#### **ORIGINAL PAPER**



# Correlates of Stigma Toward Mental Health Service Use Among Filipino Americans and Korean Americans

Michael Park<sup>1</sup> · Yoonsun Choi<sup>2</sup> · Leopoldo J. Cabassa<sup>3</sup> · Miwa Yasui<sup>2</sup> · David Takeuchi<sup>4</sup>

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#### Abstract

Asian Americans are less likely than Whites to seek mental care and when they do, there is a substantial delay in help-seeking. Stigma associated with mental health service use is one of the major barriers to help-seeking among Asian Americans. However, few studies have examined multi-layered contextual predictors of stigma to examine joint as well as unique contributions of each predictor. Using a cross-sectional study of 376 Filipino and 412 Korean American parents from the Midwestern U.S., we investigated how individual, familial, ethnic cultural, and macro level factors were associated with stigma among immigrant parents. The findings from hierarchical regressions suggest that familial and ethnic cultural factors are prominent predictors of stigma among Korean Americans, whereas macro level factors are particularly pertinent to Filipino Americans. This study highlights the significance of subgroup specific interventions to be effective in addressing unmet mental care needs in distinct subgroups of Asian Americans.

Keywords Stigma toward mental health service use · Filipino Americans · Korean Americans

# **Background and Conceptual Framework**

Asian Americans (AA) are the fastest growing racial group in the United States and expected to become the largest immigrant group by 2065 [1]. Despite their growth and presence in many communities, AAs and their mental health needs are seriously understudied [2]. This is troubling given disturbingly high prevalence of mental health problems [3, 4] but the lowest mental health service use among AAs [5]. Certain subgroups, such as Filipino Americans (FAs) and Korean Americans (KAs), may be particularly more vulnerable. A meta-analysis of 58 studies with 21,731 AA adults revealed notably higher rates of depression among FAs (34.4%) and KAs (33.3%) than other AA subgroups [4].

- Michael Park p.michael@rutgers.edu
- School of Social Work, Rutgers, The State University of New Jersey, New Brunswick, NJ 08901, USA
- <sup>2</sup> Crown Family School of Social Work, Policy and Practice, University of Chicago, Chicago, IL, USA
- <sup>3</sup> Brown School and the Center for Mental Health Services Research, Washington University, St. Louis, MO, USA
- School of Social Work, University of Washington, Seattle, WA, USA

However, mental health service use among FAs and KAs are lower than or similar to those of other AA subgroups. For example, a study with 2285 FAs found that the rate of past-year mental health service use was 2.9% [6]. Another study with a population-based sample of Californian AAs found that only 3.8% of KAs used any type of mental health service in the past year [3].

Perceived public stigma toward mental health service use (herein referred to stigma) refers to the extent to which individuals perceive to feel stigmatized by the general public for using mental health services. It is one of the major barriers to mental health care seeking among AAs [7], and existing studies [8, 9] have identified some determinants of stigma. These factors are likely to both independently and jointly shape stigma. However, they have been rarely accounted for simultaneously in a single study to demonstrate both independent and joint contributions of each predictor to stigma. Previous efforts were also seriously hampered by aggregating diverse AA subgroups [10], despite their significant differences among these subgroups that can variably determine stigma.

Guided by the Culturally Infused Engagement (CIE) model [11], this study aims to illustrate how cultural and contextual influences from multiple systemic levels shape help-seeking and treatment engagement among FA and



KA mothers with adolescent children. Specifically, the CIE model purports that the individual process of mental health help seeking is guided by the influences at the (a) familial level (e.g., familial values, beliefs about mental health and help seeking in the family), (b) meso level (e.g., ethnic culture or community values, beliefs, and practices), and (c) macro level (e.g., racial discrimination and health policies). The infusion of these multilevel influences in turn shape culturally determined patterns of help seeking for racial and ethnically diverse individuals.

Following the CIE model, at the individual level, this study examined participants' demographic characteristics (including age, years living in the U.S., and household income), English language proficiency, mental health status, and previous mental health service use. Extant studies suggest that AAs with longer residence in the U.S. [8], mental health concerns [9], and a history of mental health service use [12] may have more favorable attitudes toward mental health service use than their counterparts without those characteristics. In addition, AAs who are older [9], have higher income [9], and have higher English language proficiency [9] are more likely to seek mental health services.

Familial factors that may influence stigma included child's mental health, intergenerational cultural conflict (ICC), and gendered family process. AA parents with children experiencing mental struggles were reported to have more favorable attitudes toward mental health service use than their counterparts [9]. ICC (i.e., tensions between parent and children due to acculturation gap) has been shown to predict more mental health service use among AAs [13]. Gendered family process has not been explored much to understand how it may be related to mental health helpseeking attitudes. However, literature on AA family process has identified gendered AA family process (e.g., parental endorsement of gendered norms) as a source of mental distress [14]. Furthermore, less acculturation to the host society has been shown to predict negative attitudes toward mental health help-seeking [8].

This study also included the constructs of "saving face" and fatalism as ethnic cultural factors of stigma [15]. Saving face (*chemyun* in KAs and *hiya* in FAs) indicates a sense of shame and propriety that gravely concerns how others think of oneself and one's family and creates conformity in the family [15]. Fatalism is *bahala na* (come what may) [15] for FAs and *palja* (everything is decided by fate) [16] for KAs. Both ethnic cultural values are associated with more negative attitudes toward mental health service use among AAs [8, 9].

Finally, as the macro level factors, this study included the impact of racial discrimination and colonialism. Experiences of racial discrimination [8] and internalized colonial mentality (i.e., internalized sense of inferiority due to the history of colonization or post-colonialism) [9, 17], have been identified

as important contributors to less favorable attitudes toward mental health service use.

Using a unique AA subgroup data and the comprehensive contextual CIE model, this study examined how multi-layered individual and contextual factors explain stigma in two distinct large AA subgroups. The findings should inform the development of group-specific guidelines to reduce stigma with an ultimate goal of improving mental health care use among underserved AAs.

## **Methods**

# **Participants and Data Collection**

This study used data from the Midwest Longitudinal Study of Asian American Families (MLSAAF), a 4-wave panel study of FA and KA families. The eligibility at baseline (2014) was families with self-identified Filipino or Korean mothers with children between 12 and 17 (or in middle or high school), living in 4 major counties near Chicago. The families were recruited from multiple sources, including phone book, ethnic community organization, public and private schools. Parent-child dyads were interviewed in Wave 1 and Wave 2, and only child participants in subsequent waves. This study used Wave 1 parent data because the measure of stigma was available only in Wave 1 parent data. In addition, Wave 1 child report of their own depressive symptoms was used to investigate its association with parent report of their perceived public stigma toward mental health service use. At baseline, 376 FA parents and 378 FA children and 412 KA parents and 408 KA children participated. The survey questionnaires were available in English, Tagalog, and Korean, and in paper and online formats. Survey was collected mostly by trained bilingual interviewers (84%) at Wave 1 and self-administered in subsequent waves. Participants received incentives (\$40 for parents and \$20 for children at Wave 1). The study was approved by the University's IRB.

Parent participants were predominantly female (95.39% FAs and 97.8% KAs) and foreign-born (91.44% FAs and 99.51% KAs) and on average, in their mid-forties [M=46.19 (SD=5.78) for FAs; M=45.31 (SD=3.76) for KAs]. FAs have been living in the U.S. longer than KAs (22.23 vs. 16.15 years) and reported significantly higher annual household income and English proficiency than KAs. Average age of youth participants were 15.24 (SD=1.87) for FAs and 14.74 (SD=1.90) for KAs.

#### Measures

Unless noted, response options were a five-point Likert scale (e.g., 1 = not at all to 5 = very likely) and a higher score indicates a higher level of the measured construct.



#### Individual Level Factors

**Demographic Variables** Age and years of living in the U.S. of participants, and annual household income (1 = < \$25 K; 2 = \$25-\$49 K; 5 = \$100-\$149 K; 6 = > \$150 K) were measured.

**English Language Proficiency** Two items from the Language, Identity, and Behavior [18] measured English language proficiency, e.g., how well they understand and speak English. (r=0.81 for FAs and 0.87 for KAs).

**Parental Depression** The 20-item modified version of the Center for Epidemiologic Studies Depression (CES-D) scale [19, 20] was used to measure depression during the week prior to the survey. Participants who scored a total of 16 or above were classified as depressed [21] ( $\alpha$ =0.85 for FAs;  $\alpha$ =0.90 for KAs).

**Lifetime Mental Health Service Use** Parent participants were asked whether they had ever been treated for mental health problems. Response options were *No* (0) or *Yes* (1).

#### **Familial Factors**

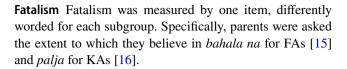
**Child's Depressive Symptoms** Survey asked child participants about their mental health status during the two weeks prior to the survey, using a 13-item scale from the Children's Depressive Inventory [22] ( $\alpha$ =0.93 for both groups).

Intergenerational Cultural Conflict Ten items from the MLSAAF asked to measure parental perception of the level of cultural gap between them and their adolescent children. Examples included "My child talks back and I find it disrespectful" and "I feel my child is too Americanized" ( $\alpha$ =0.77 for FAs;  $\alpha$ =0.75 for KAs).

**Gendered Norms** To measure parental gendered norms, 8 items from the MLSAAF were used. Examples included "Girls should not date while in high school" and "Boys should avoid anything girlish or feminine" ( $\alpha$ =0.79 for FAs;  $\alpha$ =0.80 for KAs).

# **Ethnic Cultural Factors**

**Saving Face** A total of seven items from the MLSAAF, del Prado and Church [15], and Kim, Atkinson [23] were adopted to measure the concept of saving face among parents. Examples included "Family reputation is important" and "A personal failure is a letdown for the entire family"  $(\alpha = 0.79 \text{ for FAs}; \alpha = 0.81 \text{ for KAs}).$ 



#### **Macro Level Factors**

**Racial Discrimination** A total of four items from the MLSAAF and Phinney, Madden [24] were adopted. Examples included "I have felt discriminated [against] by Whites" or "by racial and ethnic minorities like Blacks or Hispanics." ( $\alpha$ =0.79 for FAs;  $\alpha$ =0.71 for KAs).

**Colonial Mentality** Ten items from the Colonial Mentality Scale [25] measured participants' internalized sense of inferiority due to the legacy of colonization and neocolonialism [25]. Examples included "I think that a person that is part White and part Filipino/Korean is more attractive than a full-blooded Filipino/Korean" ( $\alpha$ =0.76 for FAs;  $\alpha$ =0.81 for KAs).

## **Dependent Variable**

Stigma Toward Mental Health Service Use A total of three items from the Indifference to Stigma subscale [26] was used to measure service-use stigma. Items included feeling uneasy going to mental health professionals because of what some people would think of them and believing that having been a client at the mental health services is a blot on a person's life and that having been mentally ill carries a burden of shame ( $\alpha$ =0.81 for FAs;  $\alpha$ =0.72 for KAs).

### **Analyses**

STATA version 16.1 was used for data analyses. Descriptive statistics were generated by ethnic groups and examined for statistical differences. Bivariate correlations were also generated for each subgroup.

To examine both unique and joint contributions of each cluster of predictors of stigma, hierarchical ordinary least squares (OLS) regression was estimated. Step 1 included individual level factors (three demographics, English proficiency, parental depression, and lifetime mental health service use). Each cluster was examined in subsequent steps (familial variables in Step 2, ethnic cultural variables in Step 3, and macro level variables in Step 4). Steps 2 through 4 included individual level factors of Step 1. All clusters were examined in Step 5.

The missing rates in completed survey were less than 5%. To handle missing data, we conducted multiple imputation using chained equations with 20 iterations. An additional analysis was conducted with final model (Step 5) to investigate whether the study results are sensitive



to the exclusion of a small proportion of male and/or U.S.-born participants among KAs. The study findings remained the same with and without male and U.S.-born samples. For FAs with a larger proportion of U.S.-born samples than KAs (8.56% vs. 0.49%), we conducted an analysis without male participants, while controlling for place of birth, and the study results did not change with this restricted analysis.

# Results

# Descriptives

Tables 1 and 2 summarize descriptive statistics. Of note, rates of lifetime mental health service use at Wave 1 were 5% for both groups and past year mental health service use at Wave 2 (not included in this study) were 2% for FAs and 1% for KAs. KAs showed significantly lower rates of stigma (1.89 vs. 2.36), but higher rates of depression than FAs (23.59% vs. 11.14%).

# **Hierarchical Regression Analyses**

Table 3 summarizes the regression results. We first included individual level factors (Step 1;  $R^2 = 0.03$  for both groups), which explained 3% of the variations in stigma for both groups. Only English proficiency was significantly associated with less stigma among KAs. Familial (Step 2;  $R^2 = 0.08$  for FAs;  $R^2 = 0.16$  for KAs) and ethnic cultural (Step 3;  $R^2 = 0.10$ for FAs;  $R^2 = 0.20$  for KAs) factors explained more variations in stigma among KAs than FAs. In Step 2, ICC and gendered norms were significantly associated with stigma in both groups. In Step 3, saving face was associated with stigma in both groups, while fatalism was significant only among KAs. Conversely, macro level factors (Step 4;  $R^2 = 0.09$  for FAs;  $R^2 = 0.07$  for KAs) explained 9% and 7% of the variations in stigma for FAs and KAs, respectively. Racial discrimination and colonial mentality were associated with stigma among FAs, and colonial mentality alone was significant among KAs. In the final full model (Step 5;  $R^2 = 0.15$  for FAs;  $R^2 = 0.26$  for KAs), saving face remained significant in both groups. Gendered norms and fatalism remained significant among KAs, and all macro level factors remained significant among FAs.

Table 1 Sample characteristics

	Filipino Americans	Korean Americans	All	Group differ- ences
	N (%) or M (SD)	N(%) or M (SD)	N(%) or M (SD)	
Outcome				
Stigma	2.36 (0.95)	1.89 (0.69)	2.12 (0.86)	***
Individual level factors				
Female	352 (95.39%)	401 (97.80%)	753 (96.66%)	+
Foreign-born	342 (91.44%)	410 (99.51%)	752 (95.67)	***
Age	46.19 (5.78)	45.31 (3.76)	45.72 (4.84)	*
Years in the U.S	23.23 (12.1)	16.15 (8.69)	19.52 (11.03)	***
Household income	3.96 (1.56)	3.24 (1.41)	3.58 (1.53)	***
English proficiency	4.51 (0.62)	2.9 (0.85)	3.66 (1.09)	***
Parental depression	40 (11.11%)	96 (23.59%)	136 (17.73%)	***
Lifetime service use	18 (4.85%)	19 (4.63%)	37 (4.74%)	n.s
Familial factors				
Child depressive symptoms	1.81 (0.75)	1.81 (0.73)	1.81 (0.74)	n.s
ICC	2.77 (0.65)	2.67 (0.6)	2.72 (0.62)	*
Gendered norms	3.26 (0.73)	2.92 (0.71)	3.08 (0.74)	***
Ethnic cultural factors				
Saving face	3.42 (0.72)	2.86 (0.6)	3.13 (0.72)	***
Fatalism	2.74 (1.15)	2.22 (0.99)	2.47 (1.1)	***
Macro level factors				
Racial discrimination	1.98 (0.73)	2.09 (0.63)	2.03 (0.68)	*
Colonial mentality	2.06 (0.51)	2.01 (0.51)	2.03 (0.51)	n.s

ICC Intergenerational cultural conflict



<sup>\*\*\*</sup>p < 0.001, \*\*p < 0.01, \*p < 0.05, and \*p < 0.1

 Table 2
 Correlations between study variables

	-	2	3	4	5	9	7	∞	6	10	11	12	13	41
1. Stigma	I	0.09	0.01	-0.07	$-0.12^{*}$	0.03	-0.06	-0.02	0.19***	0.37***	0.34***	0.33***	0.11*	0.19***
2. Age	-0.02	ı	$0.21^{***}$	-0.04	-0.03	0.07	-0.02	0.08	-0.03	80.0		$0.12^{*}$	-0.01	-0.02
3. Years in U.S	- 0.08	$0.18^{***}$	ı	$0.17^{***}$	0.54***	0.03	0.04	$0.10^*$	0.07	-0.05	-0.03	0.09	-0.02	0.03
4. Household Income	-0.10	90.0	$0.30^{***}$	ı	$0.35^{***}$	$-0.15^{**}$	-0.00	0.02	0.05	-0.09				-0.05
5. English Proficiency	$-0.12^{*}$	0.03	0.43***	$0.30^{***}$	I	$-0.11^{*}$	0.10	90.0	-0.02		-0.02		*	-0.06
6. Parental Depression	0.02	0.08	-0.03	$-0.18^{***}$	$-0.18^{***}$	I	-0.01	0.02	$0.12^*$			$0.16^{**}$		$0.17^{***}$
7. Lifetime Service Use	-0.10	-0.01	$0.21^{***}$	90.0	90.0	0.08	I	0.07	-0.01		- 0.09	-0.07	0.03	-0.00
8. Child Depression	90.0	0.03	-0.04	0.04	-0.06	-0.00	-0.07	I			-0.01	0.01	90.0	-0.04
9. ICC	$0.20^{***}$	0.04	$-0.20^{***}$	-0.07	$-0.12^{*}$	0.07	$-0.12^{*}$	$0.15^{**}$			$0.30^{***}$	0.04	0.10	0.17***
10. Gendered Norms	$0.20^{***}$	$0.12^*$	$-0.36^{***}$	$-0.18^{***}$	$-0.34^{***}$	0.00	$-0.20^{***}$	90.0	$0.33^{***}$		0.38***	$0.16^{***}$	$0.14^{**}$	$0.20^{***}$
11. Saving Face	$0.28^{***}$	-0.05	$-0.12^{*}$	0.02	$-0.14^{**}$	-0.06	-0.05	$0.15^{**}$	$0.29^{***}$	$0.34^{***}$	1	$0.23^{***}$	$0.13^{**}$	$0.30^{***}$
12. Fatalism	0.10	-0.07	$0.22^{***}$	-0.01	-0.04	0.05	$0.14^{**}$	- 0.06		0.05	$0.18^{***}$	ı	- 0.00	$0.18^{***}$
13. Discrimination	$0.15^{**}$	0.02	-0.00	-0.05	-0.06	$0.25^{***}$	60.0	90.0	0.23	-0.02	0.10	90.0	I	0.09
14. Colonial Mentality	0.22***	-0.05	-0.03	-0.11*	$-0.11^{*}$	$0.10^{*}$	-0.01	$0.11^{*}$	0.18***	0.21***	0.21***	$0.11^*$	80.0	I

Correlations above the diagonal is for KAs and below for FAs. ICC=Intergenerational cultural conflict

\*\*\*p < 0.001, \*\*p < 0.01, and \*p < 0.05



**Table 3** Hierarchical OLS regression results [b (95% CI)]

	Filipino Ameri	cans $(n = 376)$			Korean America	ans $(n=412)$		
	Step 2	Step 3	Step 4	Step 5	Step 2	Step 3	Step 4	Step 5
Familial level								
Child Depression	0.04 (-0.09, 0.17)	)		-0.00 (-0.13, 0.13)	-0.01 (-0.10, 0.07)			-0.02 (-0.10, 0.07)
ICC	0.23** (0.07, 0.38)			0.10 (-0.06, 0.26)	0.12* (0.01, 0.23)			0.08 (-0.03, 0.19)
Gendered Norms	0.17* (0.02, 0.33)			0.08 (-0.08, 0.23)	0.32*** (0.23, 0.41)			0.22*** (0.13, 0.31)
Ethnic cultural								
Saving Face		0.35*** (0.21, 0.48)		0.25*** (0.11, 0.40)		0.32*** (0.22, 0.43)		0.18** (0.07, 0.30)
Fatalism		0.05 (-0.04, 0.13)		0.03 (-0.06, 0.12)		0.19*** (0.12, 0.25)		0.18*** (0.12, 0.24)
Macro level								
Discrimination			0.19** (0.06, 0.33)	0.14* (0.01, 0.28)			0.10 <sup>+</sup> (-0.01, 0.21)	0.06 (-0.03, 0.16)
Colonial Mentality			0.36*** (0.17, 0.55)	0.24* (0.05, 0.43)			0.25*** (0.12, 0.38)	0.06 (-0.06, 0.19)
$R^2$	0.08	0.10	0.09	0.15	0.16	0.20	0.07	0.26

ICC=Intergenerational cultural conflict. The models were adjusted for individual level factors but the coefficients are not reported in this Table as only three of them are statistically significant and only among KAs. Those three predictors for KAs included: English proficiency in Step 1 (b = -0.10; 95% CI [-0.21, -0.00], p < 0.05) and Step 3 (b = -0.11; 95% CI [-0.20, -0.02], p < 0.05) and parental depression in Step 5 (b = -0.17; 95% CI [-0.31, -0.02], p < 0.05)

## Discussion

To address the serious public health concern, a combination of alarming rates of mental distress and the lowest use of mental health services among AAs, this study aimed to examine the multilevel influences on stigma toward mental health service use that may deter FAs and KAs from using mental health services when they need them. The findings of this study demonstrate how each cluster of predictors of stigma independently and collectively may influence stigma. The findings also highlight several important similarities and differences in how stigma may be shaped among two major AA ethnic subgroups, signifying the importance of subgroup specific interventions to be effective in addressing unmet mental health care needs in distinct subgroups of AAs.

For example, saving face, a keen attention to how others think of oneself and one's family, was a significant correlate of stigma in both groups, emerging as the robust and shared determinant of stigma. This finding is not surprising given the nature of saving face and a higher level of stigma against mental health problems in AA communities. Nevertheless, this finding highlights the importance of community level education to ease stigma. In addition, the importance of macro level factors among FAs is notable. Consistent with the existing literature [8, 9, 17], racial discrimination and colonial mentality were

significant correlates of stigma, particularly among FAs for whom they explained more variance and remained significant after accounting for all other clusters of factors. Conversely, familial and ethnic cultural factors (e.g., gendered norms, saving face and fatalism) explained twice the variance in stigma for KAs than FAs.

These findings may be explained by prior research on differences in acculturation, patterns of integration in U.S. society and immigrant/colonial history among AA subgroups [27, 28]. That is, FAs, whose country of origin is a former colony of the U.S., are highly acculturated into American society (e.g., occupational integration) [28] and may be more likely to be influenced by racial minority status. On the other hand, KAs, one of the least acculturated groups and living in neighborhoods of high co-ethnic density [27], may be more sensitive to familial and ethnic cultural factors (cultural family process and traditional values) than macro factors. Racial discrimination significantly increases mental distress [29]. It is concerning that racial discrimination can also increase stigma, which means AAs can be distressed because of racial discrimination but because of it, they may not seek needed help.

It is also important to note that gendered norms and colonial mentality were no longer significant for FAs and KAs, respectively, and ICC for both groups, when all predictors were accounted together. It is possible that other factors



<sup>\*\*\*</sup>p < 0.001, \*\*p < 0.01, \*p < 0.05, and \*p < 0.1

are more powerful than ICC, gendered norms, and colonial mentality. Alternatively, this could indicate a potential mechanism for mediation, in which familial (e.g., ICC and gendered norms) and macro level (e.g., colonial mentality) factors may enhance ethnic cultural factors such as saving face to indirectly influence stigma, which warrants further investigation in future research.

The findings have some limitations. First, we would have liked to directly examine correlates of mental health service use. However, the actual service utilization was too low to use as an outcome. This study used regional data, also from predominantly immigrant and female adults, thus has limited generalizability. Immigrants and men are less likely to seek mental health service and have more stigma than their U.S.-born and female counterparts [30, 31]. Future studies should expand in gender and immigrant status as well as regional representations.

## **New Contribution to the Literature**

Despite these limitations, this study is one of few to examine correlates of stigma toward mental health service use among AA subgroups, using one of the largest studies on FAs and KAs in the Midwest. By examining multilevel influences on stigma while focusing on ethnic subgroup differences, this study provides empirical evidence for the complexity of influences on mental help-seeking attitudes. The comprehensive approach in this study points to the need for intervention efforts to go beyond targeting individual or familial level factors, which has largely been of focus in the field. Indeed, a handful of new interventions for AAs have been integrating the salient roles of culture and race [32]. For example, a culturally grounded intervention that addressed the impact of culturally specific stressors (e.g., culturally gendered parenting norms) found reduction in depressive symptoms among AA women [33]. A pilot intervention that centered on reducing race-related stress among AA young adults reported symptom reductions in general distress, depression, anxiety, and PTSD symptoms [34]. The efficacy of these studies points to the greater need for future interventions that are additionally tailored to the cultural and racial contexts of AAs. This study also provides a unique contribution by studying AAs in the Midwest, as most studies of AA mental health and service use are from the West Coast [9]. The findings on the importance of racial minority status are particularly crucial given that Midwestern AAs report the highest incidence of racial microaggressions among AAs in the U.S. [35].

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#### References

- Cohn, D. Future immigration will change the face of America by 2065, 2015. Available from: https://www.pewresearch.org/ fact-tank/2015/10/05/future-immigration-will-change-the-faceof-america-by-2065/
- Đoàn LN, et al. Trends in clinical research including Asian American, Native Hawaiian, and Pacific Islander participants funded by the US National Institutes of Health, 1992 to 2018. JAMA Netw Open. 2019;2(7):e197432.
- Sorkin DH, Nguyen H, Ngo-Metzger Q. Assessing the mental health needs and barriers to care among a diverse sample of Asian American older adults. J Gen Intern Med. 2011;26(6):595–602.
- Kim HJ, et al. Depression among Asian-American adults in the community: systematic review and meta-analysis. PLoS ONE. 2015;10(6):e0127760.
- Substance Abuse and Mental Health Services Administration. Results from the 2019 National Survey on Drug Use and Health: summary of national findings, 2019. Available from: https://www.samhsa.gov/data/report/2019-nsduh-detailed-tables.
- Abe-Kim J, Gong F, Takeuchi D. Religiosity, spirituality, and helpseeking among Filipino Americans: religious clergy or mental health professionals? J Community Psychol. 2004;32(6):675–89.
- Sue DW, Sue DW. Counseling the culturally different: theory and practice. 4th ed. New York: Wiley; 2003.
- Martinez AB, et al. Filipino help-seeking for mental health problems and associated barriers and facilitators: a systematic review. Soc Psychiatry Psychiatr Epidemiol. 2020;55(11):1397–413.
- Kim SB, Lee YJ. factors associated with mental health help-seeking among Asian Americans: a systematic review. J Racial Ethnic Health Disparities. 2021;9:1–22.
- Kormendi NM, Brown AD. Asian American mental health during COVID-19: a call for task-sharing interventions. SSM-Mental Health. 2021;1:100006.
- Yasui M, Pottick KJ, Chen Y. Conceptualizing culturally infused engagement and its measurement for ethnic minority and immigrant children and families. Clin Child Fam Psychol Rev. 2017;20(3):250–332.
- 12. Cheng HL, et al. Self-stigma, mental health literacy, and attitudes toward seeking psychological help. J Couns Dev. 2018;96(1):64–74.
- Chang J, Natsuaki MN, Chen C-N. The importance of family factors and generation status: mental health service use among Latino and Asian Americans. Cultural Diversity Ethnic Mino Psychol. 2013;19:236–47.
- Choi Y, et al. Disempowering parenting and mental health among Asian American youth: immigration and ethnicity. J Appl Dev Psychol. 2020;66:101077.
- del Prado AM, Church AT. Development and validation of the enculturation scale for Filipino Americans. J Couns Psychol. 2010;57(4):469–83.
- Lee S-Y, Lee EE, Aranda F. Instrument adaptation, modification, and validation for cultural beliefs about colorectal cancer screening among Korean Americans. Cancer Nurs. 2018;41(3):E38–48.
- Tuazon VE, et al. Colonial mentality and mental health helpseeking of Filipino Americans. J Couns Dev. 2019;97(4):352–63.
- Birman D, Trickett EJ. The "language, identity, and behavior" (LIB) acculturation measure. Chicago: University of Illinois; 2002.
- Radloff LS. The CES-D scale: A self-report depression scale for research in the general population. Appl Psychol Meas. 1977;1(3):385–401.
- Ueno K. Sexual orientation and psychological distress in adolescence: examining interpersonal stressors and social support processes. Social Psychology Quarterly. 2005;68(3):258–77.

- Lewinsohn PM, et al. Center for epidemiologic studies depression scale (CES-D) as a screening instrument for depression among community-residing older adults. Psychol Aging. 1997;12(2):277–87.
- Angold A, et al. Development of a short questionnaire for use in epidemiological studies of depression in children and adolescents. Int J Methods Psychiatr Res. 1995;5(4):237–49.
- Kim BS, Atkinson DR, Yang PH. The Asian values scale: development, factor analysis, validation, and reliability. J Couns Psychol. 1999;46(3):342–52.
- Phinney JS, Madden T, Santos LJ. Psychological variables as predictors of perceived ethnic discrimination among minority and immigrant adolescents. J Appl Soc Psychol. 1998;28(11):937–53.
- 25. David EJR, Okazaki S. The colonial mentality scale (CMS) for Filipino Americans: scale construction and psychological implications. J Couns Psychol. 2006;53(2):241–52.
- Mackenzie CS, et al. An adaptation and extension of the attitudes toward seeking professional psychological help scale 1. J Appl Soc Psychol. 2004;34(11):2410–33.
- Min PG. Korean Americans. In: Min PG, editor. Asian Americans: contemporary trends and issues. Thousand Oaks: Pine Forge Press; 2006. p. 230–59.
- 28. Vigdor, JL. Measuring immigrant assimilation in the United States (Civic Report No. 53), 2008, c; b.
- Benner AD, et al. Racial/ethnic discrimination and well-being during adolescence: a meta-analytic review. Am Psychol. 2018;73(7):855–83.
- Pattyn E, Verhaeghe M, Bracke P. The gender gap in mental health service use. Soc Psychiatry Psychiatr Epidemiol. 2015;50(7):1089–95.

- 31. Derr AS. Mental health service use among immigrants in the United States: a systematic review. Psychiatr Serv. 2016;67(3):265-74.
- Hahm HC, Yasui M. Guest editors' introduction to the special section: Cultural adaptation of mental health interventions for Americans of East Asian descent. Am J Orthopsychiatry. 2019;89(4):458–61.
- Hahm HC, et al. Feasibility, preliminary efficacy, and safety of a randomized clinical trial for Asian Women's Action for Resilience and Empowerment (AWARE) intervention. Am J Orthopsychiatry. 2019;89(4):462–74.
- Hwang W-C, Chan CP. Compassionate meditation to heal from race-related stress: a pilot study with Asian Americans. Am J Orthopsychiatry. 2019;89(4):482–92.
- Pew Research Center. The rise of Asian Americans, 2013. Available from: https://www.pewsocialtrends.org/2012/06/19/the-rise-of-asian-americans/.

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