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Abstract

Prior research has confirmed that multiple factors affect individual's psychological distress. However, there is little research specifically on Korean Americans. Therefore, the purpose of this study was to examine differences in psychological distress between Korean immigrants and other racial or ethnic groups and investigate which factors contribute to psychological distress among Korean immigrants. In the 2018 California Health Interview Survey, 191 Korean immigrants participated, among the greater total of racial or ethnic groups (N = 21,177). The data were analyzed using descriptive and inferential statistics, including independent t tests, Pearson's correlation, and hierarchical regression analyses. The findings indicated that Korean immigrants experience higher psychological distress than other racial or ethnic groups, including White, African American, Latino, other Asians, and other races in the United States. Particularly, the difference between Korean immigrants and all other Asians in the study group are significant (t =2.1, p = .039). Perceived health, social and emotional support, and a safe neighborhood were found to be the contributing factors to psychological distress (F(17, 63) = 2.64, p = .0028). The result indicated that mental health professionals need to be aware of distinct factors that may have an influence on the mental health of Korean immigrants, including language barriers, the social and emotional support that they receive, health status, and their perception of safety.

The Korean Immigrant Population in the United States

According to the U.S. Census Bureau (2018), there were 1.9 million Korean Americans in 2018, making it the fifth largest Asian American subgroup (Yu et al., 2002), although the growth of the Korean American population has been slowing down due to the decrease in emigration from Korea, most likely in response to Korea's economic growth (T. Lee, 2012). In 2017, almost half of all Korean Americans resided in California

(31%), New York (9%), and New Jersey (7%; O'Connor & Batalova, 2019). Interestingly, 74% of Korean Americans identified themselves as foreign-born or first-generation immigrants who maintain their Korean culture and heritage in their daily lives (Center for American Progress, 2015). Korean Americans are one of the most homogeneous minority groups, in that they are composed of one race, use the same language and alphabet, and share the same traditional cultures (H. B. Lee et al., 2008)

Korean Immigrants' Mental Health

Growing evidence indicates a high prevalence of depression symptoms in Korean Americans. (H. B. Lee et al., 2008). A meta-analysis study that analyzed the pooled prevalence rates of depression measured by the Center for Epidemiologic Studies Depression Scale in 58 studies found that 33.3% of Korean Americans showed depression symptoms, whereas 15.7% of Chinese Americans and 20.4% of Japanese Americans reported depression symptoms (H. J. Kim et al., 2015). Another recent study found high prevalence of depression (33%) based on the score of Center for Epidemiologic Studies Depression scale (CES-D) and anxiety disorders (17%) based on the score of Generalized Anxiety Disorder 7-item scale (GAD-7) among Korean Americans residing in the Washington, DC metropolitan area. These rates were higher than the prevalence among the general population (Koh, 2018). However, the opposite result was also reported by Hong et al. (2014), finding that the prevalence of mental illnesses among Asian Americans, including Korean Americans, is lower compared to the general population in the United States.

Psychological distress refers to the presence of nonspecific behavioral, emotional, cognitive, and psychophysiological distress associated with serious mental illnesses including depression and anxiety disorders (Kessler et al., 2002; Kessler et al., 2003). Accordingly, psychological distress has a great impact on individuals' well-being, such as lowering satisfaction with

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Keon Kim, PhD Candidate, LMSW, Fordham University Graduate School of Social Service Jieun Yoo, MSW, is a Lecturer at Yonsei University, Department of Social Welfare life (Marum et al., 2014), development of chronic diseases (McLachlan & Gale, 2018), and reducing health-related quality of life (Kwok et al., 2020). In spite of its substantial impact, psychological distress among Asian immigrants has not been a significant public health concern in the United States. This is because they (particularly first generation immigrants) are less likely to report severe psychological distress and psychiatric disorders compared to their U.S. -born counterparts (Alegría, et al., 2017). Bratter and Eschbach (2005) found a similar result from a 1997- 2001 National Health Interview Survey that Asian/Pacific Islanders were less likely to report nonspecific psychological distress than non-Hispanic Whites, African Americans, Native Americans, Mexicans, and Puerto Ricans. However, it is worthwhile to notice that there were variances in the severity of psychological distress across Asian American subgroups. Interestingly, Korean Americans are the only Asian subgroup reporting higher psychological distress than non-Hispanic Whites among Asian American subgroups (i.e., Chinese, Filipino, Vietnamese, Korean, and Japanese) in the 2011/2012 California Health Interview Survey (H. Park et al., 2020). This indicates that much less is known regarding the prevalence of mental health among Korean American immigrants, and further research is needed for this psychologically distressed population.

Potential Factors Affecting Psychological Distress among Korean Immigrants

Determinants of Mental Health Framework

Good mental health is grounded in a strong biological, psychological, behavioral, social, economic, and environmental foundation that enables people to play a meaningful role in their life within communities (Allen et al., 2014). According to multilevel social determinants of mental health framework, the course of mental illness and individuals' mental health are shaped to a great extent by the social, economic, and physical environments in which people live. (World Health Organization & Calouste Gulbenkian Foundation, 2014). Therefore, previous studies have focused on determinants of mental health framework to demonstrate

factors affecting mental health outcomes in immigrants and ethnic minorities (Alegria, et al. 2017; Primm et al., 2010). Especially, ethnic/racial minorities and immigrants are more likely to report declining mental health due to the repercussion of well-known determinants of mental health, including low socioeconomic status, experience of chronic acculturative stress, limited access to health care services, and low level of social support (Gobert, 2009; Loue, 2009). Given the known mental health disparities among ethnic groups, it is worthwhile to delve further into which factors may affect the mental health of ethnic minorities.

Potential Factors Affecting Korean Immigrants' Mental Health

The development of psychological distress and the overall mental health of racial/ethnic minorities are influenced by numerous factors, such as sociodemographic characteristics, social relationships, neighborhood environmental factors, and physical and functional health factors (Paek et al., 2019), as well as acculturation stress (Mui & Kang, 2006). In the Asian American study conducted by S. S. Lee (2020), the following independent risk factors for psychological distress among Korean Americans were identified: female gender, being born outside of the United States, lack of proficiency in English, older age, less income, and being unmarried. A few studies conducted with Korean American samples found an association between sociodemographic and environmental factors and mental health outcomes (Cho et al., 2015; J.-H. Kim et al., 2016). Korean immigrants in New York City who reported being single or living alone, low levels of education, and low income showed higher levels of depression than their counterparts (Bernstein et al., 2011). Also, respondents who had lived in the United States between 5 and 10 years reported higher depression scores than did those who had lived in the United States less than 5 years or more than 10 years. However, there is inconsistency among previous findings in factors affecting mental health outcomes. For example, age, gender, or neighborhood ethnic composition were not significantly associated with depression scores in the Korean American study by Bernstein et al. (2011), while age, gender, and neighborhood

environment were linked to depression of Korean American older adults in New York City in the study by Roh et al. (2011).

The process of adapting to a new cultural environment, which is called *acculturation*, is also associated with immigrants' and ethnic minorities' mental health (Saadi & Ponce, 2020). Previous studies indicated that recent immigrants are at risk for depression due to acculturative stress including feelings of alienation and marginality and identity confusion (Bernstein et al. 2011; Koh, 2018; Noh & Kaspar 2003; S.-Y. Park & Bernstein, 2008). This is because the acculturation process may be a source of stress when an ethnic minority experiences hardships or conflict in adapting to a new language, culture, and social customs (J. Choi et al., 2009).

Recently, researchers have shown an increased interest in the role of social support for mental health because social support is exceptionally significant for maintaining mental health (Harandi et al. 2017; Ozbay et al., 2007). For example, social support is associated with lower rates of depression because it plays a pivotal role in reducing stress and providing people with positive effects, a sense of predictability, and self-value acknowledgement (Camara et al., 2017). Particularly, more evidence has accumulated to show ways in which social support is associated with mental health and acculturative stress within multi-cultural and immigrant populations (Joo eta al., 2015; Thomas & Sumathi, 2016). Among Korean Americans, social support acts as a protective buffer that mitigates the impact of acculturative stress on mental health (J. S. Lee et al., 2004; Ra, 2016). In the same vein, recent Korean American study found that depressive symptomology is strongly associated with their lack of social support and acculturative stress (Baek, 2018).

Besides the aforementioned factors, health-related factors (i.e., health status, healthcare access, and healthy lifestyle behaviors) may also play pivotal roles in determining mental health. For example, Korean Americans with chronic conditions are more likely to have severe depressive symptoms (Roh et al., 2011). Health-related behaviors are also found to be associated with depressive symptoms among Korean Americans (Cho et al., 2015). Health insurance status also shows significant relationships with psychological distress. Among U.S. adults aged 18–64 years,

for example, those with private health insurance coverage show lower psychological distress than individuals with public or other coverage (Ward & Martinez, 2015). Low utilization and limited access to health services have been reported among Korean Americans (Li et al., 2016). This could be associated with the fact that they have the highest uninsured rate (24.1% in 2010 before the Affordable Care Act and 8.3% in 2017) among Asian groups (5%; APIAH Forum, 2019). Therefore, it is important to examine how insurance status may affect psychological distress within Korean Americans.

A large body of studies have acknowledged that Korean Americans have been underrepresented in mental health services; therefore, existing mental health services may not be effective in treating mental health problems among Korean Americans (Cho et al., 2015; N. S. Park et al., 2018). Undeniably, substantial uncertainty remains regarding the mental health risks among Korean immigrants. Moreover, the inconsistent reports on factors affecting Korean Americans' mental health from previous research warrant further study (Cho et al., 2015). Hence, there needs to be further research to identify the severity of mental health problems among Korean immigrants and contributing determinants to their poor mental health. Given the unique characteristics of Korean American immigrants, further investigation into the difference in psychological distress between Korean immigrants and other racial/ethnic groups, and finding potential factors affecting psychological distress, will contribute to increasing understanding of this population's mental health needs. Furthermore, findings of this study will provide important knowledge on the factors affecting psychological distress and will help develop culturally effective programs for Korean American population. Therefore, the current study a) examines differences in the severity of psychological distress between Korean immigrants and other racial or ethnic groups, and b) investigates which factors contribute to psychological distress among Korean immigrants.

Methods

Source of Data and Sample

A secondary data analysis of the 2018 California Health Interview Survey (CHIS) was utilized to investigate the severity of psychological distress among Korean immigrants and factors contributing to their mental health (UCLA Center for Health Policy Research, 2019). The CHIS is an annual population-based survey conducted with a representative sample of noninstitutionalized California residents. The survey employs a multistage sampling design using a random-digit dial (RDD) sample. The RDD sample was designed to include approximately 50% of landline phone numbers and 50% of cellular phone numbers for the entire samples. Surveys were conducted in multiple languages: English, Spanish, Mandarin, Cantonese, Vietnamese, and Korean. Weights were applied to the sample data for the probability of selection and a variety of other factors to produce noninstitutionalized population estimates from CHIS data.

In 2018, CHIS surveyed 21,177 adults. Since the 2018 CHIS does not include a subsample of self-rated Koreans, the authors of this study created a variable, titled Korean Immigrants, based on being born outside of the United States and language spoken at home. According to S. Choi et al. (2020), "Korean immigrant adults often remain monolingual, speaking Korean language most of the time" (p. 2). To identify unique characteristics of Korean immigrants, this study limited the sample (Korean immigrants) to only those who reported that they were born outside of the U.S and spoke Korean at home. This approach decreased the number of self-rated Asian Americans from 1,869 to 1,678 and brought the Korean immigrants' sample to n = 191. For the first purpose of the current study in comparing Korean immigrants' psychological distress with other groups, therefore, the full sample was categorized into seven groups: Korean immigrants (n = 191), White (n =12,726), African American (n = 1,222), Latino (n = 2,770), American Indian/Alaskan Native (n = 477), other Asian Americans (n = 1,678), and other single or multiple races (n = 2,113). For the second aim of this study, the 191 Korean immigrants' sample was used to examine factors affecting psychological distress.

Measures

Dependent variable: The dependent variable was severity of psychological distress. The Kessler Psychological Distress Scale (K6) was used in the CHIS to measure non-specific psychological distress among the survey participants. Respondents were asked whether they had experienced any of six emotional states (nervous, hopeless, restless, depressed, everything an effort, and worthless) in the past 30 days. The total K6 score ranges from 0 (indicating no psychological distress) to 24 (indicating severe psychological distress). The K6 scale demonstrated excellent internal consistency (Cronbach's $\alpha = .89-.92$) and criterion validity (Hootman & Cheng, 2009). K6 is considered the most efficient screening tool in predicting serious mental illness in the general population (Kessler et al., 2003).

Independent variables: Based on findings from previous studies, 17 sociodemographic, cultural, environmental, social relation, and health-related factors were selected. First, the following sociodemographic variables were included in the current study: age (14 groups from 18 years to 85+ years), gender (male vs. female), marital status (single vs. not single), educational attainment (lower or equivalent to high school diploma vs. above high school diploma), employment status (employed vs. unemployed), and poverty level (>/= 200% FPL vs. < 200% FPL). Second, significant cultural, environmental, and social relational factors were included. For racial or ethnic minorities, proficiency in English (Jia et al., 2016) and years living in the United States (Saadi & Ponce, 2020) are the two of the most important proxies associated with acculturation. Therefore, two variables (proficiency in English and years of living in the United States) were included to determine whether or not these acculturative factors are associated with psychological distress. To assess the social relational factor of Korean immigrants, receiving social and emotional support was measured by one question: "How often do you get the social and emotional support you need?" Feeling safe in the neighborhood environment was also measured by the question: "Do you feel safe in your neighborhood?" Last, health-related variables were selected based on three proxies: a) health status, b) healthcare

access, and c) healthy lifestyle behaviors. Health status includes perceived health status (excellent/very good/good vs. fair/poor), body mass index (BMI; underweight and normal vs. overweight and obese), and existence of chronic diseases (i.e., asthma, diabetes, high blood pressure, and heart disease). Healthcare access was measured by the question: "Is there a place that you usually go to when you are sick or need advice about your health?" Healthy lifestyle behaviors include frequency of exercise, healthy dietary intake (i.e., frequency of vegetable and fruit consumption per week), and current smoking status.

Data Analysis

First, this study performed descriptive statistics for sociodemographic and health-related factors, acculturation, social and emotional support, and neighborhood safety among Korean immigrants. Second, independent t tests were used to examine differences in psychological distress between Korean immigrants and seven other racial or ethnic groups (i.e., White, African American, Latino, American Indian/Alaskan Native, other Asian, and other races). Next, Pearson's correlation analysis for continuous variables and point-biserial correlation analysis for dichotomous variables were performed to find the correlation among variables. Prior to a hierarchical regression analysis, the following preliminary tests were performed to check whether the assumptions for a hierarchical regression were met or not (i.e., sample size, multicollinearity, and heteroscedasticity). Finally, a hierarchical regression was conducted with psychological distress as a dependent variable.

Results

Table 1. Characteristics of Korean Americans

Variable	Categories	N (Weighted %)		
		(n=191)		
Gender	Male	72 (38.4)		
	Female	119 (61.6)		
Age	18-64	67 (53.2)		
	65+	124 (46.8)		
Educational Attainment	Not graduated from high school	27(14.2)		
	Highschool equivalent	48 (22.2)		
	Higher than high school	116 (63.6)		
Employment	Employed	63 (44.7)		
	Unemployed	128 (55.3)		
Marital Status	Not Single (Married or living with a partner)	115 (71.0)		
	Single	76 (29.0)		
Poverty Level	>/= 200%	81 (53.9)		
	< 200%	110 (46.1)		

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Healthcare Access (Source of care)	Yes	180 (95.2)
	No	11 (4.8)
Health Status	Excellent/very good/good	99 (51.8)
	Fair/poor	92 (37.9)
Chronic Diseases	Yes	125 (53.4)
	No	66 (46.6)
BMI (kg/m ²)	>/= 25	80 (40.9)
	< 25	111 (59.1)
Smoking Status	Current Smoker	18 (11.7)
	Non-smoker	173 (88.3)
Proficiency in English	Very well/well	41 (19.6)
	Not well/not at all	150 (80.4)
Years of living in the U.S.	>15 years	25 (26)
	=/<15 years	166 (74)
Feeling Safe in	All or most of the time	149 (77.9)
Neighborhood	Some or none of the time	42 (22.1)
Social and Emotional Support	Always or usually	74 (31)
	Sometimes, rarely, never	117 (69)
	Range	M (SE)
Physical activity (# of exercise)	0-7	3.98 (.27)
Dietary intake (# of eating vegetable and fruits)	0 - ∞	12.15 (.61)

Descriptive statistics are presented in Table 1. The differences in psychological distress between Korean immigrants and other racial or ethnic groups are presented in Table 2. Korean immigrants reported the second highest level of psychological distress after American Indian/ Alaskan Natives (the weighted mean is 5.24), followed by other races, Latino, White, and other Asian Americans.

As shown in Table 2, however, there are no statistically significant differences in psychological distress were found between Korean immigrants and other racial groups, except for other Asian Americans (t=2.1, p=.039). Thus, the results indicated that Korean immigrants were more likely to have psychological distress than other Asian Americans.

statistical power (0.8), anticipated effect size (0.15), and probability level (0.05); the minimum number was found to be 159, making the sample of n=191 valid (Soper, 2020). Another assumption for a regression analysis (called the "homoscedasticity") was not tested because the current study employed a complex survey data analysis that included variance estimation methods used by the Stata's complex survey estimation command, which is robust for heteroscedasticity (StataCorp, 2021). According to the preliminary correlation analyses, four variables are correlated with psychological distress. Perceived health status (r = -.28, p=.0003), being a non-smoker (r = -.21, p = .03), receiving social and emotional support (r = -.32, p = .000) and feeling safe in the neighborhood (r = -.26, p = .003) are

Table 2. Psychological Distress Across Race/Ethnicity (n=21,177)

	N (Weighted %)	Weighted Mean ^a	t (Korean vs. Others)	SE
Korean	191 (0.9)	5.24		
White	12,726 (42.6)	3.96	1.55	.83
African American	1,222 (5.8)	4.11	1.36	.83
Latino	2,770 (22.3)	4.22	1.19	.24
AI/AN ^b	477 (0.8)	5.53	23	1.24
Other Asian	1,678 (13.9)	3.51	2.1*	.82
Other races	2,113 (13.7)	4.61	.74	.86

Note. a = Higher score indicate higher psychological distress. <math>b = AI (American Indian)/AN (Alaskan Native). *p < .05, ** p < .01, *** p < .001.

Prior to conducting a hierarchical regression, multicollinearity was tested. In the multicollinearity test, the results of the variance inflation factor (< 2.66) and collinearity tolerance (all > 0.38) suggested that the independent variables of this study are not highly correlated with one another. The assumption of multicollinearity was deemed to have been met (Acock, 2012). The minimum number for the required sample size for a hierarchical regression was estimated with desired

negatively associated with severity of psychological distress.

The hierarchical multiple regression revealed that at step 1, sociodemographic factors were not significant factors for psychological distress, nor did they contribute significantly to the regression model, F (6, 74) = 1.42, p > .05 and accounted for 10.1% of the variation in psychological distress among Koran Americans (see Table 3). Introducing the cultural and environmental factors ex-

plained an additional 21% of the variation in psychological distress in step 2. Last, adding health-related factors to the regression model, including all 17 independent variables, explained an additional 14% of the variation in psychological distress in step 3. The final model accounted for 43% of the variation in psychological distress among Koran immigrants (F(17, 63) = 2.64, p)= .0028). Out of 17 independent variables in the model, perceived health, receiving social and emotional support, and feeling safe in the neighborhood were significant predictors of psychological distress. The most significant factor affecting psychological distress was perceived health (t = -2.79, p = .007). This indicated that Korean immigrants who had excellent, very good, or good health were more likely to score 4.11 points lower on the K6 psychological distress scale. Also, Korean immigrants who received social and emotional support often scored 1.31 points lower, and those who felt safe in their neighborhoods scored 2.96 points lower in the K6 psychological distress scale (t = -2.42, p = .018and t = -2.03, p = .046, respectively).

Variable	В	SE ^a	t	(adj) R ²	ΔR^2
Step 1				0.10	
Female	.16	1.48	.11		
Age in years	.02	.04	.56		
Some college education or above	-1.95	1.72	-1.13		
Unemployed	-1.17	1.67	70		
Married or living w/partner	83	2.04	41		
Poverty level	-1.92	1.78	-1.08		

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Step 2				0.29	0.21
Female	38	1.54	25		
Age	01	.06	13		
Some college education or above	-1.77	1.64	-1.07		
Unemployed	71	1.39	51		
Married or living w/partner	20	1.85	11		
<200% FPL	-1.36	1.43	95		
Healthcare access (Source of care)	1.37	2.92	.47		
Perceived health (Excellent/very good/good)	-4.11	1.51	-2.71**		
Having Chronic disease	19	1.59	13		
BMI (=/< 25)	-1.32	1.37	96		
# of exercise	.24	.33	.72		
# of eating vegetables and fruits	12	.12	97		
Non-smoker	-3.31	2.86	-1.16		
Step 3				0.43	0.14
Female	67	1.27	53		
Age	01	.05	21		
Some college education or above	-1.25	1.29	97		

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Employed and not looking for a job	.28	1.41	.20	
Married or living w/partner	86	1.62	53	
<200% FPL	86	1.28	67	
Healthcare access (Source of care)	2.34	3.09	.76	
Perceived health (Excellent/very good/good)	-3.56	1.28	-2.79**	
Having chronic disease	-1.01	1.51	67	
BMI (=< 25)	-1.51	1.13	-1.33	
# of exercise	.11	.30	.37	
# of eating vegetables and fruits	07	.12	57	
Non-smoker	-1.77	2.53	70	
Proficiency in English (very well/well)	-1.45	1.42	-1.02	
Lived in the U.S. more than 15 years	.84	1.56	.54	
Receiving social and emotional support	-1.31	.55	-2.42*	
Safe neighborhood	-2.96	1.46	-2.03*	

Note. a = Using the mean squared error formula called "Jackknife." * p < .05, ** p < .01, *** p < .001.

Discussion

In this population-based study, psychological distress levels were not significantly different between Korean immigrants and other racial/ ethnic groups, although Korean immigrants showed the highest psychological distress except for American Indian/Alaskan Natives. In Particular, only significant discrepancy in psychological distress was found between Korean immigrants and other Asian Americans. This is somewhat consistent with the previous findings that Korean immigrants reported higher levels of psychological distress than non-Hispanic White elderly (Min et al., 2005). It is noteworthy that a growing body of studies found that Asian Americans are lower in prevalence of mental illnesses (Hong et al., 2014), and they are considered a group that reports lower psychological distress than the U.S. general population (Bloom & Black, 2016). Most importantly, our findings suggest that Korean Americans are more vulnerable to psychological distress than other Asian Americans. We should note that Korean Americans have often been aggregated with "other" Asian groups when reporting health data (Holland & Palaniappan, 2012). Generalizing findings from one particular Asian category or from an aggregate Asian category may be problematic (Saadi & Ponce, 2020). This may hide the potentially disproportionate prevalence of mental illness and severity of psychological distress and may not reflect an accurate picture of the characteristics of Korean immigrants who have not acculturated to the United States. Being aware of these differences in background and health characteristics may help providers to better serve Asian American subgroups including Korean Americans.

In regard to health-related factors, only perceived health status was shown to have a beneficial effect on psychological distress, and its significance was sustained even after this study controlled for the effects of sociodemographic, acculturative, social, and environmental factors. This result is congruent with the study of Jang et al. (2006) that showed perceived health status is associated with mental health status among older Korean Americans in two Florida cities: Tampa and Orlando. In the current study, however, health behaviors (i.e., exercise, smoking, and dietary intake), BMI, having chronic

diseases, or healthcare access did not show significance in association with psychological distress among Korean immigrants in California.

The sample showed a high rate of low proficiency in speaking English (80%), even though 74% of respondents have lived in the United States for more than 15 years. In contrast to earlier findings on the significant associations between acculturation factors (i.e., length of living in the United States and English proficiency) and depressive symptoms (Bernstein et al., 2011; Islam et al., 2016), this study indicated that acculturation factors are not shown to be contributing factors to psychological distress among Korean Americans. The possible explanation for these results may be because the sample of this study is homogenous since the sample criteria for this study were speaking Korean at home and being born outside of the United States.

Important elements to consider when studying immigrant groups is that neighborhood environmental factors may contribute to mental health. These findings suggest that the safer Korean immigrants feel in the neighborhood, the less psychological distress they experience. This is congruent with the previous finding of Roh et al. (2011) that there is a strong link between perceived neighborhood safety and depressive symptoms among Korean Americans. The direct link between perceived neighborhood safety and psychological distress can be explained by other mediators, including feelings of powerlessness, social isolation, and mistrust (Booth et al., 2012). The findings of their study can support the reason why Korean immigrants' safety in neighborhoods affects psychological distress.

Korean Americans are one of the ethnic minority groups that are largely foreign-born and primarily Korean speaking, which means they suffer from varying degrees of acculturative stress (S.-Y. Park & Bernstein, 2008). For immigrants, having sufficient social support is pivotal to decreasing acculturative stress (Poyrazli et al., 2004) and increasing their sense of community and satisfaction with life (Hombrados-Mendieta et al., 2019). In Korean American studies, social support was also found to be a protective factor for mental health because it has a buffering role in reducing the impact of acculturative stress on depression rates of Korean immigrants (J. Choi et al., 2009; M. T. Kim et al., 2005). Korean immigrants reported a similar amount of social support

from family members, friends, and significant others (Koh, 2018). A previous study conducted with older Korean immigrants and non-Hispanic White elders found that increased social support significantly decreased psychological distress among only older Korean immigrants (Min et al., 2005). This study supports the previous finding that Korean immigrants with high perceived social and emotional support are less likely to suffer from psychological distress. Findings on significant factors point to the usefulness of addressing social support and strengthening available social support resources for Korean Americans who struggle with psychological distress.

Strengths and Limitations

A strength of this study is that data were drawn from a population-based survey that was conducted in various languages. However, these study results should be interpreted with some degree of caution, given that the study sample of Korean immigrants were relatively small and were selected based on the criteria of language spoken at home and immigration to the United States. There could have been elevated chances to exclude Korean Americans who speak English at home and are successfully accultured into U.S. society from this study. Next, the cross-sectional research design limits the revelation of causal inferences regarding risk factors affecting psychological distress among Korean Americans. It seems likely many factors that were tested in this study are bidirectional with psychological distress. Thus, longitudinal studies could help to determine factors affecting psychological distress. Last, the CHIS was conducted in California only, and this may limit generalizability to all Korean Americans and the general population in the United States.

Conclusion

This study reviewed multiple factors which may affect psychological distress among Korean immigrants. Primarily, perceived health status, safety in the neighborhood, and social and emotional support have the greatest influence on psychological distress. Although Korean immigrants possess a wide range of strengths, such as an education-oriented culture, high motivation for upward mobility, economic achievement, and family ties (Y.-S. Kim & Naughton, 1993), they are also a vulnerable population that are more likely to experience acculturative distress, language barriers, a lack of resources, and psychological distress. When treating Korean immigrants, therefore, it is strongly recommended that mental health service professionals be aware of distinct factors from the general population that may influence the mental health of Korean immigrants, including language barriers, social and emotional support that they receive, health status, and perception of their safety. In keeping with these findings, intervention strategies that modify protective and risk factors are needed to reduce psychological distress at the individual and environmental levels for Korean Americans. More Korean-specific research is needed to better understand the unique needs of Korean Americans.

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References

- Acock, A. C. (2012). A gentle introduction to Stata (4th ed.). Stata Press.
- Alegría, M., Álvarez, K., & DiMarzio, K. (2017). Immigration and mental health. *Current Epidemiology Reports*, 4(2), 145–155. doi:10.1007/s40471-017-0111-2
- Allen, J., Balfour, R., Bell, R., & Marmot, M. (2014). Social determinants of mental health. *International Review of Psychiatry*, 26(4), 392–407. doi:10.3109/09540261.2014.928270.
- Asian & Pacific Islander American Health Forum. (2019). Snapshot: Asian American, Native Hawaiian, and Pacific Islander health. https://www.apiahf.org/wpcontent/uploads/2017/09/August2019_SnapshotAANHPIHealth_Fact sheet-3.pdf
- Baek, K. E. (2018). A cross-sectional study on Korean American mental health challenges and help-seeking behavior (Order No. 10936865) [Doctoral disertation, Loma Linda University]. ProQuest Disseration Publishing.
- Bernstein, K. S., Park, S. Y., Shin, J., Cho, S., & Park, Y. (2011). Acculturation, discrimination and depressive symptoms among Korean immigrants in New York City. *Community Ment Health J, 47*(1), 24–34. doi:10.1007/s10597-009-9261-0
- Bloom, B., & Black, L. I. (2016). *Health of non-Hispanic Asian adults: United States*, 2010–2014 (Data Brief No. 247) National Center for Health Statistics. Retrieved January 3, 2022, from https://www.cdc.gov/nchs/data/databriefs/db247.pdf
- Booth, J., Ayers, S. L., & Marsiglia, F. F. (2012). Perceived neighborhood safety and psychological distress: Exploring protective factors. *The Journal of Sociology & Social Welfare, 39*(4), 137–156. https://scholarworks.wmich.edu/jssw/vol39/iss4/8
- Bratter, J. L., & Eschbach, K. (2005). Race/ethnic differences in nonspecific psychological distress: Evidence from the National Health Interview Survey. *Social Science*

- *Quarterly*, 86(3), 620-644. doi.org/10.1111/j.0038-4941.2005.00321.x
- Camara, M., Bacigalupe, G., & Padilla, P. (2017). The role of social support in adolescents: Are you helping me or stressing me out? *International Journal of Adolescence and Youth*, 22(2), 123–136. doi.org/10.1080/02673843.2013.875480
- Center for American Progress. (2015). Who are Korean Americans? https://
 cdn.americanprogress.org/wp-content/
 uploads/2015/04/AAPI-Koreanfactsheet.pdf
- Cho, S., Park, S. Y., Bernstein, K. S., Roh, S., & Jeon, G. S. (2015). Socio-demographic and health behavioral correlates of depressive symptoms among Korean Americans. *Community Mental Health Journal*, 51(4), 414–423. doi:10.1007/s10597-014-9802-z
- Choi, S., Hong, J. Y., Kim, Y. J., & Park, H. (2020). Predicting psychological distress amid the COVID-19 pandemic by machine learning: Discrimination and coping mechanisms of Korean immigrants in the US. *International Journal of Environmental Research and Public Health*, 17(17), 6057. doi:10.3390/ijerph17176057
- Choi, J., Miller, A., & Wilbur, J. (2009). Acculturation and depressive symptoms in Korean immigrant women. *Journal of Immigrant and Minority Health*, 11(1), 13–19. doi.org/10.1007/s10903-007-9080-8
- Goebert, D. (2009). Social support, mental health, minorities, and acculturative stress. In *Determinants of minority mental health and wellness* (pp. 1-24). Springer, New York, NY. doi: 10.1007/978-0-387-75659-2-7
- Harandi, T. F., Taghinasab, M. M., & Nayeri, T. D. (2017). The correlation of social support with mental health: A meta-analysis. *Electronic Physician*, *9*(9), 5212–5222. doi:10.19082/5212
- Holland, A. T., & Palaniappan, L. P. (2012).

 Problems with the collection and interpretation of Asian-American health data:
 Omission, aggregation, and extrapolation. *Annals of Epidemiology*, 22(6), 397

- -405. doi:10.1016/ j.annepidem.2012.04.001
- Hombrados-Mendieta, I., Millán-Franco, M., Gómez-Jacinto, L., Gonzalez-Castro, F., Martos-Méndez, M. J., & García-Cid, A. (2019). Positive influences of social support on sense of community, life satisfaction and the health of immigrants in Spain. Frontiers in Psychology, 10 (2555), 1-17. doi.org/10.3389/fpsyg.2019.02555
- Hong, S., Walton, E., Tamaki, E., & Sabin, J. A. (2014). Lifetime prevalence of mental disorders among Asian Americans: Nativity, gender, and sociodemographic correlates. *Asian American Journal of Psychology*, *5*(4), 353–363. doi:10.1037/a0035680
- Hootman, J. M., & Cheng, W. Y. (2009). Psychological distress and fair/poor health among adults with arthritis: Statespecific prevalence and correlates of general health status, United States, 2007. *International Journal of Public Health*, 54(1), 75–83. doi:10.1007/s00038-009-0010-5
- Islam, N. S., Patel, S., Wyatt, L. C., Sim, S.-C., Mukherjee-Ratnam, R., Chun, K., Desai, B., Tandon, S. D., Trinh-Shevrin, C., Pollack, H. & Kwon, S. C. (2016). Sources of health information among select Asian American immigrant groups in New York City. *Health Communication*, 31(2), 207–216. doi:10.1080/10410236.2014.944332
- Jang, Y., Kim, G., & Chiriboga, D. A. (2006). Health perception and depressive symptoms among older Korean Americans. Journal of Cross Cultural Gerontology, 21(3-4), 91–102. doi:10.1007/s10823-006-9026-y
- Jia, F., Gottardo, A., Chen, X., Koh, P., & Pasquarella, A. (2016). English proficiency and acculturation among Chinese immigrant youth in Canada: A reciprocal relationship. *Journal of Multilingual and Multicultural Development*, 37(8), 774–782.

 doi.org/10.1080/01434632.2015.113363

- Joo, H., Kim, J., Cho, S. & Kwon, H. H. (2015). The relationship among social support, acculturation stress and depression of Chinese multi-cultural families in leisure participations. *Procedia-Social and Behavioral Sciences*, 205, 201-210. doi: 10.1016/j.sbspro.2015.09.059
- Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L., Walters, E. E., & Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non -specific psychological distress. *Psychological Medicine*, 32(6), 959–976. doi: 10.1017/s0033291702006074
- Kessler, R. C., Barker, P. R., Colpe, L. J., Epstein, J. F., Gfroerer, J. C., Hiripi, E., Howes M.J., Normand S. L., Manderscheid, R.W., Walters, E. E. & Zaslavsky, A.M. (2003). Screening for serious mental illness in the general population. *Archives of General Gsychiatry*, 60(2), 184–189. doi: 10.1001/archpsyc.60.2.184
- Kim, H. J., Park, E., Storr, C. L., Tran, K., & Juon, H.-S. (2015). Depression among Asian-American adults in the community: Systematic review and meta-analysis. *PloS One*, 10(6), e0127760. Doi:10.1371/journal.pone.0127760
- Kim, J.-H., Chang, S. M., Bae, J. N., Cho, S.-J., Lee, J.-Y., Kim, B.-S., & Cho, M. J. (2016). Mental-physical comorbidity in Korean adults: Results from a nationwide general population Survey in Korea. *Psychiatry Investigation*, *13*(5), 496 –503. doi:10.4306/pi.2016.13.5.496
- Kim, M. T., Han, H.-R., Shin, H. S., Kim, K. B., & Lee, H. B. (2005). Factors associated with depression experience of immigrant populations: A study of Korean immigrants. *Archives of Psychiatric Nursing*, 19(5), 217–225. Doi:10.1016/j.apnu.2005.07.004
- Kim, Y. S., & Naughton, F. (1993). Koreans in the United States: Economic achievement and assimilation. *Korea Journal of Population and Development*, 181-195.
- Koh, E. (2018). Prevalence and predictors of depression and anxiety among Korean

- Americans. *Social Work in Public Health*, *33*(1), 55–69. doi:10.1080/19371918.2017.1415178
- Kwok, J. Y. Y., Auyeung, M., & Chan, H. Y. L. (2020). Examining factors related to health-related quality of life in people with Parkinson's disease. *Rehabilitation Nursing Journal*, 45(3), 122–130. doi:10.1097/rnj.0000000000000179
- Lee, H. B., Hanner, J. A., Cho, S.-J., Han, H.-R., & Kim, M. T. (2008). Improving access to mental health services for Korean American immigrants: Moving toward a community partnership between religious and mental health services. *Psychiatry Investigation*, 5(1), 14. doi:10.4306/pi.2008.5.1.14
- Lee, J. S., Koeske, G. F., & Sales, E. (2004). Social support buffering of acculturative stress: A study of mental health symptoms among Korean international students. *International Journal of Intercultural Relations*, 28(5), 399–414. doi.org/10.1016/j.ijintrel.2004.08.005
- Lee, S. S. (2020). Serious psychological distress among East Asian American adults: A quantitative study (Order No. 27744267) [Master's thesis, California State University, Long Beach]. ProQuest Dissertations Publishing.
- Lee, T. (2012). Koreans in America: A demographic and political portrait of pattern and paradox. *Asia Policy*, 13, 39–60. doi:10.1353/asp.2012.0003
- Loue, S. (2009). Migration and mental health. In *Determinants of minority mental health and wellness* (pp. 1-16). Springer, New York, NY. doi.org/10.1007/978-0-387-75659-2_4
- Li, J., Maxwell, A. E., Glenn, B. A., Herrmann, A. K., Chang, L. C., Crespi, C. M., & Bastani, R. (2016). Healthcare access and utilization among Korean Americans: The mediating role of English use and proficiency. *Int J Soc Sci Res, 4*(1), 83–97. doi:10.5296/jissr.y4i1.8678
- Marum, G., Clench-Aas, J., Nes, R. B., & Raanas, R. K. (2014). The relationship between negative life events, psychological distress and life satisfaction: A population-based study. *Quality of Life Re-*

- search, 23(2), 601–611. doi.org/10.1007/s11136-013-0512-8
- McLachlan, K. J., & Gale, C. R. (2018). The effects of psychological distress and its interaction with socioeconomic position on risk of developing four chronic diseases. *Journal of Psychosomatic Research*, 109, 79–85. doi:10.1016/j.jpsychores.2018.04.004
- Min, J. W., Moon, A., & Lubben, J. E. (2005).

 Determinants of psychological distress over time among older Korean immigrants and Non-Hispanic White elders:

 Evidence from a two-wave panel study.

 Aging & Mental Health, 9(3), 210–222.

 doi:10.1080/13607860500090011
- Mui, A. C., & Kang, S.-Y. (2006). Acculturation stress and depression among Asian immigrant elders. *Social Work*, *51*, 243–255. doi.org/10.1093/sw/51.3.243
- Noh, S., & Kaspar, V. (2003). Perceived discrimination and depression: Moderating effects of coping, acculturation, and ethnic support. *American Journal of Public Health*, 93(2), 232–238. doi:10.2105/ajph.93.2.232
- O'Connor, A. & Batalova, J. (2019). Korean immigrants in the United States. The Migration Policy Institute. https://www.migrationpolicy.org/article/korean-immigrants-united-states-2017
- Ozbay, F., Johnson, D. C., Dimoulas, E., Morgan III, C. A., Charney, D., & Southwick, S. (2007). Social support and resilience to stress: From neurobiology to clinical practice. *Psychiatry (Edgmont)*, 4(5), 35 –40.
- Paek, M.-S., Seo, S., & Choi, D. (2019). Factors affecting psychological distress among Asian American and non-Hispanic White older adults. *Social Behavior and Personality: An International Journal*, 47 (8), 1–10. doi.org/10.2224/sbp.8315
- Park, N. S., Jang, Y., & Chiriboga, D. A. (2018). Willingness to use mental health counseling and antidepressants in older Korean Americans: The role of beliefs and stigma about depression. *Ethnicity & Health*, 23(1), 97–110. doi:10.1080/13557858.2016.1246429
- Park, H., Choi, E., & Wenzel, J. A. (2020). Racial/ethnic differences in correlates of

psychological distress among five Asian-American subgroups and non-Hispanic Whites. *Ethnicity & Health*, *25* (8),1072–1088. doi:10.1080/13557858.2018.1481495

12–19. doi:10.1016/j.apnu.2007.06.011

- Park, S.-Y., & Bernstein, K. S. (2008). Depression and Korean American immigrants. *Archives of Psychiatric Nursing*, 22(1),
- Poyrazli, S., Kavanaugh, P. R., Baker, A., & Al-Timimi, N. (2004). Social support and demographic correlates of acculturative stress in international students. *Journal* of College Counseling, 7(1), 73–82. doi.org/10.1002/j.2161-1882.2004.tb00261.x
- Primm, A. B., Vasquez, M. J., Mays, R. A., Sammons-Posey, D., McKnight-Eily, L. R., Presley-Cantrell, L. R., McGuire L. C., Chapman, D. P., & Perry, G. S. (2010). The role of public health in addressing racial and ethnic disparities in mental health and mental illness. *Preventing chronic disease*, 7(1), A20.
- Ra, Y.-A. (2016). Social support and acculturative stress among Korean international students. *Journal of College Student Development*, *57*(7), 885–891. doi: 10.1353/csd.2016.0085
- Roh, S., Jang, Y., Chiriboga, D. A., Kwag, K. H., Cho, S., & Bernstein, K. (2011). Perceived neighborhood environment affecting physical and mental health: A study with Korean American older adults in New York City. *Journal of Immigrant and Minority Health*, *13*(6), 1005–1012. doi.org/10.1007/s10903-011-9492-3
- Saadi, A., & Ponce, N. A. (2020). Worse mental health among more-acculturated and younger immigrants experiencing discrimination: California Health Interview Survey, 2015–2016. *Journal of General Internal Medicine*, 35(5), 1419–1426. doi:10.1007/s11606-019-05412-w
- Soper, D. S. (2020). A-priori sample size calculator for hierarchical multiple regression [Software]. http://www.danielsoper.com/statcalc
- StataCorp. (2021). Stata survey data reference manual, release 17. StataCorp LLC.

- Thomas, F., & Sumathi, G. (2016). Acculturative stress and social support among the international students: An empirical approach. *Global Management Review, 10* (3), 61–72. UCLA Center for Health Policy Research. (2019). CHIS 2018 adult use files, Release 1 [Computer file]. UCLA Center for Health Policy Research, Los Angeles, CA.
- Ward, B. W., & Martinez, M. E. (2015). Health insurance status and psychological distress among US adults aged 18–64 years. *Stress and Health, 31*(4), 324–335. doi:10.1002/smi.2559
- World Health Organization.and Calouste Gulbenkian Foundation(2014). Social determinants of mental health. World Health Organization, Geneva.
- Yu, E.-Y., Choe, P., & Han, S. I. (2002). Korean population in the United States, 2000: Demographic characteristics and socioeconomic status. *International Journal of Korean Studies*, 6(1), 71–107.