

Use of Mental Health–Related Services Among Immigrant and US-Born Asian Americans: Results From the National Latino and Asian American Study

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Most Asian Americans were born outside the United States, which results in a tremendous amount of cultural and linguistic diversity within this population.¹ The high proportion of immigrants in the Asian American population presents challenges for mental health systems in many communities, particularly in determining whether current services can adequately meet the needs of diverse Asian American groups. Asian immigrants may have unique patterns of help-seeking and may receive a different quality of care from mental health service providers than do their US-born counterparts.^{1,2} Without adequate data on the differences between Asian immigrants and US-born Asian Americans, it is difficult to plan for appropriate mental health services. Empirical findings on the association between immigration-related variables and mental health service use are somewhat mixed,^{3–5} although they suggest that US-born Asian Americans may be more likely to use mental health services than Asians who have immigrated to the United States.^{6–8} Information regarding Asian Americans' satisfaction with mental health care is scarce. However, data on perceptions of general health services suggest that Asian Americans are less satisfied with their medical care than their European American counterparts.^{9–12}

Levels of mental health service need and corresponding rates of service use may vary across different Asian American groups,^{13,14} as well as being affected by the availability of culturally responsive services.^{15,16} Nonetheless, in general, Asian Americans seem reluctant to seek services in response to their emotional distress.^{17–19} Even among Asian Americans who have a probable mental disorder (i.e., they met criteria for a diagnosis according to *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition [DSM-IV]*,²⁰ based on a

Objectives. We examined rates of mental health–related service use (i.e., any, general medical, and specialty mental health services) as well as subjective satisfaction with and perceived helpfulness of care in a national sample of Asian Americans, with a particular focus on immigration-related factors.

Methods. Data were derived from the National Latino and Asian American Study (2002–2003).

Results. About 8.6% of the total sample (n=2095) sought any mental health–related services; 34.1% of individuals who had a probable diagnosis sought any services. Rates of mental health–related service use, subjective satisfaction, and perceived helpfulness varied by birthplace and by generation. US-born Asian Americans demonstrated higher rates of service use than did their immigrant counterparts. Third-generation or later individuals who had a probable diagnosis had high (62.6%) rates of service use in the previous 12 months.

Conclusions. Asian Americans demonstrated lower rates of any type of mental health–related service use than did the general population, although there are important exceptions to this pattern according to nativity status and generation status. Our results underscore the importance of immigration-related factors in understanding service use among Asian Americans. (*Am J Public Health.* 2007;97:91–98. doi:10.2105/AJPH.2006.098541)

structured interview, the World Health Organization Composite International Diagnostic Interview²¹), only a small proportion (17%), according to the US Department of Health and Human Services, appear to seek services.¹ Barriers identified as negatively affecting the use of mental health–related services include cultural barriers (e.g., stigma, loss of face, causal beliefs),^{2,22,23} culturally unresponsive services (lack of language match, lack of ethnic match, poor cross-cultural understanding),¹⁸ limited access to care (cost, lack of insurance coverage),²⁴ and lack of awareness or understanding of services.^{1,25–27} Indeed, for this population, familiarity with Western modes of treatment for mental health problems may be associated with more positive attitudes toward counseling, but not necessarily a greater willingness to seek help.²⁸

Previous studies of Asian Americans have been largely based on unrepresentative samples of that population, including (1) treated populations seen in public sector mental health

service settings,^{18,29,30} (2) college students seen in university counseling settings,^{3,5,31,32} and (3) convenience samples of nonclinical community-based populations.^{4,33,34} Help-seeking, immigration factors, and treatment experiences have typically not been the major focus of these investigations. These studies have focused on a limited number of psychiatric disorders, usually major depression or psychological distress, and hence could miss the effects of other mental health conditions on service use among immigrant and US-born Asian American populations. We addressed some of these limitations by using a national sample of Asian Americans that included a wide range of psychiatric disorders among both Asian immigrants and US-born Asian Americans.

We examined use of mental health–related services during a 12-month period, as well as the associations among different immigration-related characteristics, including nativity status, years in the United States, age at time of

immigration, and generational status, on the basis of data from the first national epidemiological household survey of Asian Americans in the United States: the National Latino and Asian American Study (NLAAS).^{35–37}

The objectives of our study were to (1) examine rates of mental health–related service use among immigrant and US-born Asian Americans during a 12-month period, (2) identify patterns of help seeking as they varied by need and immigration-related characteristics, (3) explore perceptions of satisfaction with care and helpfulness, and (4) compare differences in patterns of mental health–related service use among individuals who had a probable need for services (i.e., a *DSM-IV* diagnosis within the 12 months on the basis of the structured interview²¹) and those who had no probable need for services (because the need for treatment is a major factor in seeking help³⁸). These analyses were made in coordination with the broader Collaborative Psychiatric Epidemiology Studies effort, which provided the opportunity to compare how immigration-related factors are associated with use of mental health services across 3 major racial/ethnic populations (Asians, Blacks, and Latinos).³⁷

METHODS

Participants and Sample Design

Data for this study were taken from the NLAAS, which was part of a broader effort, the Collaborative Psychiatric Epidemiology Studies.^{36,37} These studies also included the National Comorbidity Survey Replication (NCS-R) and the National Survey of American Life. The sample for our study included Asian American individuals aged 18 years or older and residing in any of the 50 states or the District of Columbia. Three nationalities were targeted for the Asian American sample: Chinese, Filipino, and Vietnamese, but individuals of other Asian ancestry were also included.

The sampling procedure has been previously documented^{35,36} and included 3 stages: (1) core sampling, in which primary sampling units (defined as metropolitan statistical areas or county units) and secondary sampling units (formed from contiguous groupings of census blocks) were selected with probability proportionate to size; from the primary and secondary units, housing

units and household members were sampled; (2) high-density supplemental sampling to oversample census block groups with 5% or greater density of target ancestry groups; and (3) second respondent sampling to recruit participants from households in which 1 eligible member had already been interviewed. Individuals of Asian ancestry who did not belong to the target groups under which these geographical areas were classified were still eligible to participate. Weighting corrections were developed to take into account the joint probabilities for selection under the 3 components of the NLAAS sampling design.

A total of 2095 Asian Americans (1611 primary respondents; 484 second respondents) were recruited between May 2002 and November 2003 as part of the larger NLAAS survey. The final weighted response rate for the combined sample was 65.6%. Detailed sample characteristics have been reported in other NLAAS studies.^{35,36,37} All participants were interviewed by trained bilingual interviewers, who used computer-assisted interviewing software. Face-to-face interviews were conducted with participants in the core and high-density samples, unless the respondent specifically requested a telephone interview, or if face-to-face interviewing was not feasible. Interviews were conducted via telephone with second respondents. As a measure of quality control, a random sample of participants who had completed interviews was re-contacted to validate the data. A \$50 incentive initially provided to participants was later increased to \$150 to reduce nonresponses.³⁷

Measures

The NLAAS instruments were available in English, Spanish, Mandarin, Cantonese, Tagalog, and Vietnamese and were translated with standard translation and back-translation techniques. The selection of the variables and the categories within each variable were uniform across the collaborators in the Collaborative Psychiatric Epidemiology Studies to allow maximal comparisons among samples of Asians, Blacks, and Latinos. Sociodemographic variables included age and self-reported ethnicity (subsequently classified as Chinese [*n*=600], Filipino [*n*=508], Vietnamese [*n*=520], and other Asian [*n*=467]).

Immigration-related characteristics included variables such as nativity status (US-born or foreign-born), years in the United States (categorized as 0–5, 6–10, 11–20, and ≥21 years), age at time of immigration (≤12, 13–17, 18–34, and ≥35 years), generational status (first generation [immigrants], second generation [born in United States and at least 1 parent immigrant], and third generation and later [born in the United States and at least both parents born in the United States]), and English-language proficiency. English-language proficiency was assessed using the question “How well do you speak English?” Responses were separated into 2 categories, “excellent/good” or “fair/poor.”

Use

Service use was assessed with the question “In the past 12 months, did you go to see [provider on list] for problems with your emotions, nerves, or your use of alcohol or drugs?” Three types of services were assessed for the study: (1) specialty mental health care (psychiatrist, psychologist, other mental health professional, or hotline); (2) general medical care (general practitioner, nurse, occupational therapist, other health professional, or any other medical doctor), and (3) any services that represented endorsement of human service providers (social worker, counselor, religious or spiritual adviser) and alternative services (healer such as herbalist, doctor of Oriental medicine, chiropractor, spiritualist, internet support group, or self-help group), as well as specialty mental health or general medical care. This variable was dichotomously coded (0=none, 1=at least once).

Treatment Ratings

Satisfaction with care was assessed with the question “In general, how satisfied are you with the treatments and services you received from [service provider] in the past 12 months—very satisfied, satisfied, neither satisfied or dissatisfied, or very dissatisfied?” Percentages of respondents who provided ratings of “very satisfied and satisfied” were identified. Perceived helpfulness of services was assessed with the question “Did the [service provider] help you a lot, some, a little, or not at all?” Percentages of respondents who provided ratings of “a lot” were identified.

Diagnosis

The primary mental disorder diagnostic instrument was the World Health Organization Composite International Diagnostic Interview.²¹ The trained interviewers used this instrument to assess the presence of psychiatric disorders at any time during the 12-month period according to criteria from the *DSM-IV*.²⁰ Because of the highly skewed distribution of the number of mental disorders, the presence of any probable mental disorder during the 12-month period was treated dichotomously (0=none; 1=any). “Any” disorder was on the basis of the diagnosis of at least 1 disorder in any of the following 3 categories: (1) mood disorders (major depressive disorder or dysthymia), (2) anxiety disorders (panic disorder, agoraphobia without panic, social phobia, generalized anxiety disorder, or posttraumatic stress disorder), or (3) substance disorders (alcohol abuse, alcohol dependence, drug abuse, drug dependence).

Analyses

The weighted prevalence of service use during a 12-month period and ratings of subjective satisfaction and perceived helpfulness of care were computed for general medical care, mental health care, and any services, stratified by ethnicity and various immigration-related characteristics (nativity status, years in the United States, English-language proficiency, age at time of immigration, and generational status). We also completed separate multivariate analyses (data not shown) to examine the potential influence that age and the presence of a disorder during the 12 months might have on differences in service use across groups. We fitted a series of separate logistic regressions for each service sector, in which each of the correlates (ethnicity, nativity status, language, and immigration-related characteristics) was entered separately, after control for respondents’ current age and the presence of a mental disorder during the 12 months.

The prevalence of use of any service during the 12 months was also compared for individuals with and without a probable *DSM-IV* diagnosis during the 12 months. Weighted percentages and 95% confidence intervals are reported. We conducted significance tests for differences among estimates for proportions using a Rao–Scott statistic

for contingency tables. Stata version 9.2 (Stata Corp, College Station, Tex) software survey commands that allow the estimation of standard errors in the presence of stratification and clustering were used to account for sample design effects. Sampling weights³⁷ were applied to all analyses to generalize results to the Asian American population in the United States

RESULTS

Among all respondents, in the previous 12 months, 8.6% sought help from any service, 4.3% sought help from general medical providers, and 3.1% sought help from mental health providers. Table 1 presents rates of service use across different sectors of care, according to ethnicity and immigration-related characteristics. US-born individuals used any services at significantly higher rates than did individuals born outside the United States, and had higher rates for specialty mental health care (6.2% vs 2.2%, respectively), but not for general medical care. However, after control for individual age and the presence of a probable mental disorder during the previous 12 months, differences between US-born and immigrant Asian Americans for use of any services disappeared (data not shown), although differences in specialty mental health care use remained. At the same time, differences between Chinese and Filipinos for use of general medical services became significant after control for age and the presence of a probable mental disorder during the previous 12 months ($P=.029$, data not shown).

Individuals who were categorized as third or later generation had higher rates of use of any services (19.3%) than did individuals who were first (7.4%) or second (8.1%) generation, as well as higher rates of both specialty mental health and general medical care use. Years in the United States and English-language proficiency were not associated with service use at all; age at time of immigration was associated with seeking help from the general medical sector only.

We were also interested in the experiences of Asian Americans who used different services for their problems. Among respondents who gained access to different mental health–related services, ratings did not

vary significantly by immigration-related characteristics but did vary by ethnicity (Table 2). A higher proportion of Filipinos (92.2%) reported that they were satisfied with the care they received from any service than did other ethnic groups (Chinese=72.1%; Vietnamese=74.9%; other Asian=88.1%).

By contrast, a significantly lower proportion of individuals born outside the United States (51.5%) than US-born individuals (72.6%) reported that treatment helped a lot (Table 3). In addition, when we specifically examined US-born individuals according to their generation, third-generation or later individuals had significantly higher perceptions of helpfulness (81.1%) than did second-generation individuals (60.2%).

A critical issue that affects the use of services is whether people have a mental disorder. We stratified the sample into respondents with and without a *DSM-IV* diagnosis during the 12-month period to assess the use of services for the ethnicity and immigration-related characteristics described in the “Methods” section. As shown in Table 4, the use of any services during the 12 months was higher among individuals who had a probable *DSM-IV* diagnosis (34.1%) during that period than among individuals without a diagnosis (6.0%). Among respondents with a probable diagnosis, no significant differences in service use were evident for ethnicity, nativity status, English-language proficiency, years in the United States, or age at time of immigration. However, respondents who were third generation or later who had a *DSM-IV* diagnosis during the 12 months sought help from any services at significantly higher rates (62.6%) than did first-generation (30.4%) or second-generation (28.8%) respondents.

DISCUSSION

We investigated patterns of mental health–related service use and ratings of subjective satisfaction and perceived helpfulness in a national sample of Asian American groups, and examined within-group variations by ethnicity and immigration-related characteristics. Our findings indicate that, overall, Asian Americans appear to have lower rates of mental health–related service use compared with the general population;

TABLE 1—Mental Health Service Use During a 12-Month Period, by Sector, for Total Asian American Sample: National Latino and Asian American Study, 2002–2003

	Any Service		Specialty Mental Health		General Medical	
	No.	Percentage (95% CI)	No.	Percentage (95% CI)	No.	Percentage (95% CI)
Ethnic origin						
Chinese (n = 600)	49	7.34 (4.77, 11.11)	24	4.03 (2.44, 6.59)	18	2.85 (1.53, 5.25)
Filipino (n = 508)	45	8.35 (5.57, 12.33)	15	2.60 (1.31, 5.12)	25	5.20 (3.01, 8.83)
Vietnamese (n = 520)	47	9.96 (5.70, 16.82)	20	3.92 (2.39, 6.36)	26	6.28 (3.30, 11.64)
Other Asian (n = 467)	38	9.15 (6.64, 12.47)	13	2.35 (1.12, 4.85)	16	4.06 (2.78, 5.90)
F statistic, <i>P</i>	F = 0.36, <i>P</i> = .747		F = 0.99, <i>P</i> = .386		F = 1.36, <i>P</i> = .265	
Nativity status						
US-born (n = 454)	56	12.65 (8.76, 17.92)	25	6.19 (3.93, 9.62)	26	6.79 (4.09, 11.07)
Foreign-born (n = 1639)	123	7.35 (5.56, 9.66)	47	2.17 (1.44, 3.26)	59	3.50 (2.38, 5.12)
F statistic, <i>P</i>	F = 4.37, <i>P</i> = .047		F = 13.16, <i>P</i> = .001		F = 3.21, <i>P</i> = .085	
English-language proficiency						
Excellent/good (n = 1292)	117	8.99 (7.22, 11.15)	50	3.50 (2.41, 5.05)	49	4.45 (3.32, 5.93)
Fair/poor (n = 797)	56	7.74 (5.09, 11.59)	21	2.25 (1.08, 4.62)	36	3.89 (2.27, 6.60)
F statistic, <i>P</i>	F = 0.38, <i>P</i> = .543		F = 1.14, <i>P</i> = .295		F = 0.18, <i>P</i> = .677	
Years in the United States^a						
0–5 (n = 302)	21	8.13 (4.56, 14.08)	4	1.10 (0.39, 3.09)	8	2.28 (0.97, 5.28)
6–10 (n = 300)	22	8.15 (4.43, 14.54)	8	1.99 (0.79, 4.90)	11	3.03 (1.87, 4.87)
11–20 (n = 532)	42	5.83 (3.60, 9.30)	17	2.03 (0.85, 4.77)	20	2.71 (1.53, 4.75)
≥21 (n = 504)	38	8.17 (5.19, 12.63)	18	3.03 (1.76, 5.16)	20	5.32 (2.80, 9.86)
F statistic, <i>P</i>	F = 0.52, <i>P</i> = .612		F = 0.97, <i>P</i> = .396		F = 2.26, <i>P</i> = .102	
Age at time of immigration, <i>y</i>^a						
≤12 (n = 237)	29	8.73 (4.92, 15.04)	15	4.10 (2.03, 8.09)	11	3.71 (1.55, 8.62)
13–17 (n = 130)	13	9.48 (4.47, 18.99)	4	2.36 (0.80, 6.79)	6	5.02 (2.00, 12.02)
18–34 (n = 886)	43	6.09 (4.23, 8.68)	14	1.63 (0.89, 2.97)	18	2.01 (1.11, 3.61)
≥35 (n = 385)	38	8.76 (6.02, 12.58)	14	1.99 (0.94, 4.19)	24	6.47 (4.01, 10.28)
F statistic, <i>P</i>	F = 1.18, <i>P</i> = .318		F = 2.12, <i>P</i> = .116		F = 4.21, <i>P</i> = .015	
Generational status						
First (n = 1639)	123	7.35 (5.56, 9.66)	47	2.17 (1.44, 3.26)	59	3.50 (2.38, 5.12)
Second (n = 272)	25	8.11 (4.87, 13.18)	9	3.51 (1.54, 7.79)	11	3.29 (1.47, 7.22)
Third or later (n = 182)	31	19.28 (12.27, 28.97)	16	10.10 (5.77, 17.11)	15	11.88 (6.34, 21.18)
F statistic, <i>P</i>	F = 7.12, <i>P</i> = .003		F = 11.49, <i>P</i> = .001		F = 6.36, <i>P</i> = .006	
All generations	179	8.56 (7.17, 10.18)	72	3.09 (2.26, 4.21)	85	4.25 (3.36, 5.36)

Note. CI = confidence interval.
^aAmong the foreign-born only.

only 8.6% of Asian Americans sought help from any services versus 17.9% of the general population in the NCS-R.³⁹ Differences in rates of help seeking persisted among individuals who had a demonstrated need for services: 34.1% of all Asian Americans who had a probable *DSM-IV* diagnosis during a 12-month period sought any services compared with 41.1% of all individuals who had a *DSM-IV* diagnosis during a 12-month period in the NCS-R sample.³⁹

However, our study also shows that, although the overall finding of low rates of help seeking among Asian Americans are consistent with findings from previous studies,^{18,19,29,30,40} there are important differences in service use between immigrants and US-born individuals. For instance, use of services differed according to nativity status: US-born individuals used mental health services at higher rates than did immigrants. Second-generation individuals

(i.e., children of immigrants) were more similar to immigrants in their use of services than to third-generation individuals. Third-generation individuals were more similar in their pattern of service use to the general population sampled in the NCS-R (19.3% vs 17.9%, respectively, for seeking any service). Furthermore, among individuals with a probable diagnosis of a mental disorder, rates of service use among third-generation Asian Americans were higher than those of

TABLE 2—Distribution (Weighted Percentages) of Reported Subjective Satisfaction With Care During a 12-Month Period, by Sector, Among All Asian American Mental Health–Related Service Users: National Latino and Asian American Study, 2002–2003

	Any Service		Specialty Mental Health		General Medical	
	No. ^a	Percentage (95% CI)	No. ^a	Percentage (95% CI)	No. ^a	Percentage (95% CI)
Ethnic origin						
Chinese	25/35	72.09 (56.70, 87.48)	15/21	71.72 (47.07, 96.37)	10/14	81.66 (60.21, 100 ^b)
Filipino	31/35	92.23 (85.28, 99.17)	13/15	85.32 (64.52, 100 ^b)	14/17	90.80 (80.42, 100 ^b)
Vietnamese	27/34	74.85 (58.07, 91.63)	16/20	83.21 (65.98, 100 ^b)	13/16	72.07 (41.18, 100 ^b)
Other Asian	23/29	88.11 (80.88, 95.33)	11/13	89.41 (76.39, 100 ^b)	8/13	75.93 (57.86, 93.99)
F statistic, <i>P</i>	F = 3.35, <i>P</i> = .031		F = 0.80, <i>P</i> = .494		F = 0.74, <i>P</i> = .513	
Nativity status						
US-born	35/47	82.33 (72.90, 91.76)	18/23	82.65 (64.62, 100 ^b)	14/22	75.17 (53.94, 96.40)
Foreign-born	71/86	84.01 (76.19, 91.83)	37/46	80.79 (67.82, 93.76)	31/38	84.76 (70.86, 98.67)
F statistic, <i>P</i>	F = 0.06, <i>P</i> = .803		F = 0.03, <i>P</i> = .874		F = 0.54, <i>P</i> = .471	
English-language proficiency						
Excellent/good	68/91	80.73 (73.91, 87.56)	36/48	78.56 (65.58, 91.53)	24/37	75.59 (61.35, 89.83)
Fair/poor	37/41	92.03 (83.38, 100 ^b)	18/20	92.15 (80.20, 100 ^b)	21/23	93.37 (83.64, 100 ^b)
F statistic, <i>P</i>	F = 2.47, <i>P</i> = .128		F = 1.75, <i>P</i> = .197		F = 3.46, <i>P</i> = .074	
Years in the United States^c						
0–5	13/16	84.86 (70.21, 99.52)	3/4	83.38 (44.64, 100 ^b)	5/6	88.48 (69.93, 100 ^b)
6–10	14/17	79.42 (50.25, 100 ^b)	6/8	79.57 (53.53, 100 ^b)	8/9	78.99 (29.44, 100 ^b)
11–20	21/26	74.02 (52.98, 95.06)	13/16	75.10 (47.05, 100 ^b)	9/12	73.55 (42.94, 100 ^b)
≥21	23/27	90.63 (80.40, 100 ^b)	15/18	83.75 (69.64, 97.86)	9/11	91.34 (77.75, 100 ^b)
F statistic, <i>P</i>	F = 0.74, <i>P</i> = .522		F = .14, <i>P</i> = .262		F = 0.46, <i>P</i> = .664	
Age at time of immigration, <i>y</i>^c						
≤12	16/19	85.67 (67.92, 100 ^b)	12/15	77.77 (61.47, 94.08)	5/7	81.50 (55.61, 100 ^b)
13–17	5/9	50.37 (12.71, 88.03)	2/4	46.31 (5.48, 98.10)	2/4	46.77 (5.74, 99.28)
18–34	24/30	85.03 (72.76, 97.30)	10/13	83.71 (59.80, 100 ^b)	9/11	89.27 (75.14, 100 ^b)
≥35	26	91.91 (79.17, 100 ^b)	13/14	92.63 (79.04, 100 ^b)	15/16	91.97 (75.27, 100 ^b)
F statistic, <i>P</i>	F = 2.42, <i>P</i> = .078		F = 3.07, <i>P</i> = .907		F = 2.18, <i>P</i> = .110	
Generational status						
First	71/86	84.02 (76.19, 91.83)	37/46	80.79 (67.82, 93.76)	31/38	84.76 (70.86, 98.67)
Second	18/24	77.68 (57.95, 97.41)	6/8	70.02 (29.62, 100 ^b)	8/11	82.26 (65.33, 99.18)
Third or later	17/23	85.53 (71.00, 100 ^b)	12/15	88.85 (72.48, 100 ^b)	6/11	71.94 (41.50, 100 ^b)
F statistic, <i>P</i>	F = 0.24, <i>P</i> = .758		F = 1.46, <i>P</i> = .237		F = 0.51, <i>P</i> = .559	
All generations	106/133	83.27 (78.04, 88.50)	55/69	81.67 (71.51, 91.83)	45/60	80.34 (69.04, 91.64)

Note. CI = confidence interval.

^aNumber of respondents that reported very satisfied or satisfied with care. Denominator is the total number of 12-month service users eligible to answer questions regarding provider satisfaction.

^bWald 95% confidence intervals produce a number greater than 100%.

^cAmong the foreign-born only.

their counterparts in the NCS-R sample (62.6% vs 41.1%).³⁹

The examination of immigration-related characteristics enabled a more refined view of service use among Asian Americans, and nativity status and generation emerged as the most important indicators of within-group differences. These differences partially extended into perceptions of their treatment

experiences. Perceived helpfulness of care varied by immigration-related characteristics: US-born Asian Americans, particularly third-generation or later, gave higher helpfulness ratings for any services. Ratings of subjective satisfaction, however, did not differ by immigration-related characteristics. These findings probably reflect the fact that ratings of “highly satisfied” and “satisfied” were

combined, so that a large majority of the sample endorsed being satisfied with care. Satisfaction ratings tend to be highly skewed even without combining categories.

We cannot determine from these data the nature of any barriers that may explain why birthplace and generation affect patterns of service use and perceived helpfulness of care. The finding that second-generation Asian

TABLE 3—Distribution (Weighted Percentages) of Reported Perceived Helpfulness of Care During a 12-Month Period, by Sector, Among All Asian American Mental Health–Related Service Users: National Latino and Asian American Study, 2002–2003

	Any Service		Specialty Mental Health		General Medical	
	No. ^a	Percentage (95% CI)	No. ^a	Percentage (95% CI)	No. ^a	Percentage (95% CI)
Ethnic origin						
Chinese	18/35	48.74 (27.43, 70.52)	11/21	54.71 (28.95, 78.17)	7/14	56.78 (24.49, 84.18)
Filipino	23/35	69.40 (48.40, 84.57)	9/15	56.69 (29.10, 80.68)	11/17	73.77 (51.78, 88.04)
Vietnamese	20/34	58.43 (39.40, 75.24)	11/20	64.64 (35.56, 85.83)	7/16	38.37 (12.29, 73.45)
Other Asian	13/29	64.18 (43.75, 80.50)	6/13	65.92 (40.60, 84.55)	4/13	51.44 (27.97, 74.29)
F statistic, <i>P</i>	F = 0.83, <i>P</i> = .466		F = 0.22, <i>P</i> = .869		F = 0.95, <i>P</i> = .417	
Nativity status						
US-born	28/47	72.55 (59.16, 82.82)	15/23	75.78 (52.94, 89.70)	10/22	56.59 (29.55, 80.20)
Foreign-born	46/86	51.45 (37.60, 65.08)	22/46	46.29 (29.18, 64.31)	19/38	56.16 (34.62, 75.61)
F statistic, <i>P</i>	F = 5.56, <i>P</i> = .027		F = 5.39, <i>P</i> = .030		F = 0.00, <i>P</i> = .982	
English-language proficiency						
Excellent/good	46/91	59.06 (44.67, 72.04)	24/48	58.23 (39.91, 74.53)	15/37	54.74 (37.34, 71.05)
Fair/poor	28/41	67.94 (51.55, 80.85)	13/20	69.58 (38.83, 89.18)	14/23	60.80 (41.93, 76.92)
F statistic, <i>P</i>	F = 0.69, <i>P</i> = .414		F = 0.50, <i>P</i> = .485		F = 0.45, <i>P</i> = .511	
Years in the United States^b						
0–5	6/16	27.81 (8.92, 60.26)	0/4	0.00 (0.00, 0.00)	4/6	62.41 (22.98, 90.23)
6–10	11/17	70.36 (34.14, 91.57)	5/8	78.72 (40.34, 95.29)	5/9	60.31 (12.64, 94.10)
11–20	15/26	54.03 (27.99, 78.05)	8/16	51.39 (21.88, 79.96)	6/12	52.40 (18.76, 84.00)
≥21	14/27	55.67 (28.76, 79.62)	9/18	42.74 (20.46, 68.42)	4/11	54.16 (17.64, 86.69)
F statistic, <i>P</i>	F = 1.16, <i>P</i> = .331		F = 2.46, <i>P</i> = .085		F = 0.04, <i>P</i> = .983	
Age at time of immigration, <i>y</i>^b						
≤12	10/19	45.17 (20.90, 71.97)	7/15	34.23 (16.00, 58.73)	1/7	17.62 (1.36, 76.69)
13–17	4/9	40.83 (12.85, 76.35)	1/4	20.26 (2.25, 73.74)	2/4	46.77 (9.37, 88.20)
18–34	14/30	44.09 (27.61, 61.97)	5/13	45.63 (20.78, 72.87)	6/11	57.27 (25.66, 83.88)
≥35	18/28	66.86 (42.31, 84.73)	9/14	74.28 (43.68, 91.49)	10/16	69.13 (37.78, 89.20)
F statistic, <i>P</i>	F = 1.19, <i>P</i> = .319		F = 2.17, <i>P</i> = .109		F = 1.26, <i>P</i> = .300	
Generational status						
First	46/86	51.45 (37.60, 65.08)	22/46	46.29 (29.18, 64.31)	19/38	56.16 (34.62, 75.61)
Second	13/24	60.17 (40.56, 76.98)	5/8	64.73 (24.36, 91.27)	6/11	70.20 (41.64, 88.61)
Third or later	15/23	81.06 (61.86, 91.86)	10/15	81.21 (60.92, 92.30)	4/11	50.38 (16.35, 84.07)
F statistic, <i>P</i>	F = 3.99, <i>P</i> = .035		F = 2.40, <i>P</i> = .107		F = 0.26, <i>P</i> = .698	
All generations	74/133	60.75 (49.67, 70.83)	37/69	60.19 (44.58, 73.96)	29/60	56.36 (40.21, 71.26)

Note. CI = confidence interval.

^aNumber of respondents that reported services helped a lot. Denominator is the total number of 12-month service users eligible to answer questions regarding provider satisfaction.

^bAmong the foreign-born only.

Americans are similar to immigrants in their patterns of service use, along with treatment ratings of perceived helpfulness, suggests that more general factors, or even cultural factors (such as stigma or loss of face), may act as constraints on service use, beyond such immigrant-specific barriers as language or knowledge of services. For instance, our data showed that English-language proficiency was

not associated with service use, despite the fact that language has been identified as a major barrier to service use in several other studies.^{23,40} Thus, in providing services to Asian American populations, mental health providers may benefit from knowing that second-generation individuals are more similar to their immigrant parents (than to their highly Americanized children) in their patterns of

service use. Nevertheless, our data also indicate that immigrants require the most intensive outreach efforts to facilitate service use. The limitations of this study must be noted. Data were based on a cross-sectional survey that used retrospective measures of service use and diagnosis, so our findings are subject to the recall and reporting biases inherent in these approaches. Further,

TABLE 4—Any Mental Health–Related Service Use by Individuals During a 12-Month Period, by Probable DSM-IV Disorder Diagnosis, Among Total Asian American Sample: National Latino and Asian American Study, 2002–2003

	Psychiatric Disorder (n = 188)		No Psychiatric Disorder (n = 1907)	
	No. ^a	Percentage (95% CI)	No. ^b	Percentage (95% CI)
Ethnic origin				
Chinese	23/61	31.02 (20.56, 43.87)	26/539	4.71 (2.48, 8.75)
Filipino	16/46	34.10 (19.65, 52.26)	29/462	5.80 (3.62, 9.17)
Vietnamese	15/35	48.46 (32.59, 64.64)	32/485	7.20 (3.93, 12.84)
Other Asian	14/46	32.99 (21.38, 47.11)	24/421	6.63 (4.91, 8.89)
F statistic, P		F = 0.63, P = .557		F = 0.60, P = .602
Nativity status				
US-born	28/69	41.44 (29.11, 54.94)	28/385	8.26 (4.82, 13.82)
Foreign-born	40/119	30.41 (21.19, 41.53)	83/1520	5.35 (3.97, 7.17)
F statistic, P		F = 1.19, P = .286		F = 2.03, P = .166
English-language proficiency				
Excellent/good	48/125	36.31 (25.91, 48.16)	69/1167	6.35 (4.92, 8.16)
Fair/poor	19/61	29.97 (15.54, 49.87)	42/736	5.31 (3.14, 8.83)
F statistic, P		F = 0.24, P = .625		F = 0.47, P = .499
Years in the United States ^c				
0–5	8/18	55.45 (28.97, 79.15)	13/284	5.16 (2.58, 10.06)
6–10	7/21	42.32 (13.93, 76.90)	15/279	4.65 (3.04, 7.06)
11–20	12/44	15.96 (9.03, 26.66)	30/488	4.81 (2.64, 8.60)
≥21	13/36	30.72 (14.94, 52.82)	25/468	6.38 (3.65, 10.92)
F statistic, P		F = 2.18, P = .117		F = 0.31, P = .758
Age at time of immigration, y ^c				
≤12	15/36	26.36 (10.56, 52.05)	14/201	5.61 (2.63, 11.59)
13–17	4/12	29.29 (9.81, 61.19)	9/118	7.45 (2.93, 17.67)
18–34	14/47	40.91 (19.70, 66.13)	29/839	3.80 (2.35, 6.08)
≥35	7/24	14.96 (5.43, 35.02)	31/361	8.30 (5.56, 12.21)
F statistic, P		F = 1.03, P = .368		F = 2.40, P = .079
Generational status				
First	40/119	30.41 (21.19, 41.53)	83/1520	5.35 (3.97, 7.17)
Second	13/41	28.76 (17.08, 44.17)	12/231	4.76 (2.35, 9.43)
Third or later	15/28	62.56 (46.20, 76.48)	16/154	13.27 (6.67, 24.66)
F statistic, P		F = 4.36, P = .024		F = 4.43, P = .022
All generations	68/188	34.06 (28.11, 40.57)	111/1907	5.98 (4.64, 7.68)
F statistic, P		F = 151.14, P = .001		

Note. CI = confidence interval; DSM-IV = Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition.

^aNumber of respondents with a psychiatric disorder during the 12-month period who used any services during the period.

Denominator is the total number of respondents who experienced a psychiatric disorder during a 12-month period.

^bNumber of respondents who used any services within a 12-month period and who had no psychiatric disorder within that period.

Denominator is the total number of respondents who never experienced any psychiatric disorder within a 12-month period.

^cAmong the foreign-born only.

although these measures have been used in other investigations of Asian American populations,^{40,41} their validity has not yet been thoroughly established across different ethnic populations, let alone across Asian American ethnic groups. Also, given our focus on immigration-related characteristics, we did not consider other factors that may

affect patterns of service use, such as gender, regional variations, and income. Finally, all “other Asians” were lumped together in a single category, even though they represent a diversity of languages, ethnicities, cultures, and practices.

However, our study represents an initial effort to present a national picture of mental

health–related service use and perceptions of treatment among different Asian American groups, further distinguished by differences in need, ethnicity, and immigration experiences. As such, it represents an important and provocative glimpse into immigrant and US-born Asian help-seeking patterns and perceptions of treatment in the United States. ■

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Contributors

J. Abe-Kim originated the study and led the writing. J. Abe-Kim and D. T. Takeuchi supervised all aspects of study implementation. S. Hong completed the analyses and assisted in drafting the article. All other authors assisted in interpretation of the findings and with preparing drafts. M. Alegria and D. T. Takeuchi were principal investigators of the NLAAS and were instrumental in the design and implementation of the entire survey.

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