



Published in final edited form as:

Asian Am J Psychol. 2014 September ; 5(3): 200–205. doi:10.1037/a0032591.

The Impact of Acculturation on Depressive Symptoms: A Comparison of Older Korean Americans in Two Areas

Yuri Jang,

The University of Texas at Austin

Soonhee Roh, and

University of South Dakota

David A. Chiriboga

University of South Florida

Abstract

This study examined how the impact of acculturation on depressive symptoms varied between two samples of older Korean Americans. One sample was from west central Florida (low Korean density area; $n = 672$), and the other from the New York City metropolitan area (high Korean density area; $n = 420$). The average level of acculturation was lower among older Korean Americans in New York, compared to those living in Florida. In the hierarchical regression models with the New York sample, acculturation was initially significant in predicting depressive symptoms; however, its impact was gradually attenuated and eventually became nonsignificant with the sequential entry of control variables. On the other hand, in the Florida sample, the impact of acculturation on depressive symptoms remained significant throughout the models. The results suggest that the level and importance of acculturation may differ by geographic locations and invite further contextual research in immigrant populations.

Keywords

acculturation; depressive symptoms; geographic location; older Korean Americans

Immigrants are the fastest growing segment of the U.S. population, with the foreign-born population increasing from 9 million (4.7% of the total population) in 1970 to more than 40 million (13% of the total population) in 2010 (Grieco et al., 2012). Although some studies have reported health advantages for specific groups of immigrants, a phenomenon referred to as the *immigrant paradox* (e.g., Alegría et al., 2008; Franzini, Ribble, & Keddie, 2001; Markides & Coreil, 1986), the general mental health profile of most immigrant populations positions them as high-risk groups (e.g., Jasso, Massey, Rosenzweig, & Smith, 2004). Older members of these groups may in fact be placed at double jeopardy due to the challenges

Correspondence concerning this article should be addressed to Yuri Jang, School of Social Work, The University of Texas at Austin, 1925 San Jacinto Boulevard, D 3500, Austin, TX 78712. yjang12@austin.utexas.edu.

Yuri Jang, School of Social Work, The University of Texas at Austin; Soonhee Roh, Department of Social Work, University of South Dakota; and David A. Chiriboga, Department of Child and Family Studies, University of South Florida.

Yuri Jang is now at The University of Texas at Austin.

adjusting not only to a host culture but also to their own aging processes (Heron, Schoeni, & Morales, 2003).

Acculturation, the degree to which a person from another culture has learned the language and behaviors expected of persons who live in the host culture (Berry, 2002; Myers & Rodriguez, 2002; Suinn, 2010), plays a key role in understanding the experiences of older immigrants. A number of studies have explored the pathways in which low acculturation is linked to depressive symptoms. For example, socioeconomic disadvantages often associated with low acculturation may impose barriers to resources and benefits, which may in turn generate adverse mental health outcomes (Berry & Kim, 1988; Chiriboga, Black, Aranda, & Markides, 2002; González, Haan, & Hinton, 2001; Suinn, 2010). On the other hand, becoming knowledgeable about a new culture—the hallmark of high acculturation—may be an indicator of successful coping styles or flexibility, which itself may lead to positive mental health outcomes (Myers & Rodriguez, 2002).

Acculturation does not occur in isolation, but in a social and environmental context. The concept of person–environment fit (Glass & Balfour, 2003; Lawton & Nahemow, 1973; Lawton, 1998) offers a framework for operationalizing the transactions between an individual's level of acculturation and environmental contexts. As suggested by this framework, an important factor to be considered in relation to older ethnic minority immigrants is the differing characteristics of the communities in which each individual resides. Community contexts, such as the presence of individuals of the same cultural background and the availability of ethnic-oriented resources, play important roles in the process of acculturation. Higher concentrations of people with the same ethnic background (i.e., ethnic enclaves) may be associated not only with reduced demand for acculturation (e.g., little pressure to learn English or to make radical adjustments in values or lifestyles), but also with less exposure to discrimination and stigma (e.g., Birman, Trickett, & Vinokurov, 2002; Chiswick & Miller, 2001; Hochhausen, Perry, & Le, 2010; Portes & Schauffler, 1994).

The present study focused on whether the impact of acculturation on depressive symptoms would vary by geographic locations. Although it is plausible that the role of acculturation would be more pronounced among immigrants who live in relative isolation from other members of their group, the issue has rarely been considered (Hochhausen et al., 2010; Kwag, Jang, & Chiriboga, 2012). It is expected that acculturation emerges as a critical factor when ethnic-oriented resources and services are scarce. In a study with older Hispanics (Kwag et al., 2012), the negative impact of low acculturation on mental well-being was particularly strong among those living in areas with low density of Hispanic populations. The present study aimed to explore the differing role of acculturation in two areas that vary substantially in the proportion of immigrants sharing the same ethnic background.

The immigrant group considered in the present study consisted Korean American older adults. Currently ranked as the fifth largest Asian American subgroup, Korean Americans are one of the fastest growing segments of immigrants in the United States (Hoeffel, Rastogi, Kim, & Shahid, 2012). Relevant to the present study is that over three quarters of all Korean Americans are concentrated in just 10 states, with half residing in California and New York

(Hoeffel et al., 2012). Despite this uneven distribution, geographic variation has rarely been addressed in previous studies. In the present assessment, two research sites were selected to represent areas with contrasting densities of Koreans: the New York City metropolitan area (high density) and the Tampa and Orlando areas of west central Florida (low density). New York and Florida are ranked as second and 12th, respectively, with regard to the number of Korean residents in the 2010 U.S. Census. The New York City metropolitan area not only has a high proportion of Koreans, but the Korean communities are also relatively well-established (Logan, Zhang, & Alba, 2002; Min, 1996). We hypothesized that, compared to their counterparts living in Florida, older Korean Americans in New York would have lower levels of acculturation. In addition, the impact of acculturation on depressive symptoms would be lower among older Korean Americans in New York compared to those in Florida. Demographic variables, health-related variables (i.e., chronic conditions and functional disability), and psychosocial variables (i.e., social network, filial satisfaction, and sense of mastery) were included as control variables because they have previously been identified as important factors for acculturation and depressive symptoms in studies with older Korean Americans (e.g., Han, Kim, & Kim, 2007; Min, Moon, & Lubben, 2005; Mui, Burnette, & Chen, 2001).

Method

Participants

The Florida sample was drawn from a survey of community-dwelling Korean American older adults (aged 60 years or older) conducted in 2008 in the Tampa and Orlando areas. Because Korean older adults represented a relatively low proportion of area residents, a multisource sampling strategy was used. The sources included local Korean churches, other religious groups, senior centers, elder associations, and a directory of Korean residents in Florida. The survey itself consisted of a standardized questionnaire in the Korean language. First drafted in English, a Korean version of the questionnaire was then developed using a back-translation method with reconciliation. In places where visits were made, surveys were self-administered in a small group context, but with trained Korean-speaking interviewers available for those needing assistance. For those who were recruited through means other than visits (e.g., via calling individuals listed in the directory of Korean residents and referrals), a mail survey approach was used. The resulting sample included 675 participants. Detailed information on sampling procedures and validation of the strategy of using multiple methods for recruitment is available elsewhere (e.g., Jang, Chiriboga, Allen, Kwak, & Haley, 2010).

The Florida survey was replicated with Korean American older adults in the New York City metropolitan area in the fall of 2010. Questionnaires were in Korean and included measures selected from the Florida survey. Participants were again recruited from a similar set of multiple sources: local Korean churches and religious organizations, senior centers, housing facilities, and referrals. Questionnaires were designed to be self-administered; however, trained interviewers were available to assist anyone who needed assistance. A total of 433 individuals participated in the survey. Detailed information on sampling procedures is available elsewhere (e.g., Roh et al., 2011).

After removing individuals who had more than 10% of missing information in their response, the final sample consisted of 672 participants in the Florida sample and 420 participants in the New York sample.

Measures

Depressive symptoms—A 10-item short form of the Center for Epidemiologic Studies–Depression Scale (CES-D; Andresen, Malmgren, Carter, & Patrick, 1994; see also Radloff, 1977) was employed to index depressive symptoms. The scale assessed the frequency of symptoms of depression experienced during the past week on a 4-point scale, ranging from *rarely or none of the time, some of the time, much of the time, to most or all of the time*. The total scores span from 0 (*no depressive symptoms*) to 30 (*severe depressive symptoms*). The CES-D has been translated into the Korean language, and its psychometric properties in that language have been validated (e.g., Cho, Nam, & Suh, 1998; Noh, Avison, & Kaspar, 1992). Internal consistency was satisfactory in both the Florida sample ($\alpha = .77$) and New York sample ($\alpha = .78$).

Acculturation—The level of acculturation was assessed with a 12-item Inventory of Acculturation (Jang, Kim, Chiriboga, & King-Kallimanis, 2007). The scale contains 12 items that deal with English proficiency, frequency of English use, consumption of audiovisual media in English (e.g., television, video), consumption of printed media in English (e.g., newspaper, magazine), food consumption at home, food consumption outside the home, ethnicity of friends, social gathering, sense of belonging, getting along, familiarity to culture and custom, and celebration of holidays. Each response was coded from 0–3. The total scores range from 0–36, with a higher score indicating a greater level of acculturation to mainstream American culture. Validation of the instrument has been conducted in previous studies with Korean American older adults (e.g., Jang et al., 2007). Internal consistency was high in both the Florida sample ($\alpha = .92$) and the New York sample ($\alpha = .88$).

Health-related variables—Chronic conditions and functional disability were included as health-related variables. Individuals were asked to report existing medical conditions using a nine-item list of chronic diseases and conditions commonly found among older populations (e.g., arthritis, stroke, heart problems, diabetes, cancer), using a yes/no format. A summated score was used for the analysis.

Functional status was assessed with a composite measure of the physical activities of daily living (Fillenbaum, 1988), instrumental activities of daily living (Fillenbaum, 1988), the Physical Performance Scale (Nagi, 1976), and the Functional Health Scale (Rosow & Breslau, 1966). The 20 items covered a wide range of activities including eating, dressing, traveling, managing money, carrying a bag of groceries, and ability to reach above the head with one's arms. Participants were asked whether they could perform each activity, and responses were coded as 0 (*without help*), 1 (*with some help*) or 2 (*unable to do*). The total scores range from 0 (*no disability*) to 40 (*severe disability*). Internal consistency was high in both the Florida sample ($\alpha = .93$) and the New York sample ($\alpha = .94$).

Psychosocial variables—Social network, filial satisfaction, and sense of mastery were included as psychosocial variables. Network of relatives and friends was measured with six items from the Lubben Social Network Scale (Lubben, 1988). Items included the number of relatives or friends seen at least once a month (*0 to 9 or more*), the frequency of contact (*less than monthly to daily*), and the number of relatives or friends the subject felt close to (*0 to 9 or more*). The scale has been translated into the Korean language, and its psychometric properties have been validated (e.g., Jang, Kim, & Chiriboga, 2006). Internal consistency was shown to be satisfactory in both the Florida sample ($\alpha = .79$) and the New York sample ($\alpha = .81$).

Satisfaction with adult children was assessed with eight items adapted from the Realization of Filial Responsibility scale (Seelbach, 1978). Participants reported how much they agreed with statements such as “I have contact with my children as much as I want,” “My children take good care of me,” and “I have a satisfying relationship with my children.” A 3-point rating scale was used, and the total scores range from 8 (*low filial satisfaction*) to 24 (*high filial satisfaction*). The scale has been translated into the Korean language, and its psychometric properties have been validated (e.g., Jang et al., 2006). Internal consistency was shown to be high in both the Florida sample ($\alpha = .88$) and the New York sample ($\alpha = .81$).

Sense of mastery was measured with Pearlin and Schooler’s Mastery Scale (Pearlin & Schooler, 1978). Respondents described their feelings about seven items (e.g., “I cannot solve my problems,” “My future mostly depends on me”) on a 4-point scale, ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The total scores range from 7 (*low mastery*) to 28 (*high mastery*). The scale has been translated into the Korean language, and its psychometric properties have been validated (e.g., Jang et al., 2006). Internal consistency was acceptable in both the Florida sample ($\alpha = .71$) and the New York sample ($\alpha = .67$).

Demographic variables—Demographic information included age (in years), sex (1 = *male*, 2 = *female*), marital status (1 = *married*, 2 = *not married*), and educational attainment (1 = *< high school*, 2 = *high school*).

Analytic Strategy

In addition to descriptive and correlational analyses, hierarchical regression models of depressive symptoms were estimated separately for the two samples. In the initial model, the independent effect of acculturation on depressive symptoms was tested. Sets of control variables were subsequently introduced with an entry order determined on the basis of antecedence: (a) demographic variables (i.e., age, sex, marital status, and education), (b) health-related variables (i.e., chronic conditions and functional disability), and (c) psychosocial variables (i.e., social network, filial satisfaction, and sense of mastery). Intercorrelations among study variables and variance inflation factors (VIF) were assessed to determine collinearity.

Results

Descriptive Characteristics of the Samples

Results of descriptive analyses comparing the two samples are shown in Table 1. The 672 participants in Florida and 420 participants in New York had similar levels of education, but differed slightly in other demographic characteristics. The length of residence in the United States was longer in the Florida sample. Those in New York had more chronic conditions, were less satisfied with their adult children, and were lower in the sense of mastery. Averaging 15.7 ($SD = 7.55$) in the Florida sample and 10.8 ($SD = 5.37$) in the New York sample out of a possible 36, acculturation scores were generally low in both samples. As expected, however, the level was significantly lower in the New York sample, and the difference remained significant even after adjusting for age, education, and the length of stay in the United States, $F(4, 1055) = 232.0, p < .001$. It should be noted that the length of stay in the United States was not included in further analyses due to its high correlation with acculturation ($r = .60, p < .001$, in the Florida sample; $r = .42, p < .001$, in the New York sample). Those in New York showed higher levels of depressive symptoms than their counterparts in Florida.

Regression Models of Depressive Symptoms

Table 2 summarizes the results of the hierarchical regression models of depressive symptoms. All zero-order correlations among variables used in the regression (results are not shown in tabular form) were below 0.52, and the highest value of VIFs was 1.40. The initial impact of acculturation on depressive symptoms was significant in both samples. Those with lower levels of acculturation were likely to have more symptoms of depression. With the introduction of the sets of control variables, acculturation remained significant in the Florida sample. However, in the New York sample, acculturation's predictability declined in each successive model and eventually became nonsignificant. In both samples, more chronic conditions, greater levels of functional disability, lower satisfaction with adult children, and lower sense of mastery were found to be linked to higher levels of depressive symptoms. Along with low acculturation, younger age and unmarried status posed a risk to depressive symptoms only in the Florida sample. The total amount of variance accounted for by the estimated model was 37%, $F(10, 619) = 35.2, p < .001$, in the Florida sample and 34%, $F(10, 369) = 18.3, p < .001$, in the New York sample.

Discussion

Building on the literature showing the importance of acculturation in the mental health of immigrant populations (e.g., Berry, 2002; Chiriboga et al., 2002; González et al., 2001; Suinn, 2010), the present study contrasted the role of acculturation in two samples of older Korean Americans residing in areas that vary substantially in their overall density of Koreans. Following the person–environment fit framework (Glass & Balfour, 2003; Lawton & Nahemow, 1973; Lawton, 1998), we hypothesized that individuals living in areas with a generally higher proportion of individuals of the same ethnic background not only would have lower levels of acculturation but also the impact of acculturation on depressive

symptoms would be lower for them. Findings from the comparative analyses with older Korean Americans living in Florida and New York supported our hypotheses.

It should be noted that the target population for the present study, older Korean American immigrants, is known to have a heightened risk of mental health problems (e.g., Han et al., 2007; Min et al., 2005; Mui et al., 2001). Consistent with previous literature, a high proportion of the present samples (40% of the New York sample and 30.8% in the Florida sample) fell into the category of probable depression when the standard cutoff for the short-form CES-D was applied.

As suggested by our first hypothesis, the mean level of acculturation was significantly lower among individuals living in New York compared to those in Florida. This difference remained after taking age, education, and the length of residence in the United States into account. Our findings suggest that geographic variations, in the aspect of density of people with the same ethnicity and availability of ethnic-oriented resources, may impact the degree of acculturation likely to be attained. This finding is in accordance with studies with other immigrant groups showing lower levels and slower processes of acculturation among those living in ethnic enclaves (e.g., Birman et al., 2002; Chiswick & Miller, 2001; Hochhausen et al., 2010; Portes & Schauffler, 1994). The results do add credence to anecdotal reports that a greater availability of ethnic-oriented resources and services may reduce the need for older immigrants to learn a new language and culture. Further support for this reduced need can be seen in the weaker association between acculturation and the years of residence in the United States in the New York sample ($r = .42, p < .001$) than the Florida sample ($r = .60, p < .001$). It is possible that the length of residence in the United States may not necessarily lead to higher levels of acculturation among those living in ethnic enclaves.

In multivariate models, an interesting finding emerged. In both the New York and the Florida samples, the impact of acculturation on depressive symptoms was initially significant. Regardless of the location, individuals with higher levels of acculturation had lower levels of depressive symptoms. However, in the Florida sample, the impact of acculturation remained significant in all models, whereas, in the New York sample, its significance gradually attenuated with the sequential entry of control variables. The finding suggests that the role of acculturation is more important for those who live in an area with a low density of people with the same ethnic background because their level of knowledge and familiarity with the host culture directly serve as personal resources that enable them to perform everyday activities. On the other hand, individuals living in an area with a high density of the same ethnic group may benefit from the greater availability of ethnic-oriented resources and benefits. In addition, they may have more opportunities to form supportive ethnic networks and to access formal and informal resources in their communities (Kwag et al., 2012). Our findings suggest geographic variations in the effects of acculturation and underscore the importance of considering environment or context in the assessment of acculturation and mental health.

Some limitations to the study should be noted. Due to the use of a cross-sectional design and nonrepresentative samples, causal inference and generalizability are not warranted. Also the absence of objective data on ethnic density and availability of ethnic-oriented resources in

the communities adds to the study limitations. Future studies need to incorporate geographic information system approaches using objective data from the U.S. Census and area resources regarding ethnic populations and communities. The present study was based on the unidimensional aspects of acculturation, addressing only the orientation to mainstream American culture. Given the bidimensional model of acculturation (Berry, 2002), the orientation to the original culture should also be taken into consideration to better understand an individual's process of acculturation and its impact on mental health. Attention should also be given to the 2-year difference in data collection time points between Florida and New York samples. Finally, the fact that individual's levels of acculturation may influence decisions about where he or she live should not be ignored.

Despite these limitations, the present study expands our knowledge of acculturation and mental health by suggesting the contextual effects of geographic locations. Such geographic variations need to be considered in developing targeted interventions to promote the mental health of vulnerable immigrant populations.

Acknowledgments

Datasets used in the present study were collected with support from the National Institute of Mental Health Research Grant Program (Grant No. R21MH081094) and a pilot grant from the Advanced Research Institute in Geriatric Mental Health (Grant No. R25MH068502).

References

- Alegría M, Canino G, Shrout PE, Woo M, Duan N, Vila D, ... Meng XL. Prevalence of mental illness in immigrant and non-immigrant U.S. Latino groups. *The American Journal of Psychiatry*. 2008; 165:359–369. DOI: 10.1176/appi.ajp.2007.07040704 [PubMed: 18245178]
- Andresen EM, Malmgren JA, Carter WB, Patrick DL. Screening for depression in well older adults: Evaluation of a short form of the CES-D. *American Journal of Preventive Medicine*. 1994; 10(2): 77–84. [PubMed: 8037935]
- Berry, J. Conceptual approaches to acculturation. In: Chun, K.Organista, P., Marin, G., editors. *Acculturation: Advances in theory, measurement, and applied research*. Washington, DC: American Psychological Association; 2002. p. 17-37.
- Berry, J., Kim, U. Acculturation and mental health. In: Dasenm, P.Berry, J., Sartorius, N., editors. *Health and cross-cultural psychology*. Newbury Park, CA: Sage; 1988. p. 207-236.
- Birman D, Trickett EJ, Vinokurov A. Acculturation and adaptation of Soviet Jewish refugee adolescents: Predictors of adjustment across life domains. *American Journal of Community Psychology*. 2002; 30:585–607. DOI: 10.1023/A:1016323213871 [PubMed: 12188052]
- Chiriboga DA, Black SA, Aranda M, Markides K. Stress and depressive symptoms among Mexican American elders. *The Journal of Gerontology Series B: Psychological Sciences and Social Sciences*. 2002; 57:P559–P568. DOI: 10.1093/geronb/57.6.P559
- Chiswick BR, Miller PW. A model of destination-language acquisition: Application to male immigrants in Canada. *Demography*. 2001; 38:391–409. DOI: 10.1353/dem.2001.0025 [PubMed: 11523267]
- Cho MJ, Nam JJ, Suh GH. Prevalence of symptoms of depression in a nationwide sample of Korean adults. *Psychiatry Research*. 1998; 81:341–352. DOI: 10.1016/S0165-1781(98)00122-X [PubMed: 9925185]
- Fillenbaum, G. *Multidimensional functional assessment: The Duke older Americans resources and services procedure*. Hillsdale, NJ: Erlbaum; 1988.
- Franzini L, Ribble JC, Keddie AM. Understanding the Hispanic paradox. *Ethnicity & Disease*. 2001; 11(3):496–518. [PubMed: 11572416]

- Glass, TA., Balfour, JL. Neighborhoods, aging, and functional limitations. In: Kawachi, I., Berkman, LF., editors. *Neighborhoods and health*. Oxford, England: Oxford University Press; 2003. p. 303-334.
- González HM, Haan MN, Hinton L. Acculturation and the prevalence of depression in older Mexican Americans: Baseline results of the Sacramento area Latino study on aging. *Journal of the American Geriatrics Society*. 2001; 49:948–953. DOI: 10.1046/j.1532-5415.2001.49186.x [PubMed: 11527487]
- Grieco, EM., Acosta, YD., de la Cruz, GP., Gambino, C., Gryn, T., Larsen, LJ., ... Walters, NP. *American Community Survey Reports (ACS-19)*. Washington, DC: U.S. Census Bureau; 2012. May. The foreign-born population in the United States: 2010. Retrieved from <http://www.census.gov/prod/2012pubs/acs-19.pdf>
- Han HR, Kim KB, Kim MT. Evaluation of the training of Korean community health workers for chronic disease management. *Health Education Research*. 2007; 22:513–521. DOI: 10.1093/her/cyl112 [PubMed: 17032707]
- Heron, M., Schoeni, RF., Morales, L. Health status among older immigrants in the United States. *Ann Arbor, MI: University of Michigan, Population Studies Center at the Institute for Social Research*; 2003.
- Hochhausen L, Perry DF, Le HN. Neighborhood context and acculturation among Central American immigrants. *Journal of Immigrant and Minority Health*. 2010; 12:806–809. DOI: 10.1007/s10903-008-9201-z [PubMed: 18949558]
- Hoeffel, EM., Rastogi, S., Kim, MO., Shahid, H. 2010 Census Brief (C2010BR-11). Washington, DC: U.S. Census Bureau; 2012. Mar. The Asian population: 2010. Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-11.pdf>
- Jang Y, Chiriboga DA, Allen J, Kwak J, Haley WE. Willingness of older Korean American adults to use hospice. *Journal of the American Geriatrics Society*. 2010; 58:352–356. DOI: 10.1111/j.1532-5415.2009.02684.x [PubMed: 20374409]
- Jang Y, Kim G, Chiriboga DA. Health perception and depressive symptoms among Korean American older adults. *Journal of Cross-Cultural Gerontology*. 2006; 21:91–102. DOI: 10.1007/s10823-006-9026-y [PubMed: 17195097]
- Jang Y, Kim G, Chiriboga DA, King-Kallimanis B. A bidimensional model of acculturation for Korean American older adults. *Journal of Aging Studies*. 2007; 21:267–275. DOI: 10.1016/j.jaging.2006.10.004 [PubMed: 18670580]
- Jasso, G., Massey, DS., Rosenzweig, MR., Smith, JP. *Immigrant health: Selectivity and acculturation*. London, England: The Institute for Fiscal Studies; 2004.
- Kwag KH, Jang Y, Chiriboga DA. Acculturation and depressive symptoms in Hispanic older adults: Does perceived ethnic density moderate their relationship? *Journal of Immigrant and Minority Health*. 2012; 14:1107–1111. DOI: 10.1007/s10903-011-9569-z [PubMed: 22389184]
- Lawton, MP. Environment and aging: Theory revisited. In: Scheidt, RJ., Windley, PG., editors. *Environment and aging theory: A focus on housing*. Westport, CT: Greenwood; 1998. p. 1-32.
- Lawton, MP., Nahemow, L. Ecology and the aging process. In: Eisdorfer, C., Lawton, MP., editors. *The psychology of adult of development and aging*. Washington, DC: American Psychological Association; 1973. p. 619-674.
- Logan JR, Zhang W, Alba RD. Immigrant enclaves and ethnic communities in New York and Los Angeles. *American Sociological Review*. 2002; 67:299–322. DOI: 10.2307/3088897
- Lubben JE. Assessing social networks among elderly populations. *Family & Community Health*. 1988; 11:42–52. DOI: 10.1097/00003727-198811000-00008
- Markides KS, Coreil J. The health of Hispanics in the southwestern United States: An epidemiologic paradox. *Public Health Reports*. 1986; 101(3):253–265. [PubMed: 3086917]
- Min JW, Moon A, Lubben JE. 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*. 2005; 9:210–222. DOI: 10.1080/13607860500090011 [PubMed: 16019275]
- Min, PG. *Caught in the middle: Korean merchants in America's multiethnic cities*. Berkeley, CA: University of California Press; 1996.

- Mui AC, Burnette D, Chen LM. Cross-cultural assessment of geriatric depression: A review of the CES-D and the GDS. *Journal of Mental Health and Aging*. 2001; 7:137–164.
- Myers, H., Rodriguez, N. Acculturation and physical health in racial and ethnic minorities. In: Chun, K.Organista, P., Marin, G., editors. *Acculturation: Advances in theory, measurement, and applied research*. Washington, DC: American Psychological Association; 2002. p. 163-185.
- Nagi SZ. An epidemiology of disability among adults in the United States. *The Milbank Memorial Fund Quarterly Health and Society*. 1976; 54:439–467. DOI: 10.2307/3349677 [PubMed: 137366]
- Noh S, Avison WR, Kaspar V. Depressive symptoms among Korean immigrants: Assessment of a translation of the Center for Epidemiologic Studies–Depression scale. *Psychological Assessment*. 1992; 4:84–91. DOI: 10.1037/1040-3590.4.1.84
- Pearlin LI, Schooler C. The structure of coping. *Journal of Health and Social Behavior*. 1978; 19:2–21. DOI: 10.2307/2136319 [PubMed: 649936]
- Portes A, Schauffler R. Language and the second generation: Bilingualism yesterday and today. *International Migration Review*. 1994; 28:640–661. DOI: 10.2307/2547152
- Radloff LS. The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*. 1977; 1:385–401. DOI: 10.1177/014662167700100306
- Roh S, Jang Y, Chiriboga DA, Kwag K, Cho S, Bernstein K. 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*. 2011; 13:1005–1012. [PubMed: 21678059]
- Rosow I, Breslau N. A Guttman Health Scale for the aged. *Journal of Gerontology*. 1966; 21:556–559. DOI: 10.1093/geronj/21.4.556 [PubMed: 5918309]
- Seelbach WC. Correlates of aged parents' filial responsibility expectations and realizations. *The Family Coordinator*. 1978; 27:341–350. DOI: 10.2307/583436
- Suinn RM. Reviewing acculturation and Asian Americans: How acculturation affects health, adjustment, school achievement, and counseling. *Asian American Journal of Psychology*. 2010; 1:5–17. DOI: 10.1037/a0018798

Table 1

Descriptive Characteristics of Samples and Study Variables

Variable	<i>M (SD) [minimum, maximum] or %</i>		<i>t (χ²)</i>
	Older Korean Americans in Florida (<i>n</i> = 672)	Older Korean Americans in New York (<i>n</i> = 420)	
Age (years)	70.1 (6.58) [60, 96]	71.6 (7.59) [60, 98]	-3.24**
Female	58.6	57.9	(5.08*)
Not married	23.4	39.1	(30.9***)
High school education	70.7	69.0	.37
Number of years in the United States	28.3 (11.8) [1, 54]	23.3 (9.58) [1, 50]	7.07***
Chronic conditions	1.34 (1.24) [0, 9]	1.74 (1.37) [0, 9]	-4.87***
Functional disability	1.81 (4.46) [0, 40]	2.37 (5.15) [0, 40]	-1.87
Social network	22.1 (5.69) [4, 36]	21.6 (5.80) [6, 33]	1.61
Filial satisfaction	19.5 (4.05) [8, 24]	18.8 (4.70) [8, 24]	2.73**
Sense of mastery	20.1 (3.37) [8, 28]	19.3 (3.29) [10, 27]	3.78***
Acculturation	15.7 (7.55) [0, 35]	10.8 (5.37) [0, 33]	11.6***
Depressive symptoms	7.24 (4.62) [0, 27]	9.31 (4.87) [0, 28]	-6.95***

*
p < .05.**
p < .01.***
p < .001.

Table 2

Hierarchical Regression Models of Depressive Symptoms

Predictor	Older Korean Americans in Florida				Older Korean Americans in New York			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
Acculturation	-.24***	-.25***	-.21***	-.14***	-.20***	-.20***	-.16**	-.05
Age		-.10*	-.19***	-.11**		-.04	-.11*	-.03
Gender		-.03	-.07	-.08		-.05	-.08	-.03
Marital status		.18***	.16***	.11**		.11*	.11*	.01
Education		.06	.06	.08		.02	.04	.04
Chronic conditions			.18***	.16***			.15**	.10*
Functional disability			.22***	.11**			.24***	.14**
Social network				-.02				-.03
Filial satisfaction				-.15***				-.16**
Sense of mastery				-.41***				-.41***
R ²	.06***	.09***	.18***	.37***	.04***	.05***	.13***	.34***

* $p < .05$.

** $p < .01$.

*** $p < .001$.