



Ethnic Disparities in Mental Health among Asian Americans: Evidence from a National Sample

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Abstract

Asian Americans have become the fastest-growing racial group in the United States, yet their health profiles are still under-explored. In particular, the existing research on Asian American mental health has not devoted adequate attention to the enormous ethnic heterogeneity of the group. Grounded upon theoretical frameworks of the tri-racial system and a contextual approach, we examined ethnic disparities in Asian American mental health using data from the National Latino and Asian American Study (NLAAS). We focused on ethnic membership, immigration-related factors, socioeconomic status, and social support as the main correlates of multiple outcomes, including self-rated mental health, psychological distress, and various types of psychiatric disorders. Our project revealed considerable ethnic variations, with Asian Indian Americans displaying the most significant mental health advantage in general, Korean Americans being most prone to psychological disorders, and other ethnic groups falling somewhere in between. Although Vietnamese Americans and Chinese Americans had worse self-rated health than Asian Indian Americans, such differences disappeared once we controlled for immigration and socioeconomic status, suggesting candidate mechanisms that might explain some of the ethnic disparities. This study sheds light on the importance of analyzing ethnic heterogeneity and incorporating multiple outcomes when exploring Asian American mental health. It also calls for more data collection efforts on national samples of diverse subgroups to contribute to health disparities research and practice.

Keywords

Ethnic health disparities; mental health; Asian Americans; immigration



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ABSTRACT

Asian Americans have become the fastest-growing racial group in the United States, yet their health profiles are still under-explored. In particular, the existing research on Asian American mental health has not devoted adequate attention to the enormous ethnic heterogeneity of the group. Grounded upon theoretical frameworks of the tri-racial system and a contextual approach, we examined ethnic disparities in Asian American mental health using data from the National Latino and Asian American Study (NLAAS). We focused on ethnic membership, immigration-related factors, socioeconomic status, and social support as the main correlates of multiple outcomes, including self-rated mental health, psychological distress, and various types of psychiatric disorders. Our project revealed considerable ethnic variations, with Asian Indian Americans displaying the most significant mental health advantage in general, Korean Americans being most prone to psychological disorders, and other ethnic groups falling somewhere in between. Although Vietnamese Americans and Chinese Americans had worse self-rated health than Asian Indian Americans, such differences disappeared once we controlled for immigration and socioeconomic status, suggesting candidate mechanisms that might explain some of the ethnic disparities. This study sheds light on the importance of analyzing ethnic heterogeneity and incorporating multiple outcomes when exploring Asian American mental health. It also calls for more data collection efforts on national samples of diverse subgroups to contribute to health disparities research and practice.

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INTRODUCTION

Health disparities research has generally documented that Asian Americans have the lowest mortality, highest life expectancy, and the best mental health status when compared to whites and other racial/ethnic minorities (Williams & Sternthal, 2010). If Asian Americans indeed have distinct health advantages, in-depth investigations of the underlying mechanisms contributing to

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such positive outcomes could provide significant research and policy implications for other racial/ethnic groups. However, these findings may be an artifact attributable to multiple factors. The ostensible health benefit might have resulted from the usually monolithic analysis of the Asian American community as a whole while ignoring its tremendous ethnic heterogeneities, or it might be a consequence of the underestimation of the unique health, especially mental health, problems of Asians that standard survey instruments cannot accurately capture (Chu & Sue, 2011; Sue, Cheng, Saad, & Chu, 2012). In this study, we addressed these potential research gaps by focusing on a crucial element that is largely missing in previous scholarship—ethnic differences in mental health—using a national sample of the Asian American population composed of its major ethnic categories.

Theoretical Underpinnings

Theoretical speculations on race/ethnic relations suggest that substantial ethnic stratifications exist within the Asian American community, with a few assimilated Asian ethnic groups at the top, most groups in the middle (e.g., Chinese Americans, Japanese Americans, Asian Indians, Filipino Americans, etc.), and several darker-skinned Asian groups (e.g., Vietnamese Americans, Laotian Americans, Hmong Americans) at the bottom of the racial hierarchy in the United States (Bonilla-Silva, 2004). Empirical evidence has lent support for the tri-racial order thesis with respect to socio-demographic (e.g., income and education) and other outcomes (e.g., social integration and residential segregation) (Bonilla-Silva, 2004). To date, however, few scholars have entertained the theoretical proposition that the tri-racial hierarchies would affect health outcomes among Asian ethnic groups. If Bonilla-Silva's premises hold, we would expect to see non-trivial health gaps across Asian ethnic groups primarily corresponding to assimilation levels and skin colors. This lack of empirical investigations is largely due to a dearth of nationally representative data of Asian Americans with identifiable ethnic status.

In addition to Bonilla-Silva's proposed racial/ethnic hierarchy (2004), several other theoretical premises also accentuate ethnic diversity within the Asian American community. One such theoretical framework is the *contextual approach* to Asian American health, which highlights integrated conditions in a variety of contexts, including historical (both immigration histories and histories of home countries), cultural, geographical, community and family, structural, and institutional contexts (Islam, Trini-Shevrin, & Rey, 2009). Indeed, due to diverse national origins, Asian immigrants often migrate from countries that differ in colonization histories, undergo various migration processes and types of legal admission (e.g., family-, employer-, or school-sponsorships, or refugees), and experience varying levels of acculturative stress and settlement/adaptation patterns once arriving in America (Zhou, Ocampo, & Gatewood, 2016).

Take colonization histories, for example. European countries, the United States, and Japan have colonized such Asian countries as India, the Philippines, Korea, and China during different historical periods. Colonization has impacted the mental health of Asian Americans in complex ways. On the one hand, colonization might lead to increased “colonial mentality” (i.e., the belief that the colonizer is superior), decreased self-esteem, and worsened psychological well-being (Nadal, 2009). On the other hand, immigrants from former colonies are often more accustomed to the language and culture in host societies which may lead to mental health advantages (Mood, Jonsson, & Låftman, 2017).

Given the diverse historical and cultural contexts, it is essential to include Asian ethnic subgroups, especially those predominant ones. Among nearly 20 origin groups, Chinese, Indians,

Filipinos, Vietnamese, Koreans, and Japanese are the largest, comprising approximately 85% of the total Asian American population (Budiman, Cilluffo, & Ruiz, 2019). Unfortunately, in-depth research on ethnic heterogeneities among even the largest subgroups has been scant (Chu & Sue, 2011).

The Goals of the Current Study

To fill in the void in the literature, we examined mental health disparities among the six largest Asian ethnic groups, including Chinese, Indians, Filipinos, Vietnamese, Koreans, and Japanese, using data from the National Latino and Asian American Survey (NLAAS), the first and only of its kind (Alegria, et al., 2004). To date, the NLAAS is the unparalleled psychiatric epidemiology data with national samples of diverse ethnic groups in the United States (Islam, et al., 2010). Although the study was conducted in the early 2000s, its theoretical and empirical significance is enduring, especially given that similar data collection efforts have been absent since the NLAAS and the relative demographic profiles of Asian subgroups have remained stable in the past two decades. For example, Chinese Americans have continued to be the largest subgroup in population size, and Asian Indian Americans the most advanced in socioeconomic status since the early 2000s (Hanna & Batalova, 2020; World Population Review, 2020). An in-depth look into ethnic disparities in health using a national sample not only captures a critical snapshot of the heterogeneity of Asian Americans in the early 2000s but also has long-term implications for the status quo and the future of Asian American health.

This study focused on mental health because it is “an integral part of health” that is essential to well-being (Herrman, Saxena, & Moodie, 2005). According to the World Health Organization (WHO), there can be “no health without mental health” (Prince et al., 2007). To gain a panoramic view, we incorporated multiple outcomes, including self-rated mental health, psychological distress, and the lifetime prevalence of psychiatric disorders (any anxiety disorders, any affective disorders, and any substance abuse disorders, respectively). Guided by theoretical frameworks and empirical findings, we included major predictors of mental health including immigration-related factors, socioeconomic status (SES), and social support, aiming to examine ethnic inequalities and possible mediating mechanisms.

Major Predictors of Mental Health

Immigration-related factors. Immigration-related factors are vital in affecting the mental health of racial minorities with a large proportion of immigrants. Extensive research has documented a multitude of factors such as nativity, English language proficiency, age at immigration, duration of residence, the context of migration, and acculturative stress that contribute to Asian American mental health, often in complex ways (Gong, Xu, Fujishiro, & Takeuchi, 2011; Takeuchi, Hong, Gile, & Alegría, 2007; Takeuchi, Zane, et al., 2007; Zhang & Ta, 2009). As immigrants account for three-quarters of Asian Americans (74%), it is critical that researchers include immigration-related factors when studying their mental health to disentangle ethnic disparities (Pew Research Center, 2012).

Socioeconomic status and mental health. From the classic New Haven Study to modern-day research, numerous studies have documented the mental health effects of SES, most typically measured by education and income (Eaton & Muntaner, 2017; Hollingshead & Redlich, 1958). According to the theory of fundamental causes of disease, SES is an essential social condition that embodies health-enhancing resources, helps reduce stress, and provides a more favorable

environment as well as access to health care, all of which are conducive to promoting mental health (Link & Phelan, 1995).

However, a more nuanced understanding of the fundamental causes of disease needs to consider broader social contexts (Lutfey & Freese, 2005), in the same vein as the contextual framework of health (Islam, Trini-Shevrin, & Rey, 2009). For those racial groups with a large influx of immigrants, such as Asian Americans, the SES-health relationship might present more intricacies than what an exploration of the general population would reveal (Williams, Mohammed, Leavell, & Collins, 2010). For example, investments in education may not necessarily lead to the same economic and health rewards to Asians as those of other racial groups (Barringer, Takeuchi, & Xenos, 1990). Specifically, research has shown that the educational attainment of Asian Americans had lower returns for income than those for Whites, especially for foreign-educated immigrants (Zeng & Yu Xie, 2004). Little is known, however, about how the rewards of socioeconomic resources differ within Asian ethnic groups. Given the heterogeneous socioeconomic backgrounds among diverse Asians, it would be fruitful to unravel if SES could serve to mediate the ethnic differences in mental disorders.

Social support. Research has shown that, in addition to immigration-related variables, social support and networks are robust predictors of the psychological well-being of Asian Americans. For example, surveying Asian Americans, Zhang and Ta (2009) reported that social connections were related to self-rated mental health; Sangelang and Gee (2012) found that family support was associated with decreased odds of major depressive disorder, whereas family strain was associated with increased odds of generalized anxiety disorder. However, it is still unclear how social support would operate differently among various Asian ethnic groups. This study attempted to include family and friend support as potential mechanisms to explain ethnic variations.

METHODS

Data and Sample

We used data from the Asian sample of the National Latino and Asian American Study (NLAAS), the landmark and the *only* available national psychiatric epidemiology survey that has included a comprehensive list of Asian ethnic subgroups. Face-to-face interviews were conducted with adults 18 years or older in multiple languages during 2002 and 2003. The sampling strategy of NLAAS followed a three-stage procedure, by first selecting primary sampling units along with bordering census blocks and sampling therein, then oversampling individuals from census blocks with a high concentration of ethnic minority groups, and finally including multiple respondents from the households sample, if they fit the targeted ethnic status (Heeringa et al., 2004).

In this study, we examined and compared the epidemiologic profiles of six major Asian American ethnic groups, including Chinese, Indians, Filipinos, Vietnamese, Koreans, and Japanese. Members from other Asian ethnic groups with small sample sizes were categorized as “other Asians” in our analyses. The NLAAS collected data on 2,095 Asian Americans, and our study included 1,949 cases after deleting those with missing cases.

Measures

Mental health outcomes. This study used multiple outcomes, including self-rated mental health, the Kessler Psychological Distress Scale (K-10), and the lifetime prevalence of any anxiety disorders, affective disorders, and substance abuse disorders. For self-rated mental health, we

followed the conventional practice in health research to dichotomize the measure, with one denoting having poor or fair mental health and zero otherwise. For the Kessler Psychological Distress Scale (K-10), a summed scale was created to indicate distress levels. For lifetime psychiatric disorders, binary indicators were constructed with one denoting those meeting the *Diagnostic and Statistical Manual of Mental Disorders IV-TR* criteria and zero otherwise.

Ethnicity. Ethnic group membership can serve as a proxy for historical and cultural contexts. We included the six most prominent ethnic groups: Chinese (29.5%), Filipino (21.3%), Vietnamese (13.2%), Asian Indian (9.7%), Japanese (8.5%), Korean (7.6%), as well as other Asian (10%), by creating a series of dummy variables with Asian Indians as the reference group.

Immigration-related variables. We used two sets of immigration variables: immigration status (nativity and length of residence) and English language proficiency. For immigration status, we divided the sample into five groups: immigrants who had stayed in the United States for zero to three years, four to ten years, 11 to 20 years, and above 20 years, with native-born individuals as the reference category in our analyses. We also controlled for English language proficiency, with one denoting having a good or excellent mastery of English and zero otherwise.

Socioeconomic status. We used two sets of variables to measure one's SES: education and income. Education was measured with four dummy variables: high school graduate, some college education, and college graduate and beyond, with less than high school as the reference category. Respondents were categorized into four income groups: those with an annual household income from \$15,000 to \$34,999, from \$35,000 to \$74,999, and from \$75,000 to above, with the lowest income category (less than \$15,000) as the reference category.

Social Support. We focused on two social support measures, namely support from family members and from friends respectively, to investigate the effects of the psychosocial environment on mental health status. Three items were used to create the scale of family support (Cronbach's alpha = 0.69), including how often respondents talked on the phone or got together with their family or relatives, how much they could rely on family or relatives for help with a serious problem, and how much they could open up to family or relatives and talk about their worries. The friend support scale (Cronbach's alpha = 0.76) was based on parallel items in which family or relatives were replaced with friends.

Demographic controls. We included age, gender, and marital status as controls. Age was measured with four dummy variables, corresponding to age groups ranging from 35 to 49, from 50 to 65, and above 65, with the age group 18 to 34 years as the reference category. We used a binary variable for gender, with the female as the reference group. Respondents in our analyses were categorized into three groups based on marital status, including those married, never married, and separated/divorced.

Analytic Procedures

We first presented descriptive statistics of all variables and group differences in mental health. We ran four models for each outcome, using OLS regression for the continuous K-10 scale and logistic regression for binary dependent measures. The first model estimated the effects of ethnic membership, along with main demographic controls, to compare the marginal distribution across ethnic groups. Models 2-4 added immigration-related variables, SES, and social support variables successively, with previous models nested within latter ones. All analyses used sample weights to match demographic characteristics in the population and account for survey sampling design, using Stata 14.0 (Stata Corporation, 2015).

RESULTS

Table 1 cross-tabulates mental health conditions by ethnicity. Among all Asians, 9% rated their mental health as poor or fair, ranging from 1.9% of Asian Indian Americans and 15.8% of Chinese Americans. The average distress score was low (3 on a scale of 0-34). The average lifetime prevalence rates were 10.2% for any anxiety disorders, 9.5% for any affective disorders, and 4% for substance abuse disorders. For psychiatric disorders, it was consistent that Asian Indian Americans had the lowest prevalence rates (4.9%, 4.6%, and 0.9% for anxiety, affective, and substance abuse disorders, respectively), whereas Korean Americans had the highest (15.1%, 21%, and 15.6% respectively).

Table 1. Mental Health Outcomes by Ethnicity: National Latino and Asian American Study, 2002-2003 (N = 1,949)

	All Asian	Chinese	Vietnamese	Filipino	Korean	Japanese	Asian Indian
Mental health outcomes							
Self-rated poor/fair mental health, %	9.0	15.8	12.4	7.0	6.5	2.1	1.9
30-day psychological distress (0 – 34), mean	3.3	3.8	2.8	2.8	4.7	2.8	2.9
Lifetime affective disorders, %	9.5	9.7	8.3	7.6	21.0	10.1	4.6
Lifetime anxiety disorders, %	10.2	11.6	6.9	9.2	15.1	7.9	4.9
Lifetime substance abuse disorders, %	4.0	2.4	1.4	5.1	15.6	5.3	0.9

Table 2 provides descriptive statistics of independent variables. Our multi-ethnic sample included 30% Chinese, 21% Filipinos, 13% Vietnamese, 10% Asian Indians, 9% Japanese, 8% Koreans, and 10% other Asians. Less than half of the sample were males, and two-thirds were married. Almost half of the respondents were college-educated (44%) and had an income of over \$75,000 (40%). About 80% were immigrants, and over 60% had good English language proficiency. On average, our respondents had high levels of family and friend support.

Table 2. Weighted Sample Characteristics: National Latino and Asian American Study, 2002-2003 (N = 1,949)

	Percentage/Mean
Ethnicity	
Chinese, %	29.5
Filipino, %	21.3
Vietnamese, %	13.2
Asian Indian, %	9.7
Japanese, %	8.5
Korean, %	7.6
Other Asian, %	10.0
Demographic characteristics	
Male, %	47.3
Age (18-34), %	37.8
Age (35-49), %	33.1
Age (50-64), %	18.2

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Age (65+), %	10.9
Married, %	66.8
Never married, %	23.8
Widowed/Separated/Divorced, %	9.5
Socioeconomic Status	
Education (\geq 16 years as reference)	44.0
0 – 11 years	18.1
12 years	15.7
13 – 15 years	22.2
Household income (in \$1,000)	
0 - \$14,999, %	18.3
\$15,000 – \$34,999, %	13.1
\$35,000 – \$74,999, %	27.5
\$75,000 and above, %	40.2
Immigration	
Years in the United States	
U.S. born, %	19.8
0-3, %	8.6
5-10, %	19.2
11-20, %	27.1
\geq 21, %	25.2
Excellent/good English proficiency, %	64.5
Social Support	
Family/relative support, mean (SD)	8.8 (0.1)
Friend support, mean (SD)	8.6 (0.1)

Models in Table 3 suggest that Chinese Americans ($b = 1.86, p < .001$ in Model 1) and Vietnamese Americans ($b = 1.58, p < .01$ in Model 1) were significantly more likely than Asian Indian Americans to rate their mental health as poor or fair. However, after controlling for immigration-related factors (for Vietnamese Americans: $b = 0.65, p = ns$ in Model 2) and further including SES and social support variables (for Chinese Americans: $b = 1.18, p < .05$ in Model 2, and $b = 0.91, p = ns$ in Model 4), such differences disappeared. However, for psychological distress, there were no significant ethnic differences when comparing major ethnic groups to Asian Indian Americans.

Regarding other controls, recent immigrants (with 0-3 years of residence) and those with better English language proficiency tended to self-rate their mental health better than their counterparts. Higher SES was associated with better self-rated mental health and psychological distress, but education and income operated differently for various outcomes. Those with either higher education or income were more likely to rate their mental health as better, but only those with higher income were less likely to be distressed (i.e., education was not significant in predicting distress). While friend support was significant to predict self-rated mental health, both family support ($b = -0.17, p < .05$ in Model 4) and friend support ($b = -0.14, p < .05$ in Model 4) were significant correlates of psychological distress.

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Table 3. Models Predicting Self-Rated Mental Health (MH) and Psychological Distress: National Latino and Asian American Study, 2002-2003 (N = 1,949)

	(1) Poor or Fair Self-Rated MH	(2) Poor or Fair Self-Rated MH	(3) Poor or Fair Self-Rated MH	(4) Poor or Fair Self-Rated MH	(1) Psychological Distress	(2) Psychological Distress	(3) Psychological Distress	(4) Psychological Distress
Chinese	1.86*** (0.49)	1.18* (0.52)	0.94 (0.51)	0.91 (0.52)	0.67 (0.59)	0.13 (0.61)	0.14 (0.57)	-0.00 (0.60)
Filipino	0.89 (0.61)	0.62 (0.63)	0.44 (0.61)	0.44 (0.63)	-0.45 (0.45)	-0.50 (0.43)	-0.56 (0.41)	-0.50 (0.48)
Vietnamese	1.58** (0.54)	0.65 (0.61)	0.30 (0.59)	0.14 (0.59)	-0.36 (0.63)	-1.23 (0.72)	-1.28 (0.65)	-1.60* (0.73)
Japanese	-0.52 (0.93)	-0.61 (0.97)	-0.72 (0.95)	-0.67 (0.95)	-0.59 (0.65)	-0.34 (0.74)	-0.42 (0.74)	-0.41 (0.78)
Korean	1.07 (0.64)	0.71 (0.68)	0.62 (0.68)	0.62 (0.70)	1.29 (0.67)	1.03 (0.66)	0.93 (0.66)	0.86 (0.66)
Other Asians	1.00 (0.90)	0.58 (1.01)	0.36 (0.98)	0.37 (1.03)	-0.81 (0.44)	-1.02* (0.45)	-1.08* (0.46)	-1.08* (0.47)
Male	-0.46* (0.20)	-0.38 (0.22)	-0.36 (0.22)	-0.44 (0.23)	-0.48 (0.32)	-0.35 (0.32)	-0.31 (0.31)	-0.49 (0.32)
Age 35-49	0.98** (0.32)	0.56 (0.28)	0.63* (0.28)	0.50 (0.29)	1.02 (0.56)	0.84 (0.58)	0.89 (0.57)	0.72 (0.53)
Age 50-64	1.29*** (0.35)	0.82* (0.32)	0.74* (0.31)	0.59 (0.33)	0.48 (0.53)	0.09 (0.52)	0.10 (0.51)	-0.10 (0.49)
Age >65	1.67*** (0.35)	1.00* (0.38)	0.64 (0.40)	0.42 (0.41)	0.51 (0.70)	-0.06 (0.70)	-0.07 (0.68)	-0.41 (0.62)
Never Married	0.47 (0.26)	0.52 (0.29)	0.43 (0.32)	0.50 (0.33)	1.79** (0.59)	2.04** (0.61)	1.89** (0.55)	2.06** (0.61)
Widowed/ Separated	0.70** (0.21)	0.81*** (0.22)	0.68** (0.24)	0.73** (0.25)	0.55 (0.50)	0.67 (0.49)	0.55 (0.49)	0.66 (0.48)
Immigrant 0-3 years		-1.00* (0.48)	-1.11* (0.50)	-1.22* (0.49)		0.64 (0.53)	0.65 (0.59)	0.47 (0.59)
Immigrant 4-10 years		0.10 (0.32)	-0.00 (0.33)	-0.16 (0.30)		0.40 (0.52)	0.44 (0.49)	0.11 (0.50)
Immigrant 11-20 years		0.08 (0.34)	-0.07 (0.35)	-0.20 (0.35)		-0.11 (0.44)	-0.10 (0.43)	-0.32 (0.46)
Immigrant >20 years		0.20 (0.34)	0.19 (0.35)	0.10 (0.37)		0.78 (0.49)	0.81 (0.48)	0.68 (0.51)
Excellent/Good English		-1.43*** (0.31)	-1.19*** (0.31)	-1.11** (0.32)		-1.53*** (0.31)	-1.53*** (0.39)	-1.38*** (0.36)
High School			-0.50 (0.26)	-0.46 (0.27)			0.47 (0.54)	0.59 (0.55)

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Some College	-0.82** (0.30)	-0.75* (0.30)			0.73 (0.38)	0.89* (0.39)
College and Beyond	-0.97** (0.32)	-0.85* (0.32)			0.32 (0.50)	0.61 (0.49)
Income 1.5-3.4k	-0.70* (0.32)	-0.71* (0.31)			-0.70 (0.61)	-0.75 (0.62)
Income 3.5-7.4k	-0.74* (0.29)	-0.70* (0.28)			-0.32 (0.43)	-0.28 (0.42)
Income >7.5k	-0.55* (0.23)	-0.48 (0.24)			-0.66 (0.49)	-0.55 (0.47)
Family Support		-0.05 (0.05)				-0.17* (0.06)
Friend Support		-0.10** (0.03)				-0.14* (0.06)
Constant			12.83*** (0.27)	13.44*** (0.53)	13.97*** (0.64)	16.68*** (0.84)

Standard errors in parentheses * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4 includes lifetime measures of psychiatric disorders. Compared with Asian Indian Americans, Korean Americans were likely to suffer from any affective disorder ($b = 1.22$, $p < .05$ in Model 4), anxiety disorder ($b = 0.86$, $p < .05$ in Model 4), and substance abuse disorder ($b = 2.64$, $p < .05$ in Model 4) at any time in their life, and such significant differences remained stable even after adding various controls. Similar to Korean Americans, Chinese Americans ($b = 0.69$, $p < .05$ in Model 4) were more likely to be associated with anxiety disorders than Asian Indian Americans even after considering immigration factors, SES, and social support variables. Filipino Americans ($b = 1.80$, $p < .05$ in Model 1, and $b = 1.52$, $p = ns$ in Model 2) and Japanese Americans ($b = 1.86$, $p < .05$ in Model 1, and $b = 0.96$, $p = ns$ in Model 2) had higher rates of substance abuse disorders than Asian Indian Americans, but the differences vanished once immigration-related factors were controlled for. Having proficient English skills was associated with lower risks of lifetime affective disorders, and higher education led to higher risks. Being a recent immigrant was related to lower risks of anxiety disorders. Friend support was significantly associated with a lower likelihood of lifetime anxiety ($b = -0.07$, $p < .05$ in Model 4) and substance abuse ($b = -0.17$, $p < .01$ in Model 4) disorders.

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Table 4. Models Predicting Lifetime Prevalence of Any Psychiatric Disorders: National Latino and Asian American Study, 2002-2003 (N = 1,949)

	(1) Affective Disorder	(2) Affective Disorder	(3) Affective Disorder	(4) Affective Disorder	(1) Anxiety Disorder	(2) Anxiety Disorder	(3) Anxiety Disorder	(4) Anxiety Disorder	(1) Substance Abuse	(2) Substance Abuse	(3) Substance Abuse	(4) Substance Abuse
Chinese	0.72 (0.43)	0.47 (0.46)	0.49 (0.44)	0.47 (0.44)	0.82* (0.34)	0.69* (0.31)	0.72* (0.31)	0.69* (0.31)	1.00 (0.82)	1.00 (0.99)	1.01 (1.00)	0.89 (0.99)
Filipino	0.37 (0.42)	0.23 (0.42)	0.30 (0.40)	0.31 (0.41)	0.53 (0.28)	0.38 (0.27)	0.45 (0.26)	0.42 (0.26)	1.80* (0.86)	1.52 (1.01)	1.47 (1.01)	1.48 (1.04)
Vietnamese	0.61 (0.56)	0.32 (0.61)	0.44 (0.58)	0.43 (0.59)	0.27 (0.28)	0.11 (0.33)	0.22 (0.32)	0.12 (0.33)	0.49 (0.86)	0.84 (1.08)	0.82 (1.10)	0.61 (1.07)
Japanese	0.79 (0.57)	0.47 (0.65)	0.48 (0.67)	0.48 (0.67)	0.31 (0.49)	0.11 (0.50)	0.11 (0.51)	0.10 (0.51)	1.86* (0.77)	0.96 (0.89)	0.93 (0.88)	0.97 (0.89)
Korean	1.36* (0.59)	1.24 (0.61)	1.23* (0.56)	1.22* (0.55)	1.01* (0.41)	0.87* (0.40)	0.88* (0.39)	0.86* (0.39)	2.50** (0.90)	2.58* (1.09)	2.62* (1.06)	2.64* (1.07)
Other Asians	0.21 (0.67)	0.06 (0.65)	0.15 (0.63)	0.15 (0.64)	0.36 (0.46)	0.22 (0.45)	0.29 (0.42)	0.25 (0.42)	-0.64 (1.27)	-0.84 (1.36)	-0.88 (1.40)	-1.07 (1.38)
Male	-0.20 (0.19)	-0.19 (0.20)	-0.16 (0.19)	-0.18 (0.18)	-0.02 (0.23)	-0.03 (0.25)	-0.04 (0.24)	-0.06 (0.25)	1.33** (0.41)	1.31** (0.45)	1.29** (0.42)	1.20** (0.42)
Age 35-49	-0.19 (0.28)	-0.25 (0.29)	-0.27 (0.31)	-0.27 (0.32)	0.19 (0.22)	0.05 (0.25)	0.01 (0.26)	-0.06 (0.27)	0.05 (0.26)	0.43 (0.33)	0.44 (0.32)	0.22 (0.37)
Age 50-64	-0.42 (0.22)	-0.45 (0.28)	-0.44 (0.30)	-0.44 (0.30)	-0.01 (0.23)	-0.22 (0.25)	-0.21 (0.25)	-0.28 (0.27)	-1.63*** (0.38)	-1.29** (0.47)	-1.24* (0.46)	-1.48* (0.55)
Age >65	-0.34 (0.54)	-0.49 (0.64)	-0.53 (0.62)	-0.50 (0.67)	0.45 (0.48)	0.21 (0.50)	0.21 (0.53)	0.09 (0.53)	-0.96 (1.12)	-0.71 (1.32)	-0.71 (1.35)	-1.12 (1.26)
Never Married	0.93*** (0.25)	0.89*** (0.24)	0.70** (0.23)	0.67* (0.25)	0.59 (0.29)	0.52 (0.27)	0.46 (0.26)	0.56* (0.27)	1.23** (0.37)	1.13** (0.39)	1.14** (0.39)	1.34** (0.37)
Widowed/ Separated	1.14** (0.38)	1.11** (0.36)	1.06** (0.39)	1.06** (0.38)	0.31 (0.38)	0.28 (0.38)	0.29 (0.38)	0.33 (0.37)	0.75 (0.40)	0.48 (0.44)	0.45 (0.43)	0.63 (0.41)
Immigrant 0-3 years		-0.58 (0.40)	-0.76 (0.40)	-0.77 (0.40)		-1.42** (0.51)	-1.56** (0.52)	-1.59** (0.52)		-0.56 (0.94)	-0.48 (0.94)	-0.61 (0.94)
Immigrant 4-10 years		-0.56 (0.34)	-0.67 (0.33)	-0.69* (0.32)		-0.19 (0.31)	-0.26 (0.30)	-0.29 (0.29)		-2.14** (0.71)	-2.08** (0.69)	-2.30** (0.70)
Immigrant 11-20 years		-0.39 (0.38)	-0.36 (0.39)	-0.38 (0.39)		-0.25 (0.35)	-0.23 (0.34)	-0.26 (0.32)		-1.21 (0.72)	-1.22 (0.73)	-1.33 (0.71)
Immigrant >20 years		-0.58 (0.45)	-0.62 (0.46)	-0.63 (0.46)		0.03 (0.32)	-0.00 (0.31)	-0.02 (0.31)		-1.23* (0.51)	-1.24* (0.51)	-1.33** (0.48)
Excellent/Good English		-0.59* (0.24)	-0.73** (0.25)	-0.73** (0.24)		-0.20 (0.31)	-0.37 (0.29)	-0.33 (0.29)		0.17 (0.61)	0.25 (0.58)	0.47 (0.63)
High School			0.43 (0.47)	0.45 (0.47)			0.18 (0.38)	0.19 (0.39)			0.06 (0.53)	0.12 (0.49)

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Some College	0.82*	0.83*	0.41	0.44	-0.05	0.02
	(0.38)	(0.38)	(0.32)	(0.32)	(0.50)	(0.46)
College and Beyond	0.92*	0.95*	0.63*	0.66*	-0.27	-0.19
	(0.40)	(0.40)	(0.28)	(0.31)	(0.45)	(0.44)
Income 1.5-3.4k	-0.40	-0.39	-0.32	-0.35	0.04	-0.01
	(0.32)	(0.33)	(0.33)	(0.33)	(0.50)	(0.49)
Income 3.5-7.4k	-0.61**	-0.62**	-0.22	-0.20	-0.07	-0.06
	(0.20)	(0.20)	(0.27)	(0.27)	(0.41)	(0.38)
Income >7.5k	-0.50	-0.48	-0.17	-0.15	0.15	0.23
	(0.26)	(0.26)	(0.27)	(0.27)	(0.30)	(0.32)
Family Support		-0.04		0.02		-0.06
		(0.04)		(0.04)		(0.09)
Friend Support		0.02		-0.07*		-0.17**
		(0.04)		(0.03)		(0.06)

Standard errors in parentheses * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

DISCUSSION

Study Findings and Interpretations

Researchers frequently face formidable challenges when studying the health profiles of Asian Americans because this population is small in size yet diverse in ethnic origins. Nonetheless, the NLAAS, a unique national survey that sampled a multitude of Asian ethnic groups, offered a rare opportunity to address such voids in existing research. Exploring Asian ethnic disparities in mental health using the NLAAS, our study yielded several key findings.

First, there were substantial ethnic variations in self-reported mental health (from 2% of Japanese Americans to 16% of Chinese Americans), psychological distress (lowest in Vietnamese Americans and highest in Korean Americans), the prevalence rates of lifetime affective disorders (from 5% of Asian Indian Americans to 21% of Korean Americans), anxiety disorders (from 5% of Asian Indian Americans to 15% of Korean Americans), and substance abuse disorders (from 1% of Asian Indian Americans to 16% of Korean Americans). Such disparities demonstrated the noticeable heterogeneity within Asian Americans. Conglomerating Asians into a pan-ethnic category would hazardously conceal their diverse profiles; instead, subgroup data collection and analyses are cardinal to Asian American mental health research.

Another intriguing finding was that some Asian groups were more advantaged than others across multiple psychological outcomes. According to bivariate analyses, of these major Asian ethnic groups, Asian Indian Americans had the lowest prevalence rates of any lifetime psychiatric disorders and self-reported poor mental health, whereas Korean Americans were especially disadvantaged in psychological distress and all types of psychiatric disorders. Multivariate analyses controlling for immigration-related factors, SES, and social support could not fully explain the advantages of Asian Indians over Koreans for various psychiatric disorders, nor could any explanatory variables mediate the advantages of Asian Indians over Chinese in anxiety disorders.

Without sufficient data and appropriate measures, we could only surmise a few possibilities regarding the mental health advantages and disadvantages of Asian subgroups. For Asian Indians, traditional cultural values such as collectiveness, joint or extended family structure, community connectedness, perceptions of acceptance of the host society, cultural orientation (e.g., biculturalism or affiliation with American culture), and religiosity/spirituality may be unique protective mechanisms for their psychological well-being (Chandra, Arora, Mehta, Asnaani, & Radhakrishnan, 2016; Mann, Roberts, & Montgomery, 2017; Mehta, 1998; Roberts, Mann, & Montgomery, 2016). For example, a study based on a national sample of South Asian Indian Americans suggested that, to better understand their psychological conditions, it would be essential to attend to “their gendered, familial, and sociopolitical realities” (Masood, Okazaki, & Takeuchi, 2009).

In contrast, Korean Americans displayed unfavorable mental health outcomes; such findings based on the nationally representative sample confirmed previous research that used regional data such as the California Health Interview Survey (Park, Choi, Park, & Wenzel, 2018). Korean Americans may be confronted with distinct challenges that could lead to more disorders and distress. For instance, a study concluded that Korean immigrants’ mental health issues were “complex, chronic, and serious,” and Korean Americans often faced unique stressors without seeking professional help (Bernstein, 2007). Research also indicated that extreme behavioral

patterns (i.e., hyper-identification and over-acculturation) among Korean Americans might be related to their negative mental health status. Furthermore, a comparative study showed that Korean Americans appraised stressors as more challenging and adopted fewer problem-solving coping strategies than whites and other Asian ethnic groups such as Filipino Americans (Bjorck, Cuthbertson, Thurman, & Lee, 2001).

Additionally, findings from this study indicated that various social factors (e.g., immigration factors, SES, and social support) were correlated with mental health among Asian Americans, depending on the specific outcomes considered. In general, individuals with higher SES and more friend support were less likely to self-report poor mental health or suffer from psychiatric disorders. In the context of Asian Americans, friend support seemed to predict mental health more consistently than family support. Individuals with a higher amount of friend support rated their mental health more favorably, were less distressed, and had lower risks of anxiety and substance abuse disorders, whereas family support was only significantly associated with psychological distress.

Theoretical Contributions and Policy Implications

Our study had both theoretical contributions and policy implications. Theoretically, the findings enhanced our understanding of the *ethnic hierarchies* within the Asian community and the *contextual* approach to Asian American health. Asian Indian Americans, who are at the top of the socioeconomic chain with the highest educational attainment and median household income as well as with the highest percentage of proficient English speakers (possibly a result of the colonial history in India) (Budiman, Cilluffo, & Ruiz, 2019; Chakravorty, Kapur, & Singh, 2017; Ramakrishnan & Ahmad, 2014), also exhibited the most advantages in mental health (even after controlling for SES in the analyses). In contrast, Korean Americans were at the bottom of the mental health rankings among the groups in this study. Such results only partially supported Bonilla-Silver's (2004) theoretical conceptualization of racial/ethnic orders based on assimilation level and skin tone. Considering the benchmark indicator of assimilation (i.e., socioeconomic status) as well as the primary indicator of language assimilation (i.e., English language proficiency) (Waters & Jiménez, 2005), Asian Indians are indeed the most assimilated ethnic group (Pew Research Center, 2012). The three hundred years of colonization of the Indian subcontinent (1633-1947) by Great Britain may have inadvertently helped Indian Americans' adaptation and assimilation to the western culture (Nadal, 2008). However, Bonilla-Silva's hypothesis failed to capture the nuanced differences among Asian ethnic groups (e.g., Asian Indians are placed in the same "Honorary Whites" category as a few other ethnic groups); nor did it accurately predict the relative psychological disadvantages of Korean Americans, as his typology would suggest that dark-skinned and less-assimilated Vietnamese Americans locate at the bottom tier (Bonilla-Silva, 2004). Our findings indicated that ethnic inequalities in mental health are attributed to a broader range of factors than simply degrees of assimilation or shades of skin color.

Beyond assimilation levels, broader historical, cultural, and other sociopolitical contexts are central to understanding ethnic disparities in mental health among Asian ethnic groups. The contextual approach to Asian health (Islam, Trini-Shevrin, & Rey, 2009) may help grasp Korean Americans' psychological conditions. Koreans, and Korean Americans, have undergone tumultuous times in the past century, from being colonized (1910-1945) to the Korean War (1950-1953), and to the 1992 Los Angeles riots. These stressful and traumatic experiences have led to

negative psychological consequences, which can be encapsulated in the Korean word, *han* (Hong, 2020; Kim-Goh, Suh, Blake, & Hiley-Young, 1995; Liem, 2007). As the Korean American author Cathy Park Hong (2020) explicated in her memoir, *han* is “an emotional condition that is specific to Koreans,” referring to “a combination of bitterness, wistfulness, shame, melancholy, and vengefulness, accumulated from years of brutal colonialism, war, and U.S.-supported dictatorships that have never been politically redressed. *Han* is so ongoing that it can even be passed down: to be Korean is to feel *han*” (p. 54).

The cultural context of Chinese Americans can also lend insights into their mental health status. In particular, a few culture-bound syndromes are usually not included in standardized instruments, such as *shenkui* (anxiety and panic with somatic complaints, especially sexual dysfunctions) and *shenjing shuairuo* (neurasthenia, includes symptoms of fatigue, anxiety, headache, and neuralgia). These culture-specific conditions exhibit symptoms overlapping with those of anxiety disorders (American Psychiatric Association, 2000), which might explain that Chinese Americans had the worst self-rated mental health and a higher prevalence of generalized anxiety disorders than most other ethnic groups. Like Chinese and Koreans, each ethnic group has its unique cultural, historical, migration, and sociopolitical contexts that may bear mental health effects, and therefore it is crucial to consider contexts when studying Asian American mental health.

Besides its theoretical contributions, our study yielded significant implications for policy and practice, highlighting the need to prioritize ethnic-specific social and cultural policies and programs to promote mental health. Researchers could devote more attention to vulnerable groups (such as Korean Americans or Chinese Americans) to identify their problems, as well as learn more about the psychologically privileged groups (such as Asian Indian Americans) to shed light upon other ethnicities. For instance, practitioners, researchers, and advocates can develop programs to help Korean Americans to cope with the distinct emotion of *han* by publicly commemorating historical trauma through art to foster healing (Liem, 2007), or help Chinese Americans better understand and cope with somatized mental disorders. Group-specific programs and policies will be effective in reducing ethnic disparities and promoting Asian American mental health overall.

Directions for Future Research

Despite the aforementioned significant findings, this study had a few caveats that future research needs to address. Given the cross-sectional design of the study, we could only draw conclusions about associations but not causations. For example, individuals who had experienced psychiatric episodes in the past might be more difficult to build friend networks. While the NLAAS was a remarkable effort in data collection on Asian Americans, more longitudinal data on Asian American health and well-being are in urgent and dire need, which would disentangle the causal and temporal relationships among the variables.

Moreover, researchers should adopt a more comprehensive approach to focusing on inter-ethnic comparisons instead of treating Asians monolithically or pan-ethnically. Subgroup analyses are necessary to help identify patterns to explain ethnic disparities. In our study, for self-rated mental health, Chinese Americans and Vietnamese Americans were more likely to rate their mental health as poor or fair than Asian Indian Americans in the initial model. However, once we included immigration-related factors and SES, all significant differences disappeared, suggesting

that immigration, as well as SES factors, served as underlying mechanisms to explain the self-perceived mental health advantage among Asian Indian Americans compared to other Asian ethnic groups. However, for other mental health outcomes such as psychiatric disorders, the included mediating variables can hardly elucidate ethnic differences. Future research needs to investigate additional mechanisms to understand ethnic disparities in Asian American mental health.

Additionally, research efforts should focus on selected subgroups to identify their distinct mental health enhancing or damaging resources, which may include historical context, discrimination, ethnic identity, family cohesion, religiosity and spirituality, acculturation styles, social connection, cultural perceptions of mental illness, and intergenerational relationships. For example, intergenerational conflict is common among Asian Americans, and intergenerational trauma is particularly salient in Chinese and Vietnamese refugee families (Pham, Lui, & Rollock, 2020; Sangalang & Vang, 2017). It would be beneficial to identify ethnic-specific cultural factors and prioritize research efforts accordingly.

The NLAAS, with its national representative sample of Asian Americans, has provided a clear lens through which researchers and practitioners alike can depict the mental health profiles of multiple Asian ethnic groups, despite that the study was conducted in the early 2000s. In effect, data collections on Asian Americans present tremendous challenges, often hindered by a lack of subgroup categorizations, small sample sizes, language barriers, and geographic distributions (Islam, et al. 2010). A notable exception and an effective remedy, the NLAAS has overcome these challenges and stored abundant resources for Asian American scholars, stakeholders, and policymakers. Unfortunately, such data collection endeavors have been paused since the NLAAS, possibly due to tenable difficulties. This study calls for ongoing high-quality data collections on the national samples of heterogeneous Asian subgroups. Such ethnicity-sensitive data and analyses will be pivotal to not only reflect a diverse America empirically but also contribute to health disparities research theoretically.

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