogel, Wade, & Aschman, 2009; Vogel, Wade, & Hackler, 2007). They anticipate high risks but low benefits, and thus tend to conceal personal information and distressing emotions, contributing to negative attitudes toward seeking help for psychological and interpersonal concerns (Vogel, Wade, & Haake, 2006).

The impact of stigma toward mental illness is particularly profound in Asian communities, such as Asian Americans, who tend to delay treatment and use fewer mental health services (U.S. Department of Health and Human Services, 2001; Mak & Chen, 2010; Zhang, Snowden, & Sue, 1998). Lin, Inui, Kleinman and Womack (1982) revealed that help-seeking process was associated strongly with ethnicity, with Asians reporting the longest delay before professional treatment whereas European Americans reporting the shortest delay. In addition to stigma toward receiving psychological help, Asian Americans' adherence to Asian values restrains them from expressing strong emotions and makes them afraid of embarrassment and shame in public (Shea & Yeh, 2008).

In Chinese communities, studies pointed to the public concern for safety and fear of display of deviance by individuals suffering from severe mental illness (e.g., Cheung, 1988). Rather than emotional difficulties and personal problems, Chinese Americans tend to express somatic distress to consult with physicians or solicit informal help (Kung, 2003; Kung & Lu,

2008). Chinese emphasize somatic complaints more than cognitive-affective complaints, and prefer to utilize social relationships, mostly friends and family members, instead of professional assistance, while coping with stress (Chang, 2007a, 2007b, 2008). Specific cultural values espoused by different cultural groups need to be examined to account for the cultural differences in stigma toward mental illness and perceived barrier to help-seeking.

Face Concern

Among the cultural values that are prevailing in Chinese societies, face concern is an influential concept affecting the help-seeking process. Face refers to social value given by others if a person performs his or her specific roles and lives up to the standards associated with the roles (Ho, 1976). It represents maintaining one's image in public and protecting one's reputation in the society (e.g., Ho, 1991; Hu, 1994; Ting-Toomey, 1994). With an emphasis on harmonious interpersonal relationships, Chinese people concern about their attitudes and behaviors presented to others and care about their social status and prestige recognized by others (Zane & Yeh, 2002). In Chinese culture, a person's worth is in the eyes of others, whereas in European American culture, self-worth is internal and inalienable (Leung & Cohen, 2011). As a result, Chinese may restrain any behaviors that put them at risk for revealing their mental health problems to avoid face loss and disruptions of social order. High levels of face concern are psychologically taxing and may bring high levels of distress (Mak & Chen, 2006). Across Eastern and Western cultures, face concern was found to be positively related to distress above and beyond the effects of age, gender, and ethnicity (Mak, Chen, Lam, & Yiu, 2009).

As pointed out by Yamashiro and Masuoka (1997), saving face becomes “psychological disturbances either are hidden or ignored or attributed to a source associated with a less severe social stigma” (p. 8). Face has social and moral aspects (Hwang, 2006). Concern for face loss and fear of moral contamination may lead to perceptions of threatening

the extension of one's family lineage, with severe social consequences (Yang & Kleinman, 2008; Yang et al., 2013). Indeed, both face and stigma were found to be related to psychological symptoms and negative attitudes toward seeking mental health services among Macau and Mainland Chinese students (Cheang & Davis, 2014). We propose that concern for loss of face is the mechanism underlying stigma toward mental illness that may bar individuals from seeking help from mental health professionals to prevent shaming one's family, as mental illness is severely stigmatized in Chinese communities.

The Present Study

Van de Vijver and Leung (1997) classified cross-cultural research by *level orientation* that examines similarities and differences in the magnitude of variables across cultures and *structure orientation* that emphasizes the relationships among variables, especially comparing the strengths of these relationships. Nevertheless, mere comparisons of cultural differences do not inform us about the source of differences, as culture comes as a "package" comprising many variables that may account for the observed differences (Singelis, Bond, Sharkey, & Lai, 1999). It is important to "unpackage" cultural influences by testing the role of cultural values in mediating the effect of cultural group on the variables under study (Heine, 2016). Statistically, the unpackaging process should demonstrate that the underlying cultural value variable can significantly mediate the relation between the independent variable of cultural group membership and the dependent variable of observed cultural differences.

The present research aims to examine cultural influences in the help-seeking process among Hong Kong Chinese, Chinese Americans, and European Americans. The objectives of this study are threefold: a) to compare the strengths of paths from face concern to stigma toward mental illness and perceived barrier to help-seeking across cultures (structure-oriented analyses); b) to compare cultural differences in perceived barrier to help-seeking, stigma toward mental illness, and face concern (level-oriented analyses); and c) to test the mediating

role of face concern in the effects of cultural group on stigma toward mental illness and perceived barrier to help-seeking (“unpacking” cultural influences).

Based on the above conceptualizations, we hypothesize that face concern will be positively related to stigma toward mental illness and perceived barrier to help-seeking. As there are limited studies suggesting whether these relations are universal or culturally specific, we will explore the strengths of these relations across the three cultural groups. In addition, we hypothesize that Chinese will report higher levels of stigma toward mental illness and perceived barrier to help-seeking than European Americans, and that face concern is the underlying mechanism that will account for cultural differences in stigma toward mental illness and perceived barrier to help-seeking.

Method

Participants and Procedure

We attempted to recruit approximately 200 participants from each cultural group based on the feasibility. Sample size varied in each group given the accessibility of participants during data collection. A total of 555 university students from Hong Kong and the United States participated in the present study, including 170 Hong Kong Chinese (97 females; $M_{age} = 19.57$, $SD = 1.38$), 194 Chinese Americans (132 females; $M_{age} = 19.34$, $SD = 1.52$), and 191 European Americans (104 females; $M_{age} = 19.88$, $SD = 2.86$). In the Chinese American sample, 116 of them were born in the United States, while 77 of them were foreign-born Chinese Americans who had lived in the U.S. for 11.36 years on average ($SD = 5.27$). In the European American sample, all were born in the U.S. except seven participants who were then dropped from the analyses.

Participants completed the measures on a voluntary basis, with the Chinese version administered in Hong Kong and English version in the US. Standard procedures of translation and back-translation (Brislin, 1970) were used to derive the Chinese version. Participants

reported demographic information, such as age and gender, at the end of the questionnaire. To encourage honest responding, it was emphasized that all responses were completely anonymous, and there were no right or wrong answers to any of the questions. This study is part of a large project on stigma and help-seeking¹; all the measures for the present research question are described below. All the studies examining the present research question are reported in this paper.

Measures

Perceived barrier to help-seeking. Seven items were designed by the Chinese American Psychiatric Epidemiologic Study to measure perceived barriers to seeking help for problems with emotions, nerves, or mental health (Kung, 2004). Participants rated the extent to which each statement applied to them on a 4-point scale ranging from 1 (*not at all true*) to 4 (*very true*). Items include perceived barriers regarding helpfulness of treatment, concern about others, cost of treatment, and access to treatment (e.g., “Treatment for mental problems does not help”). The original study reported an alpha of .67 in a community sample of Chinese Americans, and that perceived barriers significantly predicted mental health service use in the sample (Kung, 2004). Similar items have been adopted and validated in subsequent studies to assess perceived barriers to mental health treatment. The modest reliabilities of this scale were probably due to variation in the types of perceived barriers.

Stigma toward mental illness. The Attribution Questionnaire (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003), which was designed to measure stigmatizing attitudes toward schizophrenia, were adapted to assess stigma attached to individuals with a mental disorder (e.g., “I would think that it were the person’s own fault that he is in the present condition”). The original measure consists of 21 items that tap six factors, namely, personal responsibility, pity, anger, fear, helping/avoidance, and coercion/segregation. The six-factor

¹ The project was not pre-registered.

structure was examined and confirmed in a sample of college students and each factor showed adequate reliability (ranging from .70 to .96; Corrigan et al., 2003). We added six items² to better assess this construct across cultures (27 items in total). Participants were asked to rate each item on a 9-point Likert scale ranging from 1 (*completely disagree*) to 9 (*completely agree*). Factor analysis of this measure in the current study was reported in the next section.

Face concern. The 21-item Loss of Face Scale (Zane & Yeh, 2002) was used to assess concern about violating social norms or expectations and incurring a loss of face to the self and others (e.g., “I maintain a low profile because I do not want to make mistakes in front of other people”). Participants rated each item on a 7-point scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The scale showed adequate internal consistency ($\alpha = .83$) in a sample of Caucasian American and Asian American students, and ethnic differences in face concern were revealed using the measure (Zane & Yeh, 2002).

Results

Descriptive statistics including means, standard deviations, and reliability coefficients of the measures are presented in Table 1. Bivariate correlations among the major variables are summarized in Table 2.

² These additional items are “I would feel unsafe around this person,” “This person would terrify me,” “If I were in charge of this person’s treatment, I would require this person to take his/her medication,” “I would be willing to talk to this person about his/her problems,” “This person should be forced into treatment by his/her doctor even if s/he does not work to,” and “How likely is it that you would help this person?”

Table 1

Means, Standard Deviations, and Reliability Coefficients of Face Concern, Stigma toward Mental Illness and Perceived Barrier to Help-Seeking for HK Chinese (HC), Chinese Americans (CA), and European Americans (EA)

	Mean			Standard Deviation			Reliability Coefficient		
	HC	CA	EA	HC	CA	EA	HC	CA	EA
Face concern	4.57	4.52	4.12	0.65	0.83	0.86	0.84	0.87	0.86
Stigma toward mental illness	4.22	3.58	3.03	0.83	0.82	0.80	0.86	0.84	0.85
Perceived barrier to help-seeking	2.33	1.81	1.55	0.41	0.44	0.35	0.51	0.56	0.48

Table 2

Bivariate Correlations among the Measures in Each Cultural Group

Hong Kong Chinese ($n = 170$)			
	1	2	3
1. Face Concern	-		
2. Stigma toward mental illness	0.21**	-	
3. Perceived barrier to help-seeking	0.09	0.21**	-
Chinese Americans ($n = 194$)			

	1	2	3
1. Face Concern	-		
2. Stigma toward mental illness	0.29***	-	
3. Perceived barrier to help-seeking	0.33***	0.21**	-
European Americans ($n = 184$)			
	1	2	3
1. Face Concern	-		
2. Stigma toward mental illness	0.20**	-	
3. Perceived barrier to help-seeking	0.27***	0.36***	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Factor Structure of Stigma toward Mental Illness

First, we conducted an exploratory factor analysis with varimax rotation on the adapted Attribution Questionnaire (Corrigan et al., 2003), because we modified the measure for the current study. Map Test (Velicer, 1976) suggested a five-factor solution, which explained 51.86% of the variance. The first factor tapped the fear people have toward individuals with mental illness (8 items; e.g., “This person would terrify me.”). The second factor concerned about helping or avoiding individuals with mental illness (5 items; e.g., “How likely is that you would help this person?”). The third factor indicated people’s support for coercion and segregation (5 items; e.g., “I think it would be best for this person’s community if s/he were put away in a psychiatric hospital.”). The fourth factor tapped anger responses toward individuals with mental illness (2 items; e.g., “How irritated would this person make you feel?”). The last factor assessed beliefs about individuals’ responsibility for causing their mental disorder condition (3 items; e.g., “I would think that it was this person’s own fault that s/he is in the present condition.”). These factors resembled those obtained in the original study (Corrigan et al., 2003), except that we did not identify a factor on pity.

Measurement Equivalence across Cultures

Next, we conducted multiple-group confirmatory factor analysis to test measurement equivalence of the constructs across the three cultural groups, and examined a model with three latent factors, namely, face concern, stigma toward mental illness, and perceived barrier to help-seeking. The models were tested using the lavaan package in R (Rosseel, 2012). Maximum likelihood estimation with robust standard errors was used to handle non-normality in the data, given the multivariate normality test was significant, $\chi^2(110) = 237.26$, $p < .001$ (Doornik & Hansen, 2008). To reduce the number of observed variables being tested in the model, we created item parcels for face concern and perceived help-seeking barrier by randomly assigning and averaging individual items (Little, Cunningham, Shahar, & Widaman,

2002), while we used the five factors identified in the previous part for the latent factor of stigma. Model fit was evaluated using the following fit indices: Comparative Fit Index (CFI) > 0.95 , Tucker Lewis Index (TLI) > 0.95 , root-mean-square error of approximation (RMSEA) < 0.06 , and standardized root mean square residual (SRMR) < 0.08 (Hu & Bentler, 1999). Further, CFI change smaller than 0.01 indicates invariance of two nested models, and this test is preferred to the chi-square difference test as it is relatively independent of model complexity and sample size (Cheung & Rensvold, 2002), though we reported both for comprehensiveness.

The three-factor configural model fitted the data well: $\chi^2(72) = 154.42, p = .03$, CFI = 0.98, TLI = 0.97, RMSEA = 0.04, and SRMR = 0.05. Subsequently, factor loadings were constrained to be equal across cultural groups to test for metric invariance. Although the model fit was satisfactory: $\chi^2(145) = 193.37, p = .004$, CFI = 0.96, TLI = 0.96, RMSEA = 0.04, and SRMR = 0.08, CFI change larger than 0.01 indicated that the two nested models differed significantly ($\Delta\text{CFI} = 0.013, \Delta\chi^2(22) = 38.19, p = .02$). To improve model fit, we relaxed two constraints on factor loadings based on modification indices: one for the face concern factor and one for the help-seeking barrier factor. The revised model showed adequate fit to the data: $\chi^2(141) = 178.29, p = .02$, CFI = 0.97, TLI = 0.97, RMSEA = 0.04, and SRMR = 0.07. More importantly, this model did not differ from the configural model ($\Delta\text{CFI} = 0.005, \Delta\chi^2(18) = 23.75, p = .16$). Intercepts were further constrained to be equal across cultural groups to test for scalar invariance. This resulted in a substantial decrease in model fit: $\chi^2(157) = 380.54, p < .001$, CFI = 0.83, TLI = 0.82, RMSEA = 0.09, and SRMR = 0.11. We relaxed three constraints on intercepts to improve model fit: one for the face concern factor and two for the stigma factor. The final model fitted the data: $\chi^2(151) = 189.24, p = .02$, CFI = 0.97, TLI = 0.97, RMSEA = 0.04, and SRMR = 0.07. Moreover, change of CFI smaller than 0.01 suggested that the final model was not significantly different

in model fit when comparing to the model with constraints on factor loadings only ($\Delta\text{CFI} = 0.001$, $\Delta\chi^2(10) = 10.96$, $p = .36$). Therefore, partial scalar invariance was achieved for the measures and cross-cultural comparisons on the constructs were appropriate.

We then examined cultural differences in the three constructs by comparing latent means in the final model. Hong Kong Chinese reported higher levels of face concern (standardized mean difference = 0.53, $z = 4.47$, $p < .001$), stigma toward mental illness (M diff. = 1.58, $z = 10.74$, $p < .001$), and help-seeking barrier (M diff. = 2.47, $z = 11.10$, $p < .001$) than did European Americans. In a similar vein, Chinese Americans scored significantly higher on face concern (M diff. = 0.50, $z = 4.49$, $p < .001$), stigma toward mental illness (M diff. = 0.85, $z = 6.71$, $p < .001$), and help-seeking barrier (M diff. = 0.83, $z = 6.60$, $p < .001$) than did European Americans. When we compared Hong Kong Chinese and Chinese Americans, Hong Kong Chinese were higher on stigma toward mental illness (M diff. = -0.73, $z = -5.70$, $p < .001$) and help-seeking barrier (M diff. = -1.63, $z = -8.29$, $p < .001$), but the two groups did not differ in face concern (M diff. = -0.03, $z = -0.24$, $p = .81$).

Predicting Stigma and Help-Seeking Barrier across Cultures

Structural equation modeling was employed to examine the effects of face concern on stigma toward mental illness and perceived barrier to help-seeking, again using the lavaan package. We used the final partial scalar invariance model to test the effects of the structural paths, which showed adequate fit: $\chi^2(151) = 189.63$, $p = .02$, CFI = 0.97, TLI = 0.97, RMSEA = 0.04, and SRMR = 0.07. Face concern significantly and positively predicted stigma toward mental illness and perceived barrier to help-seeking among European Americans and Chinese Americans ($ps < .01$). However, among Hong Kong Chinese, face concern only significantly predicted stigma toward mental illness ($\beta = 0.32$, $p = .02$), but not barrier to help-seeking ($\beta = 0.14$, $p = .34$).

We then constrained the structural paths from face concern to stigma toward mental

illness and help-seeking barrier to be equal across the three cultural groups (see Figure 1). The model fitted the data adequately, $\chi^2(155) = 193.99, p = .02, CFI = 0.97, TLI = 0.97, RMSEA = .04,$ and $SRMR = 0.08$. Moreover, the change in CFI among the two nested models was smaller than 0.01 ($\Delta CFI = 0.001, \Delta\chi^2(4) = 4.41, p = .35$). Thus, the paths from face concern to stigma toward mental illness and perceived help-seeking barrier were equivalent across cultures.

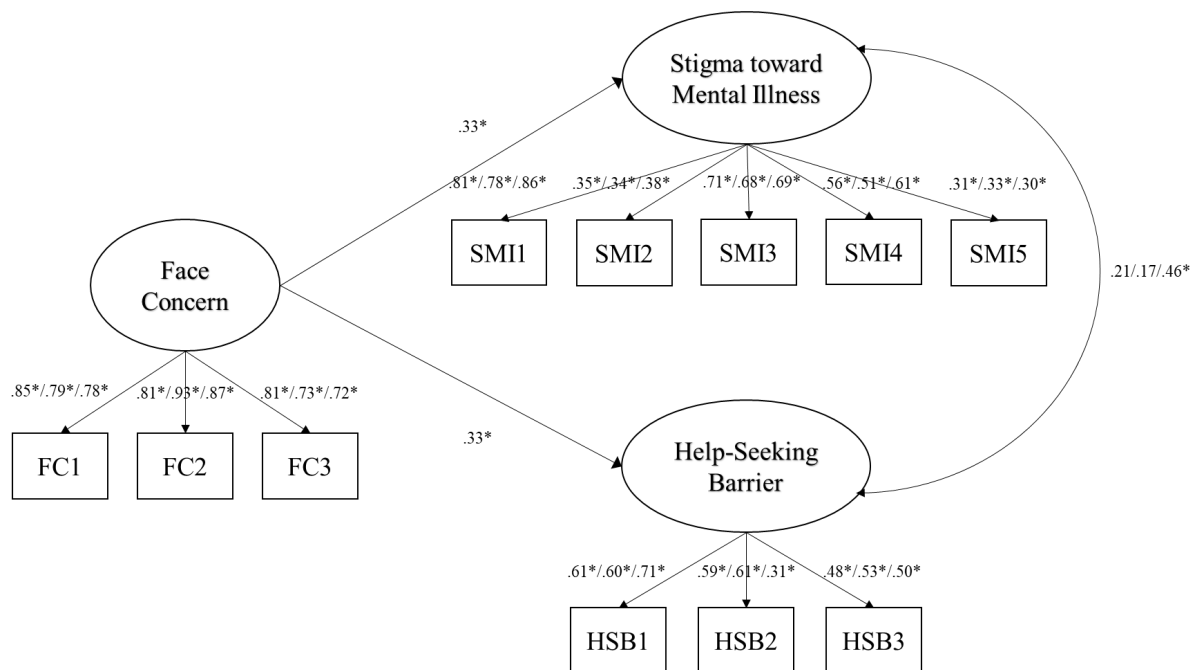


Figure 1. Multiple-group structural equation model with face concern predicting stigma toward mental illness and perceived barrier to help-seeking

Note. Standardized estimates are reported; the coefficients for Hong Kong Chinese, Chinese Americans, and European Americans are separated by slashes. Paths significant at $\alpha = 0.05$ are indicated by *.

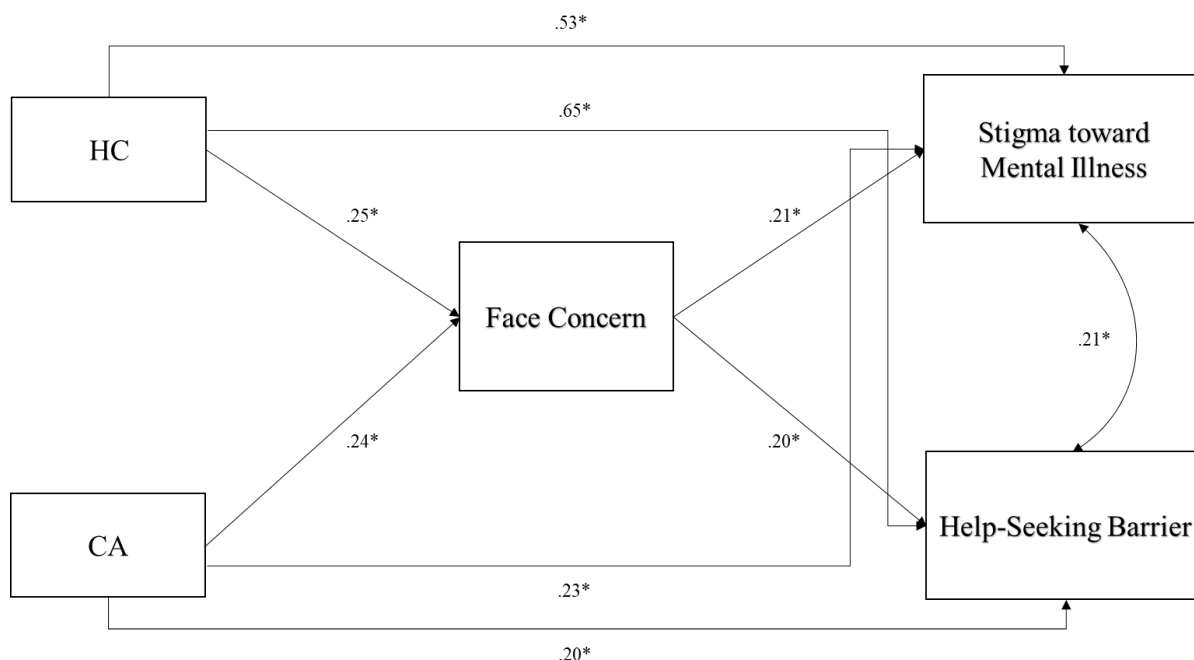


Figure 2. Summary of the mediation model unpacking cultural influences on stigma toward mental illness and perceived barrier to help-seeking by face concern

Note. Standardized estimates are reported. Paths significant at $\alpha = 0.05$ are indicated by *. Cultural groups are dummy coded such that HC is a variable comparing Hong Kong Chinese (coded as 1) and European Americans (coded as 0), while CA is a variable comparing Chinese Americans (coded as 1) and European Americans (coded as 0).

Unpackaging Cultural Differences

Finally, we attempted to unpack cultural differences in stigma toward mental illness and perceived barrier to help-seeking with face concern as a mediator in a path model (see Figure 2). Cultural groups were dummy coded using European Americans as a reference group because Hong Kong Chinese and Chinese Americans did not differ in face concern. Bootstrap analysis with 5,000 samples was conducted to test the indirect effects from cultural group to the outcome variables via face concern (bias-corrected confidence intervals were reported).

Indirect effects indicated that face concern significantly mediated cultural differences in stigma toward mental illness (Hong Kong Chinese vs. European Americans: 95% bias-corrected CI [0.06, 0.17]; Chinese Americans vs. European Americans: 95% CI [0.05, 0.16])

and perceived barrier to help-seeking (Hong Kong Chinese vs. European Americans: 95% bias-corrected CI [0.03, 0.09]; Chinese Americans vs. European Americans: 95% bias-corrected CI [0.03, 0.08]). The direct effects of cultural group were significant ($ps < .001$).

Discussion

The present study investigated cultural influences on stigma toward mental illness and perceived barrier to help-seeking among Hong Kong Chinese, Chinese Americans, and European Americans, and confirmed the role of face concern in accounting for the differences of these cultural groups. In level-oriented analyses, we found that Hong Kong Chinese reported significantly higher levels of stigma toward mental illness and perceived barrier to help-seeking than Chinese Americans, and in turn significantly higher than European Americans. Hong Kong Chinese and Chinese Americans scored significantly higher in face concern than European Americans, while the differences between the two Chinese groups were not significant. Our results point to both meaningful similarities and differences in mental illness stigma and help-seeking barrier across the three cultural groups. Furthermore, in structural-oriented analyses, the paths from face concern to stigma toward mental illness and perceived barrier to help-seeking were found to be equivalent across the three groups.

Chinese culture has strong norms and low tolerance of deviant behavior, in part due to its agricultural history, high population density, ecological challenges, and societal threats (Gelfand et al., 2011). Fostering cooperation and maintaining social order entail strong norms transmitted through socialization. Behaviors that deviate from societal norms are sanctioned and even punished. Individuals with mental illness are thus prejudiced and discriminated. Lay people in Chinese communities associate severe mental illness with insanity, craziness, and danger (Cheung, 1990; Rabkin, 1972). Mass media portraying individuals with severe mental illness as dangerous psychopaths strengthen such conceptions, making people unwilling to disclose their psychological problems in afraid of being viewed as atypical or abnormal.

When the course of mental illness is perceived as less controllable, more chronic, and incomprehensible, lay people feel less accepting, greater stigma, and more social distance (Mak, Chong, & Wong, 2014).

Ethnic minorities, such as Chinese Americans, have been exposed to the influences from their heritage culture and mainstream culture and assumed to show psychological responses intermediate to the responses of people from their heritage culture and mainstream culture. Evidence for such blending abounds in the literature on illness behaviors (e.g., Mak & Chen, 2010). The patterns of ethnic minorities are often attributed to acculturation to the mainstream culture. Wu and Mak's (2012) longitudinal study confirmed the influence of acculturation on psychological distress over time. Asian international students' acculturation to White culture is associated with positive attitudes toward seeking professional psychological help (Zhang & Dixon, 2003). However, the impact of acculturation is diffused and mixed, which can either improve well-being outcomes (e.g., Organista, Organista, & Kurasaki, 2003) or exacerbate psychological distress (e.g., Mak, Chen, Wong, & Zane, 2005). The mixed effects of acculturation signify a need to examine more specific cultural factors and identified the underlying mechanisms that come into play to shape individuals' psychological responses.

In the present study, cultural differences in stigma and help-seeking barrier between Hong Kong Chinese and European Americans reflect East-West differences; including a Chinese American sample in the cross-cultural comparisons can help to disentangle the effects of culture arising from cultural contexts and cultural values. Chinese Americans share similar cultural values (e.g., collective attributes and etiological beliefs) with Hong Kong Chinese, but differ from Hong Kong Chinese in sociocultural contexts (e.g., ecological environment and mental health service system). Conversely, Chinese Americans share the same cultural environment with European Americans and yet hold different cultural values.

Our results show that Chinese Americans reported similar levels of face concern as Hong Kong Chinese but significantly lower levels of stigma toward mental illness and perceived help-seeking barrier than Hong Kong Chinese. Thus, other than cultural values such as face, cultural context (living in the U.S.) also plays a role in mental illness stigma and help-seeking barrier. Indeed, the U.S. society's growing attention to mental health disparities and increasing efforts to eliminate them may contribute to this more positive atmosphere among Chinese Americans. For instance, the U.S. Surgeon General acknowledged that ethnic and racial minorities "face a social and economic environment of inequality that includes greater exposure to racism, discrimination, violence, and poverty, all of which take a toll on mental health" (U.S. Department of Health and Human Services, 2001). Probably, less negative attitudes toward the stigmatized evolves from the contemporary cultural context.

The role of stigma toward mental health in the help-seeking process has long been recognized by Western researchers (e.g., Corrigan, 2004), whereas the role of face concern attracts growing attention worldwide in recent years. Conceptually, Hong Kong Chinese's greater stigma toward mental illness and perceived barrier to help-seeking are related to their heightened concern about losing face in public. Face represents positive images and favorable impressions one presents in the eyes of others (Lin & Yamaguchi, 2011). People are motivated to engage in face-saving behaviors and avoid face-loss situations. Negativity toward the stigmatized reflects blame and derogation for failure to fulfill role expectations which are emphasized by Asian societies. Seeking professional help for mental health issues is regarded as losing face in front of others, as it reveals defects and weaknesses, incapability of solving personal problems, and threatening of family and group reputation. Despite these conceptualizations, it is important to statistically test the mediating effect of face concern across the cultural groups, so as to examine if face concern explains the effects of culture on stigma toward mental illness and perceived barrier to help-seeking.

Our structure-oriented analyses demonstrate that face concern was associated with stigma and perceived barrier to help-seeking with equivalent strengths across Eastern and Western cultural groups. Furthermore, the result shows that face concern mediates the effects of culture on stigma and perceived help-seeking barrier. As the current study is cross-sectional, which limits our ability to draw causal conclusions, future research may use experimental and longitudinal designs to manipulate face concern and test its prospective effects on help-seeking attitudes and behaviors. It is noteworthy that our measure of help-seeking barriers showed relatively low internal consistency across cultural groups. Although we have used latent factor modeling to account for measurement error, it is important to use scales that has been well-validated in future research (e.g., the Attitudes Toward Seeking Professional Psychological Help scale; Fischer & Turner, 1970). Furthermore, we only obtained partial scalar invariance for our measures. Although this is a condition adequate for the comparison of latent means across groups (Byrne, Shavelson, & Muthén, 1989), this finding suggests that group differences in latent means that we observed in the current study may reflect how people from different cultural groups interpret some items differently along with real cultural differences in these constructs. Despite such constraint in the measurement model, the present findings in both WEIRD and non-WEIRD societies provide implications for counselors and psychotherapists in that knowing and addressing the cultural background of clients is not sufficient; culturally sensitive interventions entail both culture-general and culture-specific dynamics underlying help-seeking propensities.

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