

# Stigma of Seeking Psychological Services: Examining College Students Across Ten Countries/Regions

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## Abstract

Stigma is an important barrier to seeking psychological services worldwide. Two types of stigma exist: public stigma and self-stigma. Scholars have argued that public stigma leads to self-stigma, and then self-stigma is the primary

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predictor of attitudes toward seeking psychological services. However, this assertion is largely limited to U.S. samples. The goal of this research was to provide a first step in understanding the relationship between public stigma, self-stigma, and attitudes toward seeking psychological services in international contexts ( $N = 3,276$ ; Australia, Brazil, Canada, Hong Kong, Portugal, Romania, Taiwan, Turkey, United Arab Emirates, and United States). Using structural equation modeling, we found that self-stigma mediated the relationship between public stigma and attitudes toward seeking services among college students in each country and region. However, differences in path strengths emphasize the need to pay attention to the role of public and self-stigma on attitudes toward seeking psychological services throughout the world.

### **Keywords**

stigma, therapy, help seeking, cross-cultural

Mental health concerns affect one in four people worldwide (World Health Organization, 2001) and constitute approximately 13% of the total global economic burden of disease—exceeding both cardiovascular disease and cancer (Collins et al., 2011). Research consistently demonstrates the efficacy of psychological treatments (e.g., Wampold, 2001); yet most individuals avoid seeking psychological treatment for their mental health concerns, with annual treatment utilization rates between 1% and 15% (Demyttenaere et al., 2004). In addition, those who eventually do seek services (e.g., psychotherapy or counseling) often delay doing so or drop out early (Wang, Berglund, Olfson, & Kessler, 2004). Understanding the barriers to psychological treatment has important implications for the psychological, physical, and economic burdens caused by untreated mental health concerns worldwide.

Although low rates of seeking treatment may be due, in part, to structural barriers, psychological factors also play an important role. One key psychological factor that has been implicated is stigma (e.g., Corrigan, 2004). Stigma is “the possession of (or belief that one possesses) some attribute or characteristic that conveys a social identity that is devalued in a particular social context” (Crocker, Major, & Steele, 1998, p. 505). As such, stigma has been suggested to be an important factor in the help-seeking process (Shechtman, Vogel, & Maman, 2010; Vogel, Armstrong, et al., 2013), with a small to moderate negative effect on help seeking (Clement et al., 2015). Two types of stigma exist: public stigma and self-stigma (Corrigan, 2004).

Researchers have theoretically and empirically argued that public stigma leads to the development of self-stigma and that self-stigma is the primary determinant of attitudes toward psychological services (Lannin, Vogel, Brenner, & Tucker, 2015; Vogel, Bitman, Hammer, & Wade, 2013; Vogel, Wade, & Haake, 2006). Yet, most research examining these assertions has been conducted in the United States (U.S.), indicating a need for more international research to mitigate the burden caused by stigma (Ban, Kashima, & Haslam, 2012; Pescosolido, Martin, Lang, & Olafsdottir, 2008). This study begins to fill this gap in the literature by examining the relationships between public stigma, self-stigma, and attitudes toward psychological services in college students from 10 countries and regions (Australia, Brazil, Canada, Hong Kong, Portugal, Romania, Taiwan, Turkey, the United Arab Emirates [UAE], and the U.S.).

## Public and Self-Stigma

*Public stigma* associated with help seeking is an external form of stigma that denotes the perception held by society that individuals are undesirable or socially unacceptable if they were to seek help (Vogel et al., 2006). This construct is applicable worldwide, with seeking psychological help being perceived as publicly stigmatizing in such places as Australia (Mellor, Carne, Shen, McCabe, & Wang, 2012), Brazil (Sartorius & Schulze, 2005), Canada (Cook & Wang, 2010), China (Lee, Lee, Chiu, & Kleinman, 2005), Hong Kong (Lam et al., 2015; Mak & Chen, 2010), Portugal (Evans-Lacko, Brohan, Mojtabai, & Thornicroft, 2012; Gonçalves, Cook, Mulvaney-Day, Kynrys, & Alegria, 2013), Romania (Evans-Lacko et al., 2012), Taiwan (Mellor et al., 2012), Turkey (Güneri & Skovholt, 1999; Topkaya, 2011b; Towle & Arslanoglu, 1998), the UAE (Al-Krenawi, Graham, Dean, & Eltaiba, 2004; Heath, Vogel, & Al-Darmaki, 2016), and the U.S. (Komiya, Good, & Sherrod, 2000). In turn, *self-stigma* associated with seeking help refers to the perception held by the individual that he or she is undesirable or socially unacceptable if they were to seek help (Vogel et al., 2006). Self-stigma of seeking help has also been found in places such as England, Greece, Israel, Turkey, Taiwan, and the U.S. (Shechtman et al., 2010; Topkaya, 2011a; Vogel, Armstrong, et al., 2013).

The modified labeling theory (Link, Cullen, Struening, Shrout, & Dohrenwend, 1989) has frequently been used to explain both the effects of stigma and the relationship between public and self-stigma (e.g., Lannin et al., 2015; Link et al., 1989). According to modified labeling theory, individuals labeled with a stigmatizing identity, such as needing to seek help, are likely to internalize the devalued aspects of that identity and avoid or

withdraw from situations that highlight a diminished status ([Link & Phelan, 2001](#)). Applying MLT to help-seeking stigma, [Vogel, Wade, and Hackler \(2007\)](#) examined a model wherein public stigma may be internalized as self-stigma, which then leads to more negative attitudes and lower intentions toward seeking help. Indeed, researchers found that perceptions of public stigma toward seeking help was directly internalized as self-stigma over time ([Vogel, Bitman, et al., 2013](#)), and in samples in the U.S., self-stigma fully mediated the relationship between public stigma and attitudes toward psychological services (e.g., [Vogel et al., 2007](#)). That is, public stigma appeared to lead to an internalization of negative external messages, and it was these internal messages that were linked to attitudes toward psychological services. In similar studies, the relationships between public stigma, self-stigma, and attitudes toward psychological services were demonstrated for different forms of therapy such as career counseling ([Ludwikowski, Vogel, & Armstrong, 2009](#)) and group counseling ([Vogel, Shechtman, & Wade, 2010](#)).

Although the presence of public stigma, self-stigma, and attitudes toward seeking psychological services has been demonstrated in many parts of the world, it is less clear whether the mediation model proposed by [Vogel et al. \(2007\)](#) and supported in U.S. samples is consistent across multiple countries and regions outside of the U.S. Understanding the applicability of the mediation model is important. Public stigma could be difficult to alter because the requisite societal changes are slow to take effect. Indeed, extensive effort worldwide aimed toward decreasing public stigma has yielded mixed results ([Corrigan, Morris, Michaels, Rafacz, & Rusch, 2012](#); [Mittal, Sullivan, Chekuri, Allee, & Corrigan, 2012](#)). If self-stigma is more proximally related to help seeking than public stigma across countries and regions, then interventions designed to reduce the self-stigma associated with seeking help may be more effective in encouraging people to make use of psychological services worldwide. Thus, a better understanding of how public and self-stigma relate to the help-seeking process is required by psychologists around the world to better tailor interventions that increase service use in their country or region.

## **Current Study**

The stigma associated with psychological help seeking may operate differently across cultures. To date and to our knowledge, no study has examined cross-country or cross-region differences in the links between public stigma, self-stigma, and attitudes toward seeking help. This study serves as an important first step in expanding previous models of help-seeking stigma and attitudes by examining a stigma model in which the relationship between public

stigma and help-seeking attitudes is fully mediated by self-stigma for college students across 10 countries and regions (Australia, Brazil, Canada, Hong Kong, Portugal, Romania, Taiwan, Turkey, the UAE, the U.S.). Understanding whether this mediation model of stigma applies to countries outside of the U.S. as well as how the strength of these relationships differ by country is important, as culturally sensitive interventions are recommended for combating stigma (Ban et al., 2012).

## **Method**

### ***Participants***

The sample consisted of 3,276 college students from universities/colleges located in 10 different countries and regions throughout the world (Australia, Brazil, Canada, Hong Kong, Portugal, Romania, Taiwan, Turkey, the UAE, the U.S.). Table 1 describes the demographic information across the 10 countries and regions.

### ***Procedure***

The first author contacted researchers in different parts of the world who had studied help-seeking stigma to collaborate on a cross-national study of stigma. Researchers from 10 countries and regions representing Asia, Australia, Europe, the Middle East, North America, and South America responded and collected samples included in the current study. In each country, institutional review board approval was first obtained through the educational institution where the data were collected. Students completed the study online in Australia, Brazil, Canada, Hong Kong, Portugal, Romania, and the U.S. However, in countries and regions where online research is less common (Taiwan, Turkey, and the UAE), the study was completed in a classroom setting. Participants in each country were recruited from psychology and other general education classes. All participants completed an informed consent, which noted that the study examined attitudes toward seeking help for mental health issues, participation was voluntary, and they could discontinue at any point. Participants then completed measures of self-stigma, public stigma, and attitudes toward help seeking, demographic questions, and were debriefed.

Each participant completed the measures in the native language of that participant's country or region. The measures were translated from English into the native language of the country when translated versions were not already available (see measures section for more detail). In these cases, two

**Table 1.** Sample Characteristics Across 10 Country Samples

Country	n	Age	Gender	Year in school	% Received help
		M (SD)	% Male, female	% 1st, 2nd, 3rd, 4th, other	
Australia	393	22.96 (8.44)	26, 74	86, 8, 3, 1, 2	44
Brazil	275	24.59 (6.22)	18, 82	83, 5, 4, 5, 3	51
Canada	304	20.18 (4.71)	39, 61	76, 15, 5, 2, 2	13
Hong Kong	341	21.09 (3.16)	34, 66	39, 29, 18, 5, 9	10
Portugal	303	22.93 (6.03)	19, 81	N/A	33
Romania	226	22.30 (3.31)	14, 86	N/A	23
Taiwan	271	20.69 (2.55)	24, 76	16, 37, 29, 5, 13	23
Turkey	332	23.10 (2.59)	22, 78	N/A	17
UAE	417	20.31 (1.85)	42, 58	21, 26, 29, 17, 7	6
USA	414	19.63 (2.92)	35, 65	51, 25, 14, 7, 3	23

Note. N/A = data were not reported; UAE = United Arab Emirates; USA = United States.

independent translators from that country or region who were bilingual in English and in their country or region's native language translated and back-translated the scales. The translators discussed items that showed semantic differences, and decisions regarding wording choices were made by consensus. To ensure readability, an expert faculty (in psychology or education) from that country or region then checked these translated versions and revised the wordings where needed. In one case (Portugal), there was an additional step where the items were reviewed for clarity and understanding by four college students recruited for the translation process.

## Measures

**Self-Stigma.** Self-stigma was measured with the Self-Stigma of Seeking Help Scale (SSOSH; [Vogel et al., 2006](#)). This 10-item scale consists of items such as "I would feel inadequate if I went to a therapist for psychological help." Items are rated on a 5-point, partly anchored scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Scale point 3 is anchored by *agree and disagree equally*. Five items are reverse scored so that higher scores reflect greater self-stigma. In U.S. college samples, estimates of the internal consistency ranged from .86 to .90 ([Vogel et al., 2006](#)). The SSOSH has also been previously used in Australia, and translated versions of the SSOSH have been used in Brazil, Taiwan, and Turkey. In these international samples, the translated SSOSH scores have reported internal consistency estimates between .73 and .88 (Baptista & Zanon,

**Table 2.** Means, Standard Deviations, and Internal Consistency

Country	Stigma								
	Public <sup>a</sup>			Self			Attitudes		
	M	SD	$\alpha$	M	SD	$\alpha$	M	SD	$\alpha$
Australia	9.20	1.99	.69	26.26	6.66	.89	18.47	5.46	.80
Brazil	7.89	2.05	.71	20.34	4.49	.73	24.72	3.80	.66
Canada	9.40	2.04	.71	28.43	6.05	.89	14.77	5.69	.83
Hong Kong	9.64	2.14	.75	28.84	4.43	.72	14.94	3.28	.65
Portugal	8.98	1.93	.61	24.19	5.62	.82	19.72	5.39	.80
Romania	8.29	2.52	.71	23.27	5.84	.83	18.03	5.14	.82
Taiwan	8.79	2.16	.70	25.33	4.96	.80	18.92	4.24	.74
Turkey	8.15	2.33	.66	22.93	5.02	.77	17.97	4.36	.72
UAE	9.05	2.28	.61	25.61	5.18	.77	15.08	4.78	.67
USA	9.27	2.33	.76	27.63	6.17	.88	15.65	5.28	.79

Note. UAE = United Arab Emirates; USA = United States.

<sup>a</sup>Public stigma based on four items of the Social Stigma of Receiving Psychological Help scale (Item 2 removed due to potential overlap with self-stigma measure).

2016; Griffiths, Mond, Murray, & Touyz, 2015; Topkaya, 2011a; Vogel, Armstrong, et al., 2013). In the current study, the SSOSH was translated for use in Hong Kong, Portugal, Romania, and the UAE. See Table 2 for reports of internal consistency of the samples in the current study.

**Public Stigma.** Public stigma was measured with the Stigma Scale for Receiving Psychological Help Scale (SSRPH; Komiya et al., 2000). This 5-item scale consists of items such as “People tend to like less those who are receiving professional psychological help.” Items are rated from 1 (*strongly disagree*) to 4 (*strongly agree*). Higher total scores reflect greater perceptions of public stigma. However, some researchers (e.g., Vogel, Armstrong, et al., 2013) have suggested that Item 2 (“It is a sign of personal weakness or inadequacy to see a psychologist for emotional or interpersonal problems”) may reflect self-stigma rather than public stigma. Consequently, this item was dropped from analyses to not inflate any possible relationship between the scales. In previous samples, SSRPH scores have reported internal consistency estimates of .73 in the U.S. (Komiya et al., 2000). Previously translated versions of the SSRPH have been used in Brazil, Taiwan, Turkey, and the UAE, with scores demonstrating internal consistency estimates between .70 to .80 in other countries (Baptista & Zanon, 2016; Heath et al., 2016; Shea &

Yeh, 2008; Topkaya, 2011b, 2015). In the current study, the SSRPH was translated for use in Hong Kong, Portugal, and Romania. See Table 2 for reports of internal consistency of the samples in the current study.

**Attitudes Toward Seeking Professional Psychological Help.** Attitudes toward seeking professional help were measured with the Attitudes Toward Seeking Professional Psychological Help Scale–Short Form (ATSPPHS-SF; Fischer & Farina, 1995). This 10-item revision of the original 29-item measure (Fischer & Turner, 1970) consists of items reflecting perceptions of seeing a psychologist or participating in psychotherapy. An example item is “The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.” Items were rated from 0 (*disagree*) to 3 (*agree*). Five items are reverse scored so that higher scores reflect more positive attitudes toward seeking psychological services. The shortened scale correlates with previous use of professional help (Fischer & Farina, 1995). Estimates of the internal consistency ( $\alpha = .84$ ) and 1-month test-retest reliabilities ( $r = .80$ ) have been reported for college student samples in the U.S. (Fischer & Turner, 1970). The ATSPPHS-SF has previously been used in countries including Brazil, Portugal, Taiwan, Turkey, and the UAE (Baptista & Zanon, 2016; Chang, 2007; Coppens et al., 2013; Topkaya, 2011a, 2011b, 2015). In these samples, the translated versions of the ATSPPHS-SF generally have shown internal consistency scores between .66 and .84 (Al-Darmaki, 2011; Chang, 2007; McCarthy, Burno, & Sherman, 2010; Topkaya, 2011a, 2011b, 2015). In the current study, the ATSPPHS-SF was translated for use in Hong Kong and Romania. See Table 2 for reports of internal consistency of the samples in the current study.

## Analytic Plan

**Measurement Invariance.** We examined measurement invariance across countries and regions by conducting a multiple group confirmatory factor analysis, which has been proposed by counseling researchers as a way to examine construct equivalence across different groups (Dimitrov, 2010; Miller & Sheu, 2009). To establish initial evidence of construct equivalence we examined two foundational types of invariance: configural and metric. *Configural invariance* occurs when there is a good fitting measurement model and the items load significantly on their respective factor(s). Therefore, we first conducted separate single-factor confirmatory models for the public stigma, self-stigma, and attitudes measures. *Metric invariance* occurs when the specific item factor loadings are similar across groups. This is examined by comparing a model where item factor loadings are set to be equal to a model where item factor loadings are allowed to freely estimate. Researchers suggest that



the best way to compare measurement invariance models is to examine changes in model fit indices, such as the comparative fit index (CFI), because they are less sensitive to issues such as (a) sample size and (b) number of indicators (Cheung & Lau, 2012; Meade, Johnson, & Braddy, 2008). Cheung and Lau (2012) recommend a cutoff of  $\Delta\text{CFI} < .01$  to indicate equivalence between freely estimated and fixed models.

*Mediation Model.* To examine the proposed model (Public stigma  $\rightarrow$  Self-stigma  $\rightarrow$  Attitudes) within each country and region, we examined the model fit for each sample independently. We then compared the direct relationships between public stigma and self-stigma, and self-stigma and attitudes of each sample to the average of the other samples. This approach is a modified form of a jackknife procedure (Wolter, 2007) that provides a simple and direct way to understand each country or region's uniqueness from the composite of the other groups. When conducting the procedure, the indicator loadings on the latent variables were fixed between each sample and the comparison group to ensure that the latent variables were estimated equivalently. Individual path differences were examined by comparing a model in which one set of structural paths (e.g., Public stigma  $\rightarrow$  Self-stigma) was constrained between the country and comparison group to a model in which the structural paths were allowed to freely estimate. An adjusted chi-square difference test was used to compare the fixed and free models.

## Results

### *Descriptive Statistics*

Table 2 shows means, standard deviations, and reliability estimates for each scale. A Kolmogorov–Smirnov test of univariate normality indicated that all continuous variables violated assumptions of univariate normality ( $ps < .001$ ), which precludes multivariate normality. Therefore, models were evaluated using the maximum likelihood estimation with robust standard errors (MLR) in Mplus 6.11, which utilizes an adjusted chi-square statistic that is robust to nonnormality (Muthén & Muthén, 2010; Satorra & Bentler, 1988). Three additional indices were also used to assess the overall goodness of fit of the models: the CFI, the standardized root mean square residual (SRMR), and the root mean square error of approximation (RMSEA; see Hu & Bentler, 1999; Martens, 2005).

### *Measurement Invariance*

For public stigma, all of the items loaded significantly ( $p < .05$ ) in each country and region (overall model fit), CFI = .98, RMSEA = .08, 90% CI [.05, .10],

SRMR = .02. The  $\Delta$ CFI between the multiple group model where item loadings were allowed to freely estimate and the model where the item loadings were fixed was within the cutoff of  $< .01$  proposed by Cheung and Lau (2012).

For self-stigma, CFI = .87, RMSEA = .09, 90% CI [.09, .10], SRMR = .07, and attitudes, CFI = .81, RMSEA = .09, 90% CI [.09, .10], SRMR = .07, the initial 10-item models did not show a good fit. Further examination of the metric equivalence indicated that there were reverse-worded items that varied across some of the countries and regions.<sup>1</sup> This finding is consistent with previous literature that details problems in obtaining cross-cultural measurement equivalence with reverse-worded items (e.g., [Wong, Rindfleisch, & Burroughs, 2003](#)). This difficulty has also been noted in previous cross-cultural examinations of the SSOSH ([Vogel, Armstrong, et al., 2013](#)). To address this concern, we removed the five reverse-worded items for both the self-stigma and attitudes measures, and reexamined the measurement invariance. The remaining five-items on the self-stigma, CFI = .99, RMSEA = .04, 90% CI [.03, .06], SRMR = .02, and attitudes, CFI = .98, RMSEA = .05, 90% CI [.03, .07], SRMR = .03, measures yielded good overall model fit. The five items on each scale loaded significantly ( $p < .05$ ) in each country and region. Furthermore, for each scale, the  $\Delta$ CFI between the multiple group models where item loadings were allowed to freely estimate and the model where the item loadings were fixed were both within the proposed cutoff of  $< .01$ . Therefore, we used the five-item versions of the measures in subsequent analyses.

### *Mediation Model*

The hypothesized structural models demonstrated adequate fit to the data within each country and region (see Table 3). All of the hypothesized relationships between public stigma and self-stigma, and self-stigma and attitudes were significant within each country and region, except for the path from public stigma to self-stigma in Portugal ( $p > .05$ ). Next, we compared the hypothesized fully mediated model to an alternative partially mediated model (see [Martens, 2005](#)). In the alternative model, we added the direct path from public stigma to attitudes. Results of the alternative model demonstrated adequate fit to the data within each country and region (i.e., all CFIs  $> .92$ , RMSEAs  $< .06$ , and all SRMR  $< .07$ ). The hypothesized fully mediated model demonstrated an equivalent fit for eight of the countries, with scaled chi-square differences tests indicating statistically significant differences between the models for Brazil and Portugal ( $ps < .05$ ). The partially mediated model demonstrated the better fit for these two countries, and the direct path from public stigma to attitudes was significant only for Brazil. To be

**Table 3.** Fit Indices for the Mediation Models

Country/Region	df	Model Fit			
		$\chi^2$	CFI	RMSEA [90% CI]	SRMR
All	75	636.38	.95	.05 [.04, .05]	.04
Australia	75	86.38	.99	.02 [.00, .04]	.04
Brazil	75	111.23	.93	.04 [.02, .06]	.05
Canada	75	114.18	.96	.04 [.03, .06]	.04
Hong Kong	75	147.23	.94	.05 [.04, .07]	.06
Portugal	75	145.63	.92	.06 [.04, .07]	.07
Romania	75	119.06	.94	.05 [.03, .07]	.06
Taiwan	75	135.34	.93	.05 [.04, .07]	.06
Turkey	75	132.28	.92	.05 [.03, .06]	.06
UAE	75	106.05	.97	.03 [.02, .05]	.04
USA	75	112.79	.98	.04 [.02, .05]	.04

Note. CFI = comparative fit index; RMSEA = root mean square error of approximation; CI = confidence interval; SRMR = standardized root mean square residual; UAE = United Arab Emirates; USA = United States.

conservative, we included (i.e., controlled for) the path from public stigma to attitudes in the subsequent comparisons for both Brazil and Portugal.

Finally, we compared the paths between public stigma and self-stigma, and between self-stigma and attitudes for each country or region with the average of the other countries and regions (i.e., overall group average minus that country and region). See Table 4 for results. The relationships between public stigma and self-stigma were statistically different for Brazil, Portugal, Romania, Taiwan, and Turkey ( $ps < .05$ ). These samples showed weaker links between public and self-stigma than the average of the other countries or regions. In turn, the relationships between self-stigma and attitudes were statistically different for the Hong Kong, Turkey, and UAE samples ( $ps < .05$ ). These samples showed weaker links between self-stigma and attitudes toward seeking help than the average of the other countries and regions.

## Discussion

There is a paucity of cross-cultural research examining stigma associated with seeking help (Vogel, Armstrong, et al., 2013). To address this gap, the present study provides an initial examination of help-seeking stigma among college students in an international context. The results, which should be treated as a first step to understanding help-seeking stigma in these countries

**Table 4.** Model Path Coefficients

Country/Region	$\beta$ Standardized	Unstandardized
<b>Public-Self</b>		
Australia	.50	1.58
Brazil	.36***	0.51
Canada	.59	1.56
Hong Kong	.54	1.13
Portugal	.27**	0.73
Romania	.54*	1.16
Taiwan	.36**	0.85
Turkey	.34***	0.73
UAE	.65	1.53
USA	.59	1.42
<b>Self-Attitudes</b>		
Australia	-.58	-0.36
Brazil	-.43	-0.30
Canada	-.62	-0.49
Hong Kong	-.20***	-0.13
Portugal	-.68	-0.51
Romania	-.63	-0.50
Taiwan	-.47	-0.30
Turkey	-.35**	-0.27
UAE	-.32*	-0.29
USA	-.55	-0.43

Note. Results are based on jackknife analyses. Item loadings for these results were fixed between country and comparison group. UAE = United Arab Emirates; USA = United States. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

and regions until additional replication studies are conducted, suggest that higher levels of public stigma are associated with higher levels of self-stigma and that higher levels of self-stigma are associated with more negative attitudes toward seeking help in most of the studied countries. In general, these correlational results are consistent with previous longitudinal research that has found that public stigma is internalized as self-stigma over time (Vogel, Bitman, et al., 2013). Our results also parallel the findings of research in the U.S. that show self-stigma mediates the relationship between public stigma and help-seeking attitudes (Vogel et al., 2010; Vogel et al., 2007).

The current findings generally supported the applicability of the hypothesized model of stigma and help-seeking attitudes in many international college student samples; however, there were some notable differences in the

magnitudes of the relationships. For example, in half of the countries examined (i.e., Brazil, Portugal, Romania, Taiwan, and Turkey) the relationship between public and self-stigma was smaller than the average of the other countries and regions. Interestingly, for Portugal, this relationship was not statistically significant, a finding consistent with one other international study conducted in Israel ([Shechtman et al., 2010](#)). These variations in the strengths of the relationship between public and self-stigma may be the result of country- or region-specific factors that affect how individuals apply publicly held messages to themselves ([Shechtman et al., 2010](#)). Corrigan and colleagues suggested that public stigma is internalized as self-stigma when there is awareness, endorsement, and application of negative external stereotypes to the self ([Corrigan, 2004](#); [Corrigan, Rafacz, & Rüsch, 2011](#)). It is possible that there are differing levels of awareness, endorsement, and application of publicly held beliefs about seeking psychological services across countries. For example, societal messages about seeking help may be more or less uniformly presented in negative ways (e.g., in the media, by friends, family, etc.). In particular, more consistent negative messages may lead to greater awareness, endorsement, or application of societal stereotypes than in countries where there are less consistent negative messages. Future research could examine the consistency of societal beliefs regarding psychological help seeking across countries to further enhance our understanding of the relationships between public and self-stigma.

Three countries and regions (i.e., Hong Kong, Turkey, and the UAE) also showed a smaller relationship between self-stigma and attitudes than the average of the other countries and regions. The variations in the strengths of the relationship between self-stigma and attitudes could be influenced by differences in cultural values or perceptions of who seeks help. For example, both Hong Kong and Turkey have experienced a number of transitional periods that have led to a blend of Western and non-Western cultural ideas, norms, and behaviors ([Kağıtçıbaşı, 2012](#); [Siu, 1996](#)), particularly those of the younger generation ([Karakitapoğlu-Aygün & Imamoğlu, 2002](#)). The UAE has also undergone a number of rapid social, cultural, and economic shifts that has led some researchers to suggest that stigma to seek psychological help may be less salient for young adults ([Al-Darmaki, 2003](#); [Al-Darmaki & Sayed, 2009](#)). Given that this study utilized college student samples, these blended norms may be influencing the relationship between self-stigma and attitudes. In addition, the relationship between self-stigma and attitudes may differ due to perceptions of the types of concerns generally addressed through the use of psychological services in that country or region. One might expect a stronger negative link for countries in which psychological services are used to treat more severe or persistent mental illness. However, for countries

where psychological services are used as a source of support for normal developmental and environmental stressors, this association may be weaker. Future research is needed to test these possibilities, specifically looking at cultural beliefs regarding the meaning of psychological services.

Another important consideration is the measurements used to assess the constructs. Although we found some support for measurement invariance for each of the three scales used across countries and regions, as is often the case in cross-cultural research where measures are translated into other languages, this required removal of negatively worded items (e.g., [Wong et al., 2003](#)). This may have limited our ability to measure the full range of the constructs in some countries and regions, and introduced additional measurement error. As noted by Cheung and Rensvold (2000), measuring a construct “with adequate validity may require more items in one culture than it does in the other. Therefore, a particular set of items may be conceptually adequate for assessing a construct in one culture, inadequate in a second culture, and yet display form invariance when compared using data from both cultures” (p. 192). In addition, because the measures were normed in the U.S., it is not clear if the measures assessed all aspects of stigma in other countries. For example, in Eastern countries and regions, the concept of stigma might not also include concerns about the negative impact or shame related to the family ([Shea & Yeh, 2008](#)). In addition, the attitude measure we used (ATSPPHS-SF) does not only assess the way one thinks and feels about something, but also assesses more general intentions and beliefs about help seeking. A more traditional way to assess attitudes might be to only ask how positively or negatively one feels about psychological services ([Fishbein & Ajzen, 2010](#)). As such, these results should be treated as a first step and require replication using measures normed in those countries or regions.

### *Implications*

A better understanding of how public and self-stigma relate to the help-seeking process is necessary for clinicians and psychologists around the world to better tailor interventions to increase service use in their countries or regions. The results of the current investigation provide initial support that college students in many areas of the world may be hesitant to seek help due to fears regarding self-stigma. Our results are important because a majority of effort worldwide has been aimed at decreasing the public stigma with mixed results ([Corrigan et al., 2012](#); [Mittal et al., 2012](#)), possibly because public stigma is difficult to alter, requiring societal changes that are slow to shift. These findings suggest that interventions designed to reduce the self-stigma associated with seeking help may be more efficient in encouraging college students to

make use of psychological services, as it more proximally related to help-seeking attitudes. As such, an important next step for clinicians might be to better understand the efficacy of specific self-stigma interventions across cultures. For example, people may feel less self-stigmatized if their symptoms are normalized or given an explanation for the symptoms they are experiencing (Schreiber & Hartrick, 2002). In addition, in the U.S., people tend to view their problems with less shame and guilt when given information that suggests that their problems (a) are not their fault, (b) are reversible (Rosen, Walter, Casey, & Hocking, 2000), and (c) will improve through treatment (Mann & Himelein, 2004). How well these specific factors reduce stigma in other parts of the world is not known at present. Identifying culturally appropriate ways to communicate about seeking help might allow counselors to better reach those who could benefit from seeking psychological help. This seems particularly important given that most of the universities studied provide psychological services to their students free of charge, eliminating many of the structural barriers to seek help.

### *Limitations and Future Directions*

This study is a first step to understanding how help-seeking stigma is related to attitudes for college students across 10 different countries and regions. It is important to note that these countries and regions, although representing many different parts of the world (e.g., Asia, Australia, Europe, the Middle East, North and South America), were selected based on the presence of a researcher known by the first author examining stigma, and the samples were not randomly selected from around the world. As a result, there could be other parts of the world (e.g., countries in Africa) where the findings may be different.

Similarly, all of the samples were gathered on college campuses and, thus, the participants were mostly young adults and predominantly women. The use of college samples allowed for more equivalent comparisons between countries and regions, but also limits the generalizability to other demographic groups that could vary in terms of factors such as age, gender composition, education, generational status, community size, and employment status. For example, researchers have found differences in response to stigma based on gender (Vogel et al., 2007) and for individuals from rural communities (Hammer, Vogel, & Heimerdinger-Edwards, 2013). In addition, in many countries, college students do not necessarily represent the majority and are often more privileged. Such privilege may influence the degree to which individuals internalize stigma compared to others living in their country. As such, it is still unclear how current findings would play out in other samples

that vary across these dimensions. Future research is needed to verify the current findings with groups that vary across these, and other, dimensions.

In addition, as discussed previously, the results should be interpreted with caution until additional research can examine these relationships using measured normed in their respective country or region. Also, although SEM analyses decrease error variance, the associations among constructs are still correlational and thus it is not possible to determine causality. There may also be alternative models that fit the data (see MacCallum, Wegener, Uchino, & Fabrigar, 1993). Future researchers might further test the hypothesized relationships with experimental or longitudinal designs. For example, previous longitudinal research has shown that stigma is internalized in the U.S. ([Vogel, Bitman, et al., 2013](#)), and similar longitudinal and/or experimental studies are needed in other countries and regions to assess causality. Despite these limitations, the current study provides initial information about how the relations between public stigma, self-stigma, and attitudes toward help seeking may be exhibited around many places in the world, allowing counselors to better reach those who could benefit from seeking psychological help.

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### **Note**

1. When full measurement equivalence is not present, it has been suggested that partial measurement equivalence be examined by relaxing constraints in the fixed models, sequentially ([Dimitrov, 2010](#); [Steenkamp & Baumgartner, 1998](#)). For self-stigma, examination of the multiple group models showed that while all of the items were statistically equivalent for most groups, five item loadings for Hong Kong, two item loadings for Taiwan, and one item loading for both Turkey and UAE needed to be freed before partial metric equivalence was observed ( $\Delta\text{CFI} < .01$ ). For attitudes, examination of the multiple group models showed that although all of the items were statistically equivalent for three of the groups, five item loadings for Hong Kong and the UAE, three items for the U.S., two item loadings for Romania and Turkey, and one item loading for both Brazil and Taiwan needed to be freed before partial metric equivalence was observed ( $\Delta\text{CFI} < .01$ ).



## References

- Al-Darmaki, F. (2003). Attitudes towards seeking professional psychological help: What really counts for United Arab Emirates university students. *Social Behavior and Personality: An International Journal*, 31, 497-508.
- Al-Darmaki, F., & Sayed, M. (2009). Counseling challenges within the cultural context of the United Arab Emirates. In L. Gerstein, P. P. Heppner, S. Ægisdóttir, S. A. Leung, & K. L. Norsworthy (Eds.), *International handbook of cross-cultural counseling: Cultural assumptions and practices worldwide* (pp. 465-474). Thousand Oaks, CA: Sage.
- Al-Darmaki, F. R. (2011). Needs, attitudes toward seeking professional help, and preferred sources of help among Emirati college students. *Journal for International Counselor Education*, 3, 39-57.
- Al-Krenawi, A., Graham, J. R., Dean, Y. Z., & Eltaiba, N. (2004). Cross-national study of attitudes toward seeking professional help: Jordan, United Arab Emirates (UAE) and Arabs in Israel. *International Journal of Social Psychology*, 50, 102-114.
- Ban, L. M., Kashima, Y., & Haslam, N. (2012). Does understanding behavior make it seem normal? Perceptions of abnormality among Euro-Australians and Chinese-Singaporeans. *Journal of Cross-Cultural Psychology*, 43, 286-298.
- Baptista, M. N., & Zanon, C. (2016). Why do not search therapy? The role of stigma and psychological symptoms in college students. *Paidéia*. Advance online publication.
- Bollen, K. A. (1989). A new incremental fit index for general structural equation models. *Sociological Methods & Research*, 17, 303-316.
- Chang, H. (2007). Psychological distress and help-seeking among Taiwanese college students: Role of gender and student status. *British Journal of Guidance & Counseling*, 35, 347-355.
- Cheung, G. W., & Lau, R. S. (2012). A direct comparison approach for testing measurement invariance. *Organizational Research Methods*, 15, 167-198.
- Cheung, G. W., & Rensvold, R. B. (2000). Assessing extreme and acquiescence response sets in cross-cultural research using structural equations modeling. *Journal of Cross-Cultural Psychology*, 31, 187-212.
- Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., . . . Thornicroft, G. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine*, 45, 11-27.
- Collins, P. Y., Patel, V., Joseti, S. S., March, D., Insel, T. R., & Daar, A. S. (2011). Grand challenges in global mental health. *Nature*, 475, 27-30.
- Cook, T. M., & Wang, J. (2010). Descriptive epidemiology of stigma against depression in a general population sample in Alberta. *BMC Psychiatry*, 10, 29. doi:10.1186/1471-244X-10-29
- Coppens, E., Van Audenhove, C., Scheerder, G., Arensman, E., Coffey, C., Costa, S., . . . Postuvan, V. (2013). Public attitudes toward depression and help-seeking in

- four European countries baseline survey prior to the OSPI-Europe intervention. *Journal of Affective Disorders*, 150, 320-329.
- Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist*, 59, 614-625.
- Corrigan, P., Morris, S., Michaels, P., Rafacz, J., & Rusch, N. (2012). Challenging the public stigma of mental illness: A meta-analysis of outcome studies. *Psychiatric Services*, 63, 963-973.
- Corrigan, P. W., Rafacz, J., & Rüsch, N. (2011). Examining a progressive model of self-stigma and its impact on people with serious mental illness. *Psychiatry research*, 189, 339-343.
- Crocker, J., Major, B., & Steele, C. (1998). Social stigma. In D. T. Gilbert, S. T. Fiske, et al. (Eds.), *The handbook of social psychology* (pp. 504-553). Boston, MA: McGraw-Hill.
- Demyttenaere, K., Bruffaerts, R., Posada-Villa, J., Gasquet, I., Kovess, V., Lepine, J., . . . Chatterji, S. (2004). Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization World Mental Health Surveys. *JAMA*, 291, 2581-2590.
- Dimitrov, D. M. (2010). Testing for factorial invariance in the context of construct validation. *Measurement and Evaluation in Counseling and Development*, 43, 121-149.
- Evans-Lacko, S., Brohan, E., Mojtabai, R., & Thornicroft, G. (2012). Association between public views of mental illness and self-stigma among individuals with mental illness in 14 European countries. *Psychological Medicine*, 42, 1741-1752.
- Fischer, E. H., & Farina, A. (1995). Attitudes toward seeking professional psychological help: A shortened form and considerations for research. *Journal of College Student Development*, 36, 368-373.
- Fischer, E. H., & Turner, J. I. (1970). Orientations to seeking professional help: Development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology*, 35, 79-90.
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*. New York, NY: Psychology Press.
- Gonçalves, M., Cook, B., Mulvaney-Day, M., Kynrys, G., & Alegria, M. (2013). Adequacy of care in a Portuguese culturally and linguistically targeted mental health care setting. *Transcultural Psychiatry*, 50, 92-107.
- Griffiths, S., Mond, J. M., Murray, S. B., & Touyz, S. (2015). The prevalence and adverse associations of stigmatization in people with eating disorders. *International Journal of Eating Disorders*, 48, 767-774.
- Güneri, O., & Skovholt, T. (1999). *Comparative study of counseling needs of American and Turkish students*. Unpublished manuscript, Middle East Technical University, Ankara, Turkey.
- Hammer, J. H., Vogel, D. L., & Heimerdinger-Edwards, S. R. (2013). Men's help seeking: Examination of differences across community size, education, and income. *Psychology of Men and Masculinity*, 14, 65-75.

- Heath, P. J., Vogel, D. L., & Al-Darmaki, F. R. (2016). Help-seeking attitudes of UAE students: Examining loss of face, stigma, and self-disclosure. *The Counseling Psychologist, 44*, 331-352.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1-55.
- Kağıtçıbaşı, C. (2012). Autonomous-related self and competence. In A. S. Masten, K. Liebkind, & D. J. Hernandez (Eds.), *Realizing the potential of immigrant youth* (pp. 281-306). Cambridge, UK: Cambridge University Press.
- Karakitapoğlu-Aygün, A. Z., & Imamoğlu, E. O. (2002). Value domains of Turkish adults and university students. *Journal of Social Psychology, 142*, 333-351.
- Komiya, N., Good, G., & Sherrod, N. (2000). Emotional openness as a predictor of college students' attitudes toward seeking psychological help. *Journal of Counseling Psychology, 47*, 138-143. doi:10.1037/0022-0167.47.1.138
- Lam, L. C. W., Wong, C. S. M., Wang, M. J., Chan, W. C., Chen, E. Y. H., Ng, R. M. K., . . . Bebbington, P. (2015). Prevalence, psychosocial correlates and service utilization of depressive and anxiety disorders in Hong Kong: The Hong Kong Mental Morbidity Survey (HKMMS). *Social Psychiatry and Psychiatric Epidemiology, 50*, 1379-1388.
- Lannin, D., Vogel, D., Brenner, R., & Tucker, J. (2015). Predicting self-esteem and intentions to seek counseling: The internalized stigma model. *The Counseling Psychologist, 43*, 64-93.
- Lee, S., Lee, M. T. Y., Chiu, M. Y. L., & Kleinman, A. (2005). Experience of social stigma by people with schizophrenia in Hong Kong. *British Journal of Psychiatry, 186*, 153-157.
- Link, B., Cullen, F., Struening, E., Shrout, P., & Dohrenwend, B. (1989). A modified labeling theory approach to mental disorders: An empirical assessment. *American Sociological Review, 54*, 400-423.
- Link, B., & Phelan, J. (2001). Conceptualizing stigma. *Annual Review of Sociology, 27*, 363-385.
- Ludwikowski, W., Vogel, D. L., & Armstrong, P. I. (2009). Attitudes towards career counseling: The role of public and self-stigma. *Journal of Counseling Psychology, 56*, 408-416.
- MacCallum, R. C., Wegener, D. T., Uchino, B. N., & Fabrigar, L. R. (1993). The problem of equivalent models in applications of covariance structure analysis. *Psychological Bulletin, 114*, 185.
- Mak, W. W. S., & Chen, S. X. (2010). Illness behaviors among the Chinese. In M. H. Bond (Ed.), *The Oxford handbook of Chinese psychology* (2nd ed., pp. 421-439). Oxford, UK: Oxford University Press.
- Mann, C. E., & Himelein, M. J. (2004). Factors associated with stigmatization of persons with mental illness. *Psychiatric Services, 55*, 185-187.
- Martens, M. P. (2005). The use of structural equation modeling in counseling psychology research. *The Counseling Psychologist, 33*, 269-298. doi:10.1177/0011000004272260

- McCarthy, J. T., Burno, M. L., & Sherman, C. A. (2010). Exploring the help-seeking attitudes of graduate students at an off-campus site. *Canadian Journal of Counseling, 44*, 208-226.
- Meade, A. W., Johnson, E. C., & Braddy, P. W. (2008). Power and sensitivity of alternative fit indices in tests of measurement invariance. *Journal of Applied Psychology, 93*, 568-592.
- Mellor, D., Carne, L., Shen, Y. C., McCabe, M., & Wang, L. (2012). Stigma toward mental illness: A cross-cultural comparison of Taiwanese, Chinese immigrants to Australia and Anglo-Australians. *Journal of Cross-Cultural Psychology, 44*, 352-364.
- Miller, M. J., & Sheu, H. (2009). Conceptual and measurement issues in multicultural psychology research. In S. D. Brown, & R. W. Lent (Eds.), *Handbook of counseling psychology* (4th ed., pp. 103-120). New York, NY: John Wiley.
- Mittal, D., Sullivan, G., Chekuri, L., Allee, E., & Corrigan, P. (2012). Empirical studies of self-stigma reduction strategies: A critical review of the literature. *Psychiatric Services, 63*, 974-981.
- Muthén, L. K., & Muthén, B. O. (2010). *Mplus user's guide: Statistical analysis with latent variables*. Los Angeles, CA: Author.
- Pescosolido, B. A., Martin, J. K., Lang, A., & Olafsdottir, S. (2008). Rethinking theoretical approaches to stigma: A framework integrating normative influences on stigma (FINIS). *Social Science & Medicine, 67*, 431-440.
- Rosen, A., Walter, G., Casey, D., & Hocking, B. (2000). Combating psychiatric stigma. An overview of contemporary initiatives. *Australian Psychiatry, 8*, 19-26.
- Sartorius, N., & Schulze, H. (2005). *Reducing the stigma of mental illness: A report from a global programme of the World Psychiatric Association*. Cambridge, UK: Cambridge University Press.
- Satorra, A., & Bentler, P. (1988). Scaling corrections for chi-square statistics in covariance structure analysis. In *Proceedings of the American Statistical Association* (Vol. 1, pp. 308-313). Alexandria, VA: American Statistical Association.
- Schreiber, R., & Hartrick, G. (2002). Keeping it together: How women use the biomedical explanatory model to manage the stigma of depression. *Issues in Mental Health Nursing, 23*, 91-105. doi:10.1080/016128402753542749
- Schwartz, S. H. (2006). A theory of cultural value orientations: Explication and applications. *Comparative Sociology, 5*, 137-182.
- Shea, M., & Yeh, C. (2008). Asian American students' cultural values, stigma, and relational self-construal: Correlates and attitudes toward professional help seeking. *Journal of Mental Health Counseling, 30*, 157-172.
- Shechtman, Z., Vogel, D. L., & Maman, N. (2010). Seeking psychological help: A comparison of individual and group treatment. *Psychotherapy Research, 20*, 30-36. doi:10.1080/10503300903307648
- Siu, H. (1996). Remade in Hong Kong: Weaving into the Chinese cultural tapestry. In T. T. Liu, & D. Faure (Eds.), *Unity and diversity: Local cultures and identities in China* (pp. 177-196). Hong Kong: Hong Kong University Press.

- Steenkamp, J. B. E., & Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. *Journal of Consumer Research*, 25, 78-107.
- Topkaya, N. (2011a). Psikolojik yardım alma nedeniyle kendini damgalama ölçeğinin geçerlik ve güvenirlik çalışması [The reliability and validity study of self-stigma of seeking help scale in a Turkish sample]. XI. Psikolojik Danışma ve Rehberlik Kongresi'nde bildiri olarak sunuldu, Ege Üniversitesi, İzmir.
- Topkaya, N. (2011b). Psikolojik yardım alma niyetinin sosyal damgalanma, tedavi korkusu, beklenen yarar, beklenen risk ve tutum faktörleriyle modellenmesi. [Structural equation analysis of willingness to seek psychological help by the roles of social stigma, treatment fears, anticipated benefits, risks, and attitudes toward therapy]. Yayınlanmamış doktora tezi, Ege Üniversitesi, İzmir, Türkiye.
- Topkaya, N. (2015). Willingness to seek psychological help among Turkish adults. *Revista de Cercetare si Interventie Sociala*, 48, 149-163.
- Towle, C. B., & Arslanoglu, T. (1998). Turkish-Americans. In L. D. Purnell, & B. J. Paulanka (Eds.), *Transcultural health care: A culturally competent approach* (pp. 1-40). Philadelphia, PA: Davis.
- Vogel, D. L., Armstrong, P. I., Tsai, P.-C., Wade, N. G., Hammer, J. H., Efstathiou, G., . . . Topkaya, N. (2013). Cross-cultural validity of the Self-Stigma of Seeking Help (SSOSH) scale: Examination across six countries. *Journal of Counseling Psychology*, 60, 303-310.
- Vogel, D. L., Bitman, R. L., Hammer, J. H., & Wade, N. G. (2013). Is stigma internalized? The longitudinal impact of public stigma on self-stigma. *Journal of Counseling Psychology*, 60, 311-316.
- Vogel, D. L., Shechtman, Z., & Wade, N. (2010). The role of public and self-stigma in predicting attitudes toward group counseling. *The Counseling Psychologist*, 38, 904-922. doi:10.1177/0011000010368297
- Vogel, D. L., Wade, N. G., & Ascheman, P. (2009). Measuring perceptions of stigmatization by others for seeking psychological help: Reliability and validity of a new stigma scale with college students. *Journal of Counseling Psychology*, 56, 301-308.
- Vogel, D. L., Wade, N., & Haake, S. (2006). Measuring the self-stigma associated with seeking psychological help. *Journal of Counseling Psychology*, 53, 325-337.
- Vogel, D. L., Wade, N., & Hackler, A. (2007). Perceived public stigma and the willingness to seek counseling: The mediating roles of self-stigma and attitudes towards counseling. *Journal of Counseling Psychology*, 54, 40-50.
- Wampold, B. E. (2001). *The great psychotherapy debate: Models, methods, and findings*. Mahwah, NJ: Lawrence Erlbaum.
- Wang, P. S., Berglund, P. A., Olfson, M., & Kessler, R. C. (2004). Delays in initial treatment contact after first onset of a mental disorder. *Health Services Research*, 39, 393-416.
- Wolter, K. (2007). The jackknife method. In K. Wolter (Ed.), *Introduction to variance estimation* (2nd ed., pp. 153-191). New York, NY: Springer.
- Wong, N., Rindfleisch, A., & Burroughs, J. E. (2003). Do reverse-worded items confound measures in cross-cultural consumer research? The case of the material values scale. *Journal of Consumer Research*, 30, 72-91.

World Health Organization. (2001). *World health report*. Retrieved from [http://www.who.int/whr/2001/media\\_centre/press\\_release/en/](http://www.who.int/whr/2001/media_centre/press_release/en/)

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