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Correlates of Psychological Distress Among Filipino Americans and Filipinos Living in Urban Areas in the United States and the Philippines

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Abstract

Introduction: Many Asian immigrants, including Filipino Americans (FilAms), experience psychological distress (PD) due to the challenges in adjusting to their new country and culture. This descriptive comparative study aimed to compare FilAms and Filipinos concerning their levels of PD, sources of stress, and use of health-promotion strategies.

Methods: Data from 89 FilAms and 95 Filipinos living in urban cities, obtained from the I-HELP-FILIPINOS database, measuring cardiometabolic risks, mental health, and environmental stressors in 2017, including PD, were examined.

Results: The mean age of all participants (N= 184) was 44.2 ± 22.8 years old. Both groups rated their health as good to excellent, although Filipinos were significantly more likely to be distressed (p<.001). Filipinos were also more likely to ascribe stress to employment (48.3% vs. 68.2%, p =.006) and finances (28.1% vs. 52.6%, p<.001) than FilAms.

Discussion: While both groups shared comparative perspectives on health, FilAms reported lower PD than Filipinos. The most significant source of stress was the country of residence. We recommend tailoring interventions to each local context's unique social and environmental circumstances.

Keywords

psychiatric/mental health; clinical areas; psychological distress; correlational design; research methods; migration

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Introduction

Since the turn of the century, worldwide immigration has increased by 49%, resulting in more than 250 million people living outside their country of birth (Fazel-Zarandi et al., 2018). The United States is home to more immigrants than any other nation, approximately 46 million, or under a fifth of the global number (Khullar & Chokshi, 2019). Despite the rise in Asian immigration, comparative studies on minority mental health are scarce, making this demographic population the most understudied in peer-reviewed literature (Yi, 2020). This limited body of research could be influenced by stereotypes showing Asian immigrants as self-sufficient, educated, and upwardly mobile (Adia et al., 2020). Furthermore, despite being a heterogeneous subpopulation, health data on Asian immigrants are often pooled, prohibiting inference and obscuring the health needs of the most vulnerable Asian American subgroups (Guan & Mukherjea, 2021). This systemic lack of specificity supports policy neglect, marginalization, and the model minority myth: the assumption that all Asian Americans are healthy and economically well-off, which ignores Asian American heterogeneity (Sabado-Liwag et al., 2022).

Due to their limited social resources and the challenges of migration and acculturation, Asian Americans are commonly affected by psychological distress (PD; Ikonte et al., 2020). Although some research has been carried out on PD, most studies are restricted to presenting PD as a physical or psychological symptom of anxiety and depression (Hess et al., 2022). This issue's generalizability is problematic due to a lack of well-grounded theoretical considerations. Contrary to widespread belief, PD is not a clinical diagnosis but a state of unpleasant feelings or emotions that impair a person's ability to perform (Chang & Moon, 2016). Hence, it could be assumed that someone undergoing PD does not always display severe mental health issues.

Studies conducted in the United States have shown that PD affects 3.3% of the population and is linked to heart disease and disability (Ikonte et al., 2020). After Chinese Americans, Filipino Americans (FilAms) are the most numerous Asian ethnic minority in the United States, constituting one of its largest and most diverse immigrant populations (Sabado-Liwag et al., 2022). Investigators have indicated that FilAms mental health issues are linked to several factors contributing to PD, including post-traumatic stress disorder (PTSD), acculturative stress, and occupational stress (Connor & Miller, 2014; A. T. Reyes et al., 2018; Serafica et al., 2019). Surprisingly, the frequency of PD is lower among FilAms than in other Asian American subgroups or non-immigrant counterparts (Singh et al., 2015). Nevertheless, the growing population of FilAms demonstrates a pressing requirement to examine the causes and predictors of mental health problems and health needs of this immigrant subset. Increasingly, studies show that immigrants from racial and ethnic minorities have better psychological health than their U.S.-born counterparts, adding to the evidence that an immigrant's cultural origins and experiences may offer additional safeguards for mental health.

A recent study in the Philippines identified PD as a predictor of quality of life among Filipino school personnel (Elgin & Hector, 2020). The effect of climate was also examined recently as a top contributing factor to anxiety and trigger for mental health problems

among Gen Z Filipinos (M. E. S. Reyes et al., 2021). However, no research has compared and documented perceived PD disparities between FilAms and Filipinos, and no empirical evidence shows any comparison between FilAms and Filipinos regarding PD.

This study will support transcultural nurses and practitioners in discovering holistic, comprehensive approaches to cultural care and awareness for use across Western and non-Western cultures, such as the Philippines because it includes various universal societal and cultural factors. In addition, comparing the FilAms and Filipinos will facilitate deeper insights into highlighting similarities and overcoming the differences in dealing with PD between the two groups. For this study, Filipinos were grouped according to their country of residence: those living in the United States (i.e., FilAms) and those living in the Philippines (i.e., Filipinos). The aims of this study were to (a) examine whether FilAms suffer less from PD than Filipinos while adjusting for gender, age, marital status, socioeconomic status, and country of residence; (b) compare sources of stress and the use of health-promotion strategies to alleviate stress between FilAms and Filipinos; and (c) identify correlates and predictors of PD among FilAms and Filipinos.

Theoretical Foundation

The comprehensive view of health in the absence of PD is consistent with the Fundamental Cause Theory and the hypothesis that social factors, such as socioeconomic status indicators (e.g., higher education, better employment, and greater wealth) and social support (marital status and religiosity), can mitigate PD. Community factors also influence PD and can vary depending on the urbanity or progressiveness of the region of residence (Phelan et al., 2010). The Fundamental Cause Theory describes four main attributes shared by a primary societal source of health inequality. First, socioeconomic status is not specific to any disease or symptoms; it affects several different health conditions. Second, it influences disease outcomes via a variety of risk variables. Third, it requires access to resources that can be used to avoid risks or mitigate the effects of an illness after it has occurred. Finally, it replaces intervening processes and maintains the relationship between the fundamental cause (socioeconomic status) and health (Link & Phelan, 1995). Our research responded to the Fundamental Cause Theory by designing a study that examines the multi-social factors of FilAms and Filipinos and their relationship with PD.

This study aimed to compare FilAms and Filipinos concerning their levels of PD, sources of stress, and use of health-promotion strategies. The research questions were:

- 1. What are the differences in levels of perceived PD and stressors between FilAms (i.e., immigrants) and Filipinos (i.e., residing in the Philippines)?
- 2. What are the correlates and predictors of PD among FilAms and Filipinos?

Methods

Study Design and Setting

The participants in this quantitative comparative study were adults (18 years) from urban (i.e., metropolitan) areas in the United States and the Philippines who reported no history

of disability or acute disease and who could read and write in either English or Tagalog. To evaluate the cardiovascular health of Filipino communities, we employed a set of tools that had previously been validated and were translated into English and Tagalog for a study done in 2000 in Northern California (Flores et al., 2018) The I-HELP-FILIPINOS database (Flores et al., 2018) contains the results of a countrywide survey administered to 1,203 Filipinos in 2017. Our survey was pilot tested (i.e., a dry run) with 89 FilAms in an urban city before being administered to Filipinos in the Philippines. Urban cities are highly developed and densely populated areas characterized by residential, commercial, industrial, and technological advancements. This study compares 95 Filipinos from similar urbanized cities in the Philippines to the responses of a pilot sample of FilAms on questions about PD, stressors, social characteristics, and environmental factors. These cities include Manila, Quezon City, Baguio City, and Roxas City. To ensure a more homogeneous sample, reduce potential challenges to internal validity, and boost generalizability to a small set of people living in what is commonly referred to as a "modernized" society, the current study included only those who lived in urban metropolises.

The research employed a convenience sampling strategy. Only one individual per home was permitted to participate in the study to prevent biases based on levels of risk variables or prevalence of mental health concerns. Trained health care professionals with knowledge of community resources collected the data through paper-and-pencil surveys. Completed questionnaires were forwarded to the study team for data entry once their completeness had been double-checked. The Institutional Review Board of the University of California, Irvine, and the Research Ethics Board of the University of the Philippines, Manila, reviewed and approved the research. All collected data were de-identified to ensure confidentiality and anonymity.

Data Collection Tools

Dependent Variable (Primary).—The distress thermometer (DT) is a single-item measure of PD developed by the National Comprehensive Cancer Network (Bulli et al., 2009). The DT has a short completion time (2 min), requires no scoring, and is easily understood. The tool has been used to measure PD in community and epidemiological studies with an internal consistency of $\alpha = .080$ (Batterham et al., 2018). Likewise, the DT was validated in cancer survivors (Boyes et al., 2013) and performed well in discriminating between cases and non-cases of anxiety, depression, and comorbid anxiety–depression. This 11-point visual analog scale includes endpoints labeled *no distress* (0) and *severe distress* (10). Participants were prompted to circle the number that best characterized their distress level throughout the previous week (Nguyen et al., 2021). The optimal DT threshold depends on whether the tool is used in the clinical or research setting. Our team used a cut-off score of 4, which is recommended for research (Boyes et al., 2013; Chang & Moon, 2016).

Independent Variables.—Age was measured as a continuous variable in years. The gender classification was either *male* or *female*. There were three educational attainment categories: *less than high school graduate*, *high school graduate*, and *beyond high school* (e.g., college, vocational school, post-graduate). Employment status was categorized as

employed, unemployed/not in the labor force, and retired. There were four categories for marital status: *single, married, divorced/separated*, and *widowed*. We also examined the presence or absence of health insurance.

Perceived Health Status.—The measure of health status used for the current study was a single-item scale obtained from the Short Form 36 (Ware et al., 1994). This global measure of health status (health perceptions) tapped participants' general ratings of their current health. Participants were asked to rate their overall health as *excellent, very good, good, fair*, or *poor*. The categories for self-rated health were later recoded to combine *excellent, very good, and good* responses and *fair* and *poor* responses to create two levels: *excellent–good* and *fair–poor*.

Stressors and Stress-Relieving Measures.—Participants were asked if their perceived PD was caused by work, money, school, or family responsibilities (*yes/no*). They were also asked if they regularly engaged in health-promotion strategies to reduce PD, such as exercising, eating healthy foods, receiving massages, praying (spirituality strategies), socializing with friends and family, or staying home to relax.

Statistical Analysis

SAS[®] Version 9.4 was used for statistical analyses. Age, gender, country of residence, education level, perceived health, marital status, stressors, and stress-relieving techniques were used to identify differences between FilAms and Filipinos using descriptive statistics (independent *t*-tests and Pearson's chi-square test [χ^2]). Using Cramér's *V*, we examined the relationship between PD and the characteristics of our two groups, stressors experienced, and use of stress-relieving strategies (Sheskin, 2011). A multiple logistic regression analysis was used with a stepwise model selection method, a selection probability of 0.3, and a retention probability of 0.35 to lessen the possibility of multicollinearity (SAS, 2013).

Results

Sociodemographic Characteristics of the Sample

Our sample size (N= 184) is composed of FilAms (n = 89) and Filipinos (n = 95) who completed the surveys. The average age of participants was 44.2 ± 22.8 (Table 1). The two groups were comparable except for marital status, work status, and health insurance. Furthermore, 80% of participants had a college degree or above, 76% were employed, and 91% had health insurance.

Our results yielded the following for each research question we asked.

Research Question 1: What are the differences in levels of perceived psychological distress (PD) and stressors between FilAms (i.e., immigrants) and Filipinos (i.e., residing in the Philippines)?

Perceived PD and Stressors

Table 1 demonstrates that Filipinos reported higher PD than FilAms (83.2% vs. 57.3%, p < .001). However, the two groups had comparable perceptions of good to excellent health.

Filipinos were more likely than FilAms to attribute stress to employment (48.3% vs. 68.2%, p = .006) and finances (28.1% vs. 52.6%, p < .001). FilAms were more likely than Filipinos to relax at home (75.3% vs. 66.6%, p < .001) to alleviate PD. All PD-relieving measures, including exercise, healthy diet, massages, traditional spiritual practices, and socializing with family and friends, were comparable among FilAms and Filipinos.

Research Question 2: *What are the correlates and predictors of PD among FilAms and Filipinos?*

Correlates and Predictors of PD

Country of residence (the United States vs. the Philippines) was highly correlated with PD (p < .001). In addition, there was a correlation between PD and younger age, employment, work stress, and financial difficulties (p < .001). Finally, PD was also related to being single and not living with someone (p < .01). The stepwise model selection yielded the following variables as part of the model: country of residence, stress related to work, stress related to financial status, and living with someone (Table 2). However, living with someone was not significant. Filipinos were 2.63 times more likely to experience PD than FilAms; they were also 2.44 and 3.01 times more likely to report work and financial issues as stressors, respectively. Hosmer and Lemeshow's Goodness-of-Fit for logistic regression yielded a χ^2 value of 2.18 with 7 degrees of freedom corresponding to a *p*-value of .94, which means our model had a good fit.

Discussion

The most obvious finding from our analysis is that PD is more prevalent in Filipinos living in the Philippines than FilAms in the United States. These differences are partly explained by subjective evaluation of the participants' life satisfaction—ways and means when individuals score their perception of PD related to their current life setting (Berggren et al., 2020). It could be argued that the positive results were due to Films' higher economic advantage than Filipinos.

Our study also finds that financial and work stressors significantly affected PD among FilAms and Filipinos. The analysis reveals that socioeconomic status plays a role in explaining why FilAms have less PD than Filipinos. This finding is consistent with recent research demonstrating that FilAms have high socioeconomic status and have successfully assimilated into the American labor market (Sabado-Liwag et al., 2022). Furthermore, past studies among Asian Americans have shown that the American job market rewards high levels of education, skills, and English proficiency with employment and social mobility (Adia et al., 2020). Therefore, this argument could explain why FilAms in our study reported lower PD.

There were no notable differences in education between FilAms and Filipinos. However, the employment rates of Filipinos were significantly higher than those of FilAms, even though three-fourths of both groups had college or post-college degrees. We believe this result is related to the high proportion of retired FilAms in our sample receiving federal social security and other retirement benefits. In contrast, Filipinos may continue to work beyond 62

years for economic reasons, such as a lack of retirement benefits and other existing financial obligations to themselves and family members. Likewise, a significantly greater proportion of FilAms than Filipinos have health insurance. Again, this is because the United States offers better retirement benefits and health care than the Philippines, which has not adopted a universal health care plan.

Filipinos, as a population, are typically well-educated and immigrate to the United States with greater employment prospects and resources that may aid in their settlement and overall acculturation process. However, better job placements may expose individuals to the glass ceiling effect, which may explain why other studies identified discrimination as a significant PD source (Singh et al., 2015). Furthermore, most FilAms perform above and beyond in the workplace (e.g., working extra hours, having multiple jobs, or delaying retirement). However, FilAms can also be exposed to chronic exploitation, oppression, and injustice, which are rarely acknowledged and discussed openly (Evangelista et al., 2022; Sabado-Liwag et al., 2022). On the other hand, low wages, a lack of education, unemployment, and rising debt act against the well-being of most Filipinos, even if this may not be the case for the Filipinos in our sample. According to studies, Filipinos' widespread dissatisfaction is worsened by familial and societal expectations (Maravilla & Tan, 2021).

Regarding stress relief, staying home to rest was preferred by our FilAm participants. This finding is somewhat surprising, given that Americans enjoy traveling and succumb to different modalities to overcome PD. A possible explanation is that our study participants are much older and may have barriers preventing other stress-relief strategies.

Overall, this study found that the country of residence plays a vital role in predicting PD. The current circumstances in which individuals reside (i.e., nativity, immigrants) have not been considered in population-level assessments of PD, which may contribute to paradoxical individual variations in psychological outcomes. This is the first study to evaluate PD, stressors, and stress-relieving measures used to alleviate PD among urbanized FilAms and Filipinos in the United States and the Philippines. This finding is critical because it demonstrates that PD varies across socioeconomic status groups and communities. Data not previously captured in population surveys are essential to comprehending population disparities in PD. Surprisingly, an individual's views of their health did not always correspond with their degree of PD. Moreover, we discovered that measuring PD is subjective and can be mitigated or exacerbated based on the country of residency or cultural environment.

The study's strength comes from its use of a diversified sample drawn from major urban areas in the United States and the Philippines, allowing its findings to benefit those populations. Despite this approach, there are limitations to this study. First, because this is a cross-sectional study with a small sample size and the lack of a control group, we cannot conclude anything about cause and effect based on the results. A second limitation is that all independent variables were self-reported. Asking participants to self-report PD, stressors, and desirable/undesirable behaviors may generate biased responses. Third, we did not assess FilAms' level of acculturation or years of residence in the United States and other relevant social support, such as social groups, religious or faith-based groups, and cyber

socialization sites. These factors may have impacted PD by FilAms. Fourth, our study does not distinguish between Filipino immigrants, such as illegal immigrants, naturalized citizens, refugees, and permanent residents, which limits the generalizability of the findings. Finally, our definition of PD was restricted to a single item. While we did not employ a psychiatric assessment to measure PD nor prescreen participants who had existing PD, the item used for population surveys identified individuals prone to experience PD. Since all data were collected at the individual level, it is impossible to conduct multi-level research that requires data from the community or health system level. A possible avenue for future study is employing datasets that enable multi-level modeling and leverage multi-level datasets.

Implications

Implications for Practice

These data support further clinical development in the health care system that can impact individuals and health care providers. First, understanding the role of various factors in determining an individual's PD may aid nurses, providers, and clinicians in better adapting care to meet their patients' needs. If health care providers are aware of their patient's unique sources of stress, they can tailor their treatment and care accordingly. For instance, if a health care provider learns their patient works in a very stressful setting, they may recommend stress-reducing strategies for the patient to implement at the office. If the stress becomes unmanageable, health care providers can refer the patient for advanced management and treatment with a psychiatrist, psychologist, mental health counselor, or psychiatric mental health nurse practitioner. Second, nurses may advocate using these indicators as a roadmap for creating policies and initiatives to reduce PD.

Implications for Future Research

This research provides timely and necessary comparative analyses of how individuals selfmanage their perceived PD that can be utilized to increase awareness of cultural, societal, and political contexts. These data can lead to the development of culturally congruent interventions targeting predictors of PD, which can be done using different approaches, such as community-based participatory research, participatory action research, dialogue sessions, and citizen panels. In addition, using technology, such as mobile health, mindfulness apps, and social media amid the pandemic to decrease the risk of PD can potentially overcome barriers to delivering culturally appropriate mental health interventions. Finally, the research results represent a further step toward examining the effects of acculturation and relocation stress levels on the overall PD of FilAms and Filipinos.

Implications for Society

Our novel findings related to the high levels of PD among Filipinos warrants immediate action among health care providers and local and regional government units in the Philippines. Maravilla and Tan (2021) urge Filipinos to reconsider PD and implore implementing the Philippine Mental Health Act—a bill enacted into law in 2018 to protect the rights of Filipinos to receive comprehensive mental health care—in local government units. Community, regional, provincial, and national leaders should take baby steps and implement change gradually by starting with smaller programs and evaluating the successes

and pitfalls of each program before implementing large-scale social or political changes because these recommendations are not at all likely to happen overnight. For example, we can start by providing comprehensive mental health care to Filipinos. First, mental health professionals must educate families to understand and resist prejudice and stigma associated with PD. They must also set rules and standards for mental health. Second, health care programs to prevent PD must prioritize managing high-risk groups, such as younger and unmarried adults. Third, suicide intervention, prevention, and response plans should be developed, and communities should be trained to identify at-risk individuals with suicidal ideations due to PD. Fourth, mental health standards must be informed by medical and scientific data. Finally, the Filipino population should have access to a comprehensive mental health treatment system that addresses their psychological and social needs. In addition, family members should be included in studies, participate in the creation of new legislation, and advocate for community and workplace mental health programs. Finally, because suicide and substance abuse are prevalent, lawmakers must change the Mental Health Act and provide more comprehensive and effective intervention programs. This approach will potentially benefit not only the individual's mental health but also their immediate environment. If these changes result in a more mentally healthy Filipino population, they can alleviate the nation's economic problems, inadequate leadership, and stagnating productivity. Consequently, the nation's economy may improve, and employment rates may rise, diminishing the need for Filipinos to leave the country in search of better opportunities.

Conclusion

Our study is the first to examine the rates and correlates of PD among FilAms and Filipinos. This study is also the first to show that FilAms are less likely than Filipinos to express PD. In addition, there appears to be a protective effect of immigrant status on PD, as results suggest that FilAms experience significantly low levels of PD than Filipinos. These findings confirm the well-studied "healthy immigrant effect," in which migrants appear to have superior health outcomes across disciplines compared with Filipinos who remain in the Philippines and suffer from its mental health care system's shortcomings. Since PD correlates with intrapersonal, interpersonal, and societal factors, population-wide intervention efforts to prevent and mitigate PD should be attentive to these factors. Further research on causal mechanisms underlying these relationships is recommended.

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References

Adia AC, Nazareno J, Operario D, & Ponce NA (2020). Health conditions, outcomes, and service access among Filipino, Vietnamese, Chinese, Japanese, and Korean Adults in California, 2011– 2017. American Journal of Public Health, 110(4), 520–526. 10.2105/ajph.2019.305523 [PubMed: 32078359]

Batterham PJ, Sunderland M, Slade T, Calear AL, & Carragher N (2018). Assessing distress in the community: Psychometric properties and crosswalk comparison of eight measures of

psychological distress. Psychological Medicine, 48(8), 1316–1324. 10.1017/S0033291717002835 [PubMed: 28967345]

- Berggren N, Bergh A, Bjørnskov C, & Tanaka S (2020). Migrants and life satisfaction: The role of the country of origin and the country of residence. Kyklos, 73(3), 436–463.
- Boyes A, D'Este C, Carey M, Lecathelinais C, & Girgis A (2013). How does the distress thermometer compare to the hospital anxiety and depression scale for detecting possible cases of psychological morbidity among cancer survivors? Supportive Care in Cancer, 21(1), 119–127. 10.1007/s00520-012-1499-3 [PubMed: 22618735]
- Bulli F, Miccinesi G, Maruelli A, Katz M, & Paci E (2009). The measure of psychological distress in cancer patients: The use of distress thermometer in the Oncological Rehabilitation Center of Florence. Support Care Cancer, 17(7), 771–779. 10.1007/s00520-008-0543-9 [PubMed: 19050940]
- Chang M, & Moon A (2016). Correlates and predictors of psychological distress among older Asian immigrants in California. Journal of Gerontological Social Work, 59(2), 77–97. 10.1080/01634372.2016.1140694 [PubMed: 26760294]
- Connor JB, & Miller AM (2014). Occupational stress and adaptation of immigrant nurses from the Philippines. Journal of Research in Nursing, 19(6), 504–515.
- Elgin C, & Hector P (2020). Psychological distress as a predictor of quality of life among selected Filipino school personnel. International Journal of Psychology and Counselling, 12(3), 73–84.
- Evangelista L, Serafica R, Reyes AT, Fudolig M, Kawi J, & Sy F (2022). Addressing the elephant in the room: Structural Racism and health disparities in the Philippines. International Forum for Nursing and Healthcare, 5, 14–16. [PubMed: 37022315]
- Fazel-Zarandi MM, Feinstein JS, & Kaplan EH (2018). The number of undocumented immigrants in the United States: Estimates based on demographic modeling with data from 1990 to 2016. PLOS ONE, 13(9), Article e0201193. 10.1371/journal.pone.0201193 [PubMed: 30240392]
- Flores JL, Hernandez MA, Leyva EW, Cacciata M, Tuazon J, & Evangelista L (2018). Prevalence and correlates of depression, anxiety, and distress among Filipinos from low-income communities in the Philippines. The Philippine Journal of Nursing, 88(2), 8–13. [PubMed: 33935304]
- Guan A, & Mukherjea A (2021). Appropriate use of the Asian American demographic category in health disparities research. American Journal of Public Health, 111(6), e15–e16. 10.2105/ ajph.2021.306266
- Hess RF, Croasmun AC, Pittman C, Baird MB, & Ross R (2022). Psychological distress, posttraumatic stress, and suicidal ideation among resettled Nepali-speaking Bhutanese refugees in the United States: Rates and predictors. Journal of Transcultural Nursing, 33, 314–323. [PubMed: 35100889]
- Ikonte CO, Prigmore HL, Dawson AZ, & Egede LE (2020). Trends in prevalence of depression and serious psychological distress in United States immigrant and non-immigrant populations, 2010 – 2016. Journal of Affective Disorders, 274, 719–725. 10.1016/j.jad.2020.05.010 [PubMed: 32664007]
- Khullar D, & Chokshi DA (2019). Challenges for immigrant health in the USA-the road to crisis. The Lancet, 393(10186), 2168–2174. 10.1016/s0140-6736(19)30035-2
- Link BG, & Phelan J (1995). Social conditions as fundamental causes of disease. Journal of Health and Social Behavior, 80–94. 10.2307/2626958 [PubMed: 7560851]
- Maravilla NMAT, & Tan MJT (2021). Philippine Mental Health Act: Just an act? A call to look into the bi-directionality of mental health and economy. Frontiers in Psychology, 12, 2928. 10.3389/ fpsyg.2021.70648
- Nguyen TQ, Do TM, & Pham TA (2021). Screening for psychological distress in Vietnamese cancer patients: An evaluation of the distress thermometer. Cancer Medicine, 10(21), 7793–7803. 10.1002/cam4.4298 [PubMed: 34559957]
- Phelan JC, Link BG, & Tehranifar P (2010). Social conditions as fundamental causes of health inequalities: Theory, evidence, and policy implications. Journal of Health and Social Behavior, 51(Suppl.), S28–S40. 10.1177/0022146510383498 [PubMed: 20943581]
- Reyes AT, Serafica R, Cross CL, Constantino RE, & Arenas RA (2018). Resilience, acculturative stress, and family norms against disclosure of mental health problems among foreign-born Filipino American Women. Asian / Pacific Island Nursing Journal, 3, 80–92. [PubMed: 31037258]

- Reyes MES, Carmen BPB, Luminarias MEP, Mangulabnan SANB, & Ogunbode CA (2021). An investigation into the relationship between climate change anxiety and mental health among Gen Z Filipinos. Current Psychology Advance online publication. 10.1007/s12144-021-02099-3
- Sabado-Liwag MD, Manalo-Pedro E, Taggueg R Jr., Bacong AM, Adia A, Demanarig D, Sumibcay JR, Valderama-Wallace C, Oronce CIA, Bonus R, & Ponce NA (2022). Addressing the interlocking impact of colonialism and racism on Filipinx/a/o American Health inequities. Health Affairs, 41(2), 289–295. 10.1377/hlthaff.2021.01418 [PubMed: 35130069]
- SAS. (2013). Statistical analysis software (Version 9.4)
- Serafica R, Lekhak N, & Bhatta T (2019). Acculturation, acculturative stress and resilience among older immigrants in United States. International Nursing Review, 66(3), 442–448. [PubMed: 31106411]
- Sheskin D (2011). Handbook of parametric and nonparametric statistical procedures (5th ed.). Chapman and Hall CRC.
- Singh S, McBride K, & Kak V (2015). Role of social support in examining acculturative stress and psychological distress among Asian American immigrants and three sub-groups: Results from NLAAS. Journal of Immigrant and Minority Health, 17(6), 1597–1606. 10.1007/ s10903-015-0213-1 [PubMed: 25910620]
- Ware JE, Kosinski M, & Keller SD (1994). SF-36 physical and mental health summary scales: A user's manual (5th ed.). Health Assessment Lab, New England Medical Center.
- Yi SS (2020). Taking action to improve Asian American health. American Journal of Public Health, 110(4), 435–437. 10.2105/ajph.2020.305596 [PubMed: 32160000]

Table 1.

Sociodemographic Characteristics and Psychological Distress Variables.

Characteristics	All participants $(N = 184)$	FilAms $(n = 89)$	Filipinos ($n = 95$)	<i>p</i> -value
Age, years $(M \pm SD)$	44.2 ± 22.8	53.6 ± 15.5	34.7 ± 14.6	.117
Female ^a	112 (60.9)	50 (52.6)	62 (65.3)	.207
Married ^a	100 (54.3)	62 (69.7)	38 (60.0)	<.001
High school education ^a	37 (20.1)	22 (24.7)	15 (15.8)	.102
Years of education $(M \pm SD)$	14.2 ± 2.7	14.4 ± 2.6	14.0 ± 2.8	.905
Employed, yes ^a	139 (75.5)	56 (62.9)	83 (87.4)	<.001
Health insurance, yes ^a	168 (91.3)	83 (93.3)	85 (89.5)	.002
Psychological distress ^{a c}	130 (70.7)	51 (57.3)	79 (83.2)	<.001
Perceived health b	152 (82.6)	79 (88.8)	73 (76.8)	.465
Cause of stress				
Work ^a	108 (58.7)	43 (48.3)	65 (68.2)	.006
School ^a	13 (7.1)	29 (32.6)`	37 (38.9)	.188
Family ^a	66 (35.9)	4 (4.5)	9 (9.5)	.368
Money ^a	75 (40.8)	23 (28.1)	50 (52.6)	<.001
Stress relief strategy				
Exercise ^a	130 (70.7)	67 (75.3)	63 (66.3)	.182
Healthy diet ^a	109 (59.2)	54 (60.7)	55 (57.9)	.701
Massage ^a	57 (31.0)	30 (33.7)	27 (28.4)	.438
Spirituality ^a	85 (46.2)	45 (50.6)	40 (42.1)	.250
Family and friends ^a	109 (59.2)	54 (60.7)	55 (57.9)	.701
Stay home and rest ^a	130 (70.7)	67 (75.3)	63 (66.3)	<.001

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 a Number outside parentheses represents n; number in parentheses represents percentage.

 $b_{\rm Excellent, very good, and good responses.}$

Table 2.

Predictors of Psychological Distress (N= 184).

Variables	Odds ratio $(N = 184)$	Odds ratio $(N = 184)$ 95% confidence interval Chi-square $(df = 1)$ <i>p</i> -value	Chi-square $(df = 1)$	<i>p</i> -value
Country of residence	2.626	[1.26–5.47]	16.175	<.0001
Stressor, work	2.441	[1.20 - 4.96]	9.455	.0021
Stressor, money	3.007	[1.36–6.64]	5.575	.0182
Lives with someone	2.082	[0.86 - 5.07]	3.088	0789.