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Emotional Confidants in Ethnic Communities: Social Network Analysis of Korean American Older Adults

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Abstract

Objective—Ethnic communities often serve as the primary source of emotional support for older immigrants. This study aims to identify individuals who are more likely to be nominated as emotional confidants by age peers in the ethnic community and to examine factors contributing to the likelihood of being a more frequently endorsed confidant.

Method—Data were drawn from a survey with 675 older Korean Americans. Using the namegenerator approach in Social Network Analysis (SNA), participants were asked to list the names of three emotional confidents among age peers in the community.

Results—A higher level of popularity (i.e., in-degree centrality) was predicted by male gender, advanced education, lower functional disability, fewer symptoms of depression, and higher levels of participation in social activities. Discussion: Our findings suggest the value of SNA as a means of identifying the key emotional confidants in the community and utilizing them in community-based interventions.

Keywords

Asians; social factors; mental health; physical function

Social networks and interpersonal connectedness are critical for the health and well-being in the later years of life (Antonucci, Fiori, Birditt, & Jackey, 2010; Berkman & Glass, 2000; Cornwell, Laumann, & Schumm, 2008). Their significance is particularly pronounced among groups whose life conditions put them at potential risk (S. Cohen & Wills, 1985), such as older ethnic immigrants (Kuo & Tsai, 1986; Park et al., 2015). Literature suggests that older ethnic immigrants are largely connected within the boundaries of an ethnic enclave (Chiswick & Miller, 2005; Logan, Zhang, & Alba, 2002), and ethnic communities therefore serve as a primary source of support (Levy-Storms & Wallace, 2003; Mulvaney-Day, Alegria, & Sribney, 2007). Especially for emotional needs, older ethnic immigrants often prefer seeking support from age peers in their community rather than from mental health professionals or even family members (Lin, Bryant, Boldero, & Dow, 2014;

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Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Mulvaney-Day et al., 2007; Zhang & Ta, 2009). This preference may be attributed to the comparability that people find in emotional confidants of the same age cohort, language, and ethnic background (Fiori, Antonucci, & Cortina, 2006; Fiori, Consedine, & Magai, 2008).

Social Network Analysis (SNA) of Ethnic Community Networks

An "ego-centric" approach has been the convention in social network research, where the network size or the frequency of contact is quantified by participants' response to standardized survey questionnaires. This approach has been criticized due to its untested presumption of non-directionality (X's reported tie to Y is equal to a tie from Y to X) and inability to address the transactional aspects of social interactions (Schafer, 2011). An alternative method can be found in the "sociometric" approach of SNA. By asking participants to list the names of their social network members, the name-generator approach allows assessment of the directionality and patterns of group dynamics (Borgatti & Molina, 2003; Scott, 1991). Although SNA has typically been used in bounded settings such as schools and retirement communities (e.g., Haas, Schaefer, & Kornienko, 2010; Schafer, 2011), it is equally applicable to ethnic communities of a cohesive and tight-knit nature where individuals are bounded by their language and culture.

Using a Korean American community in Central Florida as a target and the SNA name generator as a tool, the current study explored the community-wide networks of emotional confidants among older members. Emotional confidants are defined as persons with whom one shares a personal matter or emotional concern. Our assessment focused on emotional confidants among age peers in an ethnic community and explored how often each participant was nominated by other participants. The "popularity" or "attractiveness" can be understood in the context of in-degree centrality, the number of ties that each participant receives from his or her peers (Borgatti & Molina, 2003; Scott, 1991).

The 2010 Census tallied about 1.7 million Korean Americans in the United States and ranked them as the fifth largest Asian American subgroup (U.S. Census Bureau, 2012). Most of the current generation of older Korean Americans are foreign-born and tend to hold traditional beliefs and values (Jang, Chiriboga, Allen, Kwak, & Haley, 2010). They also have a restricted boundary of social interactions and a high reliance on ethnic-oriented resources (Park et al., 2015). Using older Korean Americans as a target, the aims of the study were (a) to identify people who are more likely to be nominated as emotional confidants by age peers in the ethnic community and (b) to examine factors contributing to the likelihood of being a more frequently endorsed confidant.

Social Status in Ethnic Community Networks

Status characteristics theory (SCT; Berger, Cohen, & Zelditch, 1972) provided a conceptual framework for the study. SCT posits that the characteristics and attributes of individuals determine their position or rank in relation to others (Robbins & Judge, 2009). The theory helps clarify the potential mechanisms by which one's status—in this case being nominated as a confidant— is assigned by members of small groups and communities. The sources that status is derived from can be summarized into (a) the power a person yields over others, (b)

a person's ability to contribute to a group's goal, and (c) an individual's personal characteristics (Berger et al., 1972; Robbins & Judge, 2009). The first source suggests that individuals in a leadership position that allows control over the group and decision-making (e.g., manager in a company, president of an association, and pastor in a church) have distinct status. The second source involves a person's ability relevant to a specific goal. A higher status is usually assigned to a person who has expertise or potentials that can contribute to achieving the goal. The last source addresses personal characteristics and attributes, which are of particular relevance to the current investigation. It is likely that individuals with favorable characteristics and resources have a higher likelihood of being a popular emotional confidant in the community. In this study, we considered three aspects of individual resources that may determine older adults' status in the networks of emotional confidants: (a) demographic characteristics, (b) health conditions, and (c) psycho-socio-cultural resources.

Demographic Characteristics

In a general sense, certain demographic characteristics (e.g., being of advanced age, female gender, unmarried status, and low education) are associated with an increased vulnerability and lowered social status (Cornwell, 2011; Mirowsky & Ross, 2003; Pinquart & Sörensen, 2000). However, when it comes to emotional support, the role of age and gender could be debatable. It is plausible that old age and female gender might present a favorable social position in networks of emotional support because of age-associated wisdom and women's nurturing nature, although this can vary by culture.

Health Conditions

Including both physical and mental health, health conditions may determine one's status in social relations (Bruce, 2001; Johnson & Wolinsky, 1999). Healthy body and mind is an important asset in the later years of life, and older adults' tendency to desire social interactions with healthy peers has been reported (Cornwell, 2009; Janevic, Ajrouch, Merline, Akiyama, & Antonucci, 2000). In a study with older residents in a retirement community, Schafer (2011) supported the notion of the health-as-status by demonstrating the popularity of those in good health in within-facility social interactions.

Psycho-Socio-Cultural Resources

Another set of potential factors would be psycho-socio-cultural resources of older adults. Sense of mastery or feelings of control over life and environment (Pearlin & Schooler, 1978) is widely known as an indicator of psychological resilience, and its beneficial effects on health and well-being have been well-documented in studies with diverse populations (Zarit, Pearlin, & Schaie, 2003), including Korean American older adults (Jang, Kim, & Chiriboga, 2006; Noh & Avison, 1996). Given the emphasis on family in Asian cultures, we expected that a large family network would promote not only older individuals' self-esteem or self-worth but also their position in social relations (Mui & Shibusawa, 2008). For immigrant populations, one critical factor to consider is acculturation. Being able to speak English and knowledgeable about the mainstream society often promotes older individuals' status in their ethnic community (Chiswick & Miller, 2005; Logan et al., 2002). Finally, participation in community activities was considered as active involvement in such activities imply older

individuals' extraverted trait and increased contacts with community members (Rote & Markides, 2014; Xu & Du, 2014).

In sum, the present study assessed how demographic characteristics (age, gender, marital status, and education), health conditions (chronic conditions, functional disability, health perception, and depressive symptoms), and psycho-socio-cultural resources (sense of mastery, family network, acculturation, and community activity) would predict older individuals' likelihood of being a more frequently endorsed emotional confidant. Given that the emotional confidants could play an important role as non-professional peer counselors, the findings of the study were anticipated to hold implications for community-based interventions.

Method

Participants and Procedures

With approval from the University's institutional review board, survey data collection was conducted in two cities in Central Florida (Tampa and Orlando) with community-dwelling Korean American older adults (60 years old). Because Asian American immigrants are often hard to identify by any single approach (Islam et al., 2010), several sampling methods were used. These methods included contacting local Korean churches, other religious groups, senior centers, senior housing facilities, and elder associations. Efforts were made to reach less mobile or socially isolated individuals by soliciting active referrals from a variety of sources. Surveys were conducted in locations convenient to the participants, such as meeting rooms and cafeterias in churches and community centers.

We supplemented this convenience sampling procedure with a systematic approach using a telephone directory of Korean residents provided by the Florida Korean American Association. A total of 2,000 Korean residents in Tampa and Orlando were listed in the directory. After excluding those who had already been recruited through our convenience sampling efforts, we called all remaining individuals to ask whether there were age-eligible members in their household. Up to five phone calls were made until the individual was considered unreachable. If there was an eligible person in the household, a mail survey packet was sent. This step was designed to improve comprehensiveness of the sample by including individuals who were not recruited by the convenience sampling efforts and to offset limitations associated with non-representativeness of convenience sampling. Detailed information on the sampling procedures and validation of the multimethod recruitment strategy is available elsewhere (e.g., Jang et al., 2010). All respondents were paid US\$20 for their participation.

The survey instrument consisted of a standardized questionnaire in Korean. Most of the instruments included in questionnaires had been used in previous research and had good psychometric properties. If not already translated, instruments and questions went through a rigorous translation/back-translation/reconciliation process and pilot-testing. The SNA name generator was included as part of the questionnaire. Detailed information on the sampling procedures and validation of the multimethod recruitment strategy is available elsewhere

(e.g., Jang et al., 2010). None of the participants had missing information on more than 5% of the variables surveyed, and all were included in the analyses.

Measures

SNA name generator—Participants were asked to list names of three individuals whom they would like to talk about emotional concerns and seek advice among their age peers in the Korean community.

Demographic characteristics—Demographic information included age (in years), gender (0 = female, 1 = male), marital status (0 = not married, 1 = married), and education ($0 = \langle high \ school \ graduation$, $1 = high \ school \ graduation$).

Health conditions—Chronic condition, functional disability, health perception, and depressive symptoms were used as indicators of health. The total number of chronic medical conditions was assessed using a checklist of nine diseases and conditions common in older populations (e.g., diabetes, cancer, arthritis, heart disease, and high blood pressure).

Functional status was assessed with a composite measure from the Older American Resources and Services (OARS; Fillenbaum, 1988). For the 20 items covering a wide range of activities, participants were asked whether they could perform each activity. Responses were coded as 0 (*without help*), 1 (*with some help*), or 2 (*unable to do*). The total scores could range from 0 to 40. Cronbach's alpha for the present sample was .81.

Health perception was measured with three items from the OARS (Fillenbaum, 1988): "How would you rate your overall health at the present time?" "How is your present health compared to 5 years ago?" and "How much do your health troubles stand in the way of your doing the things you want to do?" The summed scores could range from 0 to 7, with higher scores indicating more negative health perceptions. Cronbach's alpha for the present sample was .71.

A 10-item short form of the Center for Epidemiologic Studies—Depression Scale (CES-D; Andresen, Malmgren, Carter, & Patrick, 1994) was used to index depressive symptoms. The scale assessed the frequency of symptoms of depression experienced during the past week on a 4-point scale from 0 (*none of the time*) to 3 (*all of the time*). The total scores could span from 0 to 30. Cronbach's alpha for the present sample was .85.

Psycho-socio-cultural resources—Sense of mastery, family network, acculturation, and social activity were considered. Sense of mastery was measured with the Pearlin and Schooler's (1978) Mastery Scale. 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. The total scores could range from 7 to 28, with higher scores indicating a greater level of sense of mastery. Cronbach's alpha for the present sample was .71.

Family network was measured with three items from the Lubben's (1988) Social Network Scale. The items consisted of the number of family/relatives seen at least once a month, frequency of contact, and the number of family/relatives the participant felt close to. The

total scores could range from 3 to 18, with higher scores indicating a stronger network of family. Cronbach's alpha for the present sample was .75.

Acculturation was assessed with a 12-item acculturation inventory (Jang, Kim, Chiriboga, & King-Kallimanis, 2007) that addresses language use, media consumption, food consumption, social relations, sense of belonging, and familiarity with culture. The total scores could range from 0 to 36, with higher scores indicating a greater level of acculturation to mainstream American culture. Cronbach's alpha for the present sample was .93.

Community activity participation was assessed with an index used in a previous study (Jang & Chiriboga, 2011). Individuals were asked how often they participated in the following six types of community activities: religious meetings, social gatherings (e.g., elder association, alumni association), senior centers, leisure or sporting activities, volunteer activities, and education/learning activities. Each activity was rated on a 4-point scale, with 0 indicating "never" and 3 "every day or almost every day." The total scores could range from 0 to 18, with higher scores indicating a greater level of participation. Although the Cronbach's alpha of .62 was low, this is not unusual in combinations of a broad range of often unrelated activities.

Analytic Strategy

To characterize the social network of emotional confidants, we calculated in-degree centrality (i.e., total number of times each respondent was named by other community members) using UCINET 6 (Borgatti, Everett, & Freeman, 2002). The SNA name generator data were entered to a directed network adjacency matrix, where each respondent is assigned both a row and a column in the matrix. Rows of this matrix represent "outgoing" ties from each respondent to other community members. Columns indicate "incoming" ties from other community members to each respondent—the sum of these columns represents in-degree centrality. We also constructed a visual representation of the networks to illustrate the different levels of in-degree among community members, using NetDraw (UCINET).

To examine factors contributing to the network in-degree centrality, we conducted a multivariate analysis. Poisson regression was selected because initial analyses suggested non-normal data distributions, and Poisson is an optimal method for estimating count data with a high level of skewness (J. Cohen, Cohen, West, & Aiken, 2003). The predictive model included three sets of factors: (a) demographic characteristics (age, gender, marital status, and education), (b) health conditions (chronic conditions, functional disability, health perception, and depressive symptoms), and (c) psycho-socio-cultural resources (sense of mastery, family network, acculturation, and community activity). Analyses were performed using Stata 13.

Results

Characteristics of the Sample and Study Variables

Table 1 summarizes major characteristics of the sample and study variables. The sample was composed of 675 participants, aged 60 to 96, with an average age of 70.2 (SD = 6.87). Less than half of the participants were males (41.2%). More than three quarters (76.6%) were

married, and about 70% had received at least a high school education. Although the level of education was quite high, the sample presented the overall characteristics that are similar to previously reported profiles of older Korean Americans in Florida and in other States (e.g., Jang et al., 2006; Roh et al., 2011). All participants were foreign-born immigrants. Descriptive information on the health-related and psycho-socio-cultural factors is also included in Table 1. The overall physical health status was fairly good; however, depressive symptom scores were quite high. Also, a relatively low level of acculturation was observed.

In-degree centrality scores ranged from 0 to 7, with an average of 0.49 (SD = 0.95). The score distribution was non-normal (skewness = 2.66, SE = 0.09), and approximately 30% of the sample received at least one nomination. Figure 1 displays the network pattern of emotional confidants in the community.

Predictive Model of In-Degree Centrality

Prior to estimating a multivariate model, bivariate correlations among study variables were assessed. The variables were correlated in the expected directions, and no issues with collinearity were identified. The highest coefficient was found in the inverse relationship between sense of mastery and depressive symptoms (r = -.52, p < .001).

Table 2 summarizes the results of the Poisson regression analysis. A higher level of indegree centrality was predicted by male gender (B = 0.71, p < .001), advanced education (B = 0.55, p < .01), lower functional disability (B = -0.07, p < .05), fewer symptoms of depression (B = -0.04, p < .05), and higher levels of participation in community activities (B = 0.08, p < .001). Sense of mastery and acculturation initially had a significant correlation with in-degree centrality in the bivariate level but lost their significance in the multivariate model.

Discussion

In light of the potential importance of community support in the lives of older ethnic immigrants (Kuo & Tsai, 1986; Mulvaney-Day et al., 2007; Park et al., 2015), the present study sought to identify the characteristics of people whom others frequently turn to for emotional support. The SNA name generator method allowed in-degree centrality scores to be calculated and network flows visualized. As shown in Figure 1, the overall network patterns in the community were dynamic, with about 30% of the sample receiving at least one nomination and the highest number of nominations being 7. The figure also suggests that selecting a few of the more frequently endorsed individuals would allow an intervention to reach a much larger group.

The overall findings from the multivariate analysis conform to what might be expected among older members of an ethnic community, in that those with male gender, advanced education, better health condition (indicated by lower levels of functional disability and depressive symptoms), and active participation in community activities were more frequently endorsed as an emotional confidant. The findings are in line with the premise of SCT (Berger et al., 1972) that personal characteristics and attributes determine one's status in social interactions. It seems that male gender and advanced education offer an empowered

and respected social position that members of a Korean immigrant community are more likely to turn to for emotional support and advice (Pinquart & Sörensen, 2000; Ridgeway, 1991; Robbins & Judge, 2009).

With regard to health, good health is highly regarded among older adults and brings an advantage in social network selectivity (Cornwell, 2009; Janevic et al., 2000). The notion of health-as-status (Schafer, 2011) supports our hypothesis that older individuals with better physical and mental health would be more frequently nominated as an emotional confidant. Among the three measures of physical health, functional disability was the only one that reached statistical significance in the multivariate model. Compared with chronic conditions and self-perceptions of health, physical function may be a more visible indicator of health upon which people draw their evaluation of others' health. Autonomy and independence grounded in physical functioning may also add an advantage in the social construction of one's status (Bruce, 2001). In this respect, it is interesting that depressive symptoms were also found to play a significant role. Positive emotional state thus seems to be an important qualification for being an emotional confidant. The link between participation in community activities and in-degree centrality was also plausible because the network of emotional confidants is embedded in the overall pattern of social engagement. Those who actively participate in social activities may have an increased visibility in the community, which in turn leads to a higher likelihood of being a social and emotional leader.

Although sense of mastery and acculturation are typically associated with a higher socioeconomic status and better physical and mental health (Chiswick & Miller, 2005), it had no significant impact in predicting in-degree centrality. In pursuit of emotional confidants within an ethnic community, one's ability to speak English and knowledge about the mainstream society may not necessarily accompany social power and status. It is also possible that the contribution of acculturation was weakened in the multivariate model due to its correlation with education and health status. Also, the non-significance of sense of mastery in the multivariate model can be attributed to its high correlation with depressive symptoms.

As introduced earlier, SCT states that a person's ability to contribute to a group's goal is one of the important values in the social construction of status (Robbins & Judge, 2009). Given that the frequently endorsed emotional confidants already play a role as informal peer counselors, it is an important issue whether they have proper knowledge about mental health to be able to perform the role. As the information on mental health literacy and stigma was available in the data set, we conducted supplementary analyses (not shown in tabular format). What we found was that the participants nominated as an emotional confidant were not particularly knowledgeable about mental health issues. For example, among those who received one or more nominations (n = 201), 35.3% thought that becoming depressed was a normal part of aging, 60.5% perceived that depression was a sign of personal weakness and 15% reported that having a mentally ill family member brought shame to the whole family. They also averaged only 42.6% correct on the 12-item Depression in Late Life Quiz (Pratt, Wilson, Benthin, & Schmall, 1992). These figures are similar to those reported in previous studies with general populations of older Korean Americans (Jang, Gum, & Chiriboga, 2011; Jang, Kim, Hansen, & Chiriboga, 2007). The finding is concerning because emotional

confidants' inaccurate knowledge and dismissive perceptions may pose a barrier to community members' access to mental health services (Ellis et al., 2010; Stiffman et al., 2006).

Several limitations of the present study should be noted. Because the study was based on a cross-sectional design and a non-representative sample, the findings are only suggestive and warrant further investigation. Despite the effort to recruit diverse participants, the sample was biased toward those with favorable socio-demographic profiles (e.g., married status and advanced education). The characteristics of the sample need to be taken into consideration in interpreting the findings. Another limitation is that the name generator did not address specific information about dyadic relationships (e.g., gender match, frequency of contact, and emotional closeness). Furthermore, our name generator approach relied on participants' free recall, which is subject to memory biases and ambiguous boundaries. Finally, we only considered "individual" levels of network characteristics (i.e., in-degree centrality), but "community" levels of network characteristics, such as social cohesion and density, would be useful to map the emotional support infrastructure of ethnic communities.

Despite these limitations, the present study has important practical implications. Our findings suggest the potential value of SNA as a means of identifying key emotional support leaders. Literature suggests the value of peer-based interventions in health promotion (e.g., smoking cessation), disease prevention (e.g., HIV/AIDS risk management), and diffusion of innovations (e.g., health communication and health education), and SNA serves as an empirical tool for developing and implementing such interventions (Chambers, Wilson, Thompson, & Harden, 2012; Luke & Harris, 2007). For example, Levy-Storms and Wallace (2003) showed that the use of informal but frequently endorsed network leaders as trainers increased the rate of mammography screening among older Samoan women, highlighting the influence of peer-opinion leaders in diffusion of health knowledge and information. Our supplementary findings on the low level of mental health literacy in those who were nominated as emotional confidants suggest that they should be prioritized in the efforts for mental health education and stigma reduction. When they acquire proper knowledge and positive perceptions of mental health, they could serve as central actors to speed up diffusion of health information and healthful behaviors in the community. The constructive changes in them could lead to a community-wide mental health promotion through interpersonal awareness.

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References

Andresen EM, Malmgren JA, Carter WB, Patrick DL. Screening for depression in well older adults: Evaluation of a short form of the CES-D (Center for Epidemiologic Studies Depression Scale). American Journal of Preventive Medicine. 1994; 10:77–84. [PubMed: 8037935]

- Antonucci, TC., Fiori, KL., Birditt, KS., Jackey, LMH. Convoys of social relations: Integrating life-span and life-course perspectives. In: Lamb, ME., Freund, AM., editors. The handbook of life-span development: Social and emotional development. Vol. 2. Hoboken, NJ: John Wiley; 2010. p. 434-473.
- Berger J, Cohen BP, Zelditch M Jr. Status characteristics and social interaction. American Sociological Review. 1972; 37:241–255. DOI: 10.2307/2093465
- Berkman, LF., Glass, TA. Social integration, social network, social support, and health. In: Berkman, LF., Kawachi, I., editors. Social epidemiology. New York, NY: Oxford University Press; 2000. p. 137-173.
- Borgatti, SP., Everett, M., Freeman, L. UCINET for Windows: Software for social network analysis. Lexington, KY: Analytic Technologies; 2002.
- Borgatti SP, Molina JL. Ethical and strategic issues in organizational social network analysis. Journal of Applied Behavioral Science. 2003; 39:337–349. DOI: 10.1177/0021886303258111
- Bruce ML. Depression and disability in late life: Directions for future research. The American Journal of Geriatric Psychiatry. 2001; 9:102–112. DOI: 10.1097/00019442-200105000-00003 [PubMed: 11316615]
- Chambers D, Wilson P, Thompson C, Harden M. Social network analysis in healthcare settings: A systematic scoping review. PLoS ONE. 2012; 7:e41911.doi: 10.1371/journal.pone.0041911 [PubMed: 22870261]
- Chiswick BR, Miller PW. Do enclaves matter in immigrant adjustment? City & Community. 2005; 4:5–35. DOI: 10.1111/j.1535-6841.2005.00101.x
- Cohen, J., Cohen, P., West, SG., Aiken, LS. Applied multiple regression/correlation analysis in the behavior sciences. 3rd. Mahwah, NJ: Lawrence Erlbaum; 2003.
- Cohen S, Wills TA. Stress, social support, and the buffering hypothesis. Psychological Bulletin. 1985; 98:310–357. DOI: 10.1037/0033-2909.98.2.310 [PubMed: 3901065]
- Cornwell B. Network bridging potential in later life: Life-course experiences and social network position. Journal of Aging and Health. 2009; 21:129–154. DOI: 10.1177/0898264308328649 [PubMed: 19144972]
- Cornwell B. Independence through social networks: Bridging potential among older women and men. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 66B. 2011; : 782–794. DOI: 10.1093/geronb/gbr111
- Cornwell B, Laumann EO, Schumm LP. The social connectedness of older adults: A national profile. American Sociological Review. 2008; 73:185–203. DOI: 10.1177/000312240807300201 [PubMed: 19018292]
- Ellis BH, Lincoln AK, Charney ME, Ford-Paz R, Benson M, Strunin L. Mental health service utilization of Somali adolescents: Religion, community, and school as gateways to healing. Transcultural Psychiatry. 2010; 47:789–811. DOI: 10.1177/1363461510379933 [PubMed: 21088104]
- Fillenbaum, GG. Multidimensional functional assessment of older adults: The Duke older Americans resources and services procedures. Hillsdale, NJ: Lawrence Erlbaum; 1988.
- Fiori KL, Antonucci TC, Cortina KS. Social network typologies and mental health among older adults. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences. 2006; 61:P25–P32. DOI: 10.1093/geronb/61.1.P25
- Fiori KL, Consedine NS, Magai C. Ethnic differences in patterns of social exchange among older adults: The role of resource context. Ageing & Society. 2008; 28:495–524. DOI: 10.1017/ S0144686X07006940
- Haas SA, Schaefer DR, Kornienko O. Health and the structure of adolescent social networks. Journal of Health and Social Behavior. 2010; 51:424–439. DOI: 10.1177/0022146510386791 [PubMed: 21131619]

Islam NS, Khan S, Kwon S, Jang D, Ro M, Trinh-Shevrin C. Methodological issues in the collection, analysis, and reporting of granular data in Asian American populations: Historical challenges and potential solutions. Journal of Health Care for the Poor and Underserved. 2010; 21:1354–1381. [PubMed: 21099084]

- Janevic MR, Ajrouch KJ, Merline A, Akiyama H, Antonucci TC. The social-relations-physical health connection: A comparison of elderly samples from the United States and Japan. Journal of Health Psychology. 2000; 5:413–429. DOI: 10.1177/135910530000500402 [PubMed: 22049186]
- Jang Y, Chiriboga DA. Social activity and depressive symptoms in Korean American elders: The conditioning role of acculturation. Journal of Aging and Health. 2011; 23:767–781. [PubMed: 21273501]
- Jang Y, Chiriboga DA, Allen JY, Kwak J, Haley WE. Willingness of older Korean-American adults to use hospice. Journal of American Geriatric Psychiatry. 2010; 58:352–356. DOI: 10.1111/j. 1532-5415.2009.02684.x
- Jang Y, Gum AM, Chiriboga DA. Knowledge of depression among Korean American older adults. Journal of Applied Gerontology. 2011; 30:655–665. DOI: 10.1177/0733464810374468
- Jang Y, Kim G, Chiriboga DA. Correlates of sense of control among older Korean American older immigrants: Financial status, physical health constraints, and environmental challenges. International Journal of Aging & Human Development. 2006; 63:173–186. DOI: 10.2190/9QMQ-TG4A-1LDC-CNRR [PubMed: 17152408]
- 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]
- Jang Y, Kim G, Hansen L, Chiriboga DA. Attitudes of older Korean Americans toward mental health services. Journal of the American Geriatrics Society. 2007; 55:616–620. DOI: 10.1111/j. 1532-5415.2007.01125.x [PubMed: 17397442]
- Johnson RJ, Wolinsky FD. Functional status, receipt of help, and perceived health. Journal of Clinical Geropsychology. 1999; 5:105–125. DOI: 10.1023/A:1022974926643
- Kuo WH, Tsai YM. Social networking, hardiness and immigrant's mental health. Journal of Health and Social Behavior. 1986; 27:133–149. DOI: 10.2307/2136312 [PubMed: 3525660]
- Levy-Storms L, Wallace SP. Use of mammography screening among older Samoan women in Los Angeles county: A diffusion network approach. Social Science & Medicine. 2003; 57:987–1000. DOI: 10.1016/S0277-9536(02)00474-4 [PubMed: 12878100]
- Lin X, Bryant C, Boldero J, Dow B. Older Chinese immigrants' relationships with their children: A literature review from a solidarity-conflict perspective. The Gerontologist. 2014; doi: 10.1093/ geront/gnu004
- 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
- Luke DA, Harris JK. Network analysis in public health: History, methods, and applications. Annual Review of Public Health. 2007; 28:69–93. DOI: 10.1146/annurev.publhealth.28.021406.144132
- Mirowsky, J., Ross, CE. Social causes of psychological distress. 2nd. New York, NY: Aldine de Gruyter; 2003.
- Mui, AC., Shibusawa, T. Asian American elders in the 21st century: Key indicators of psychosocial well-being. New York, NY: Columbia University Press; 2008.
- Mulvaney-Day N, Alegria M, Sribney W. Social cohesion, social support and health among Latinos in the United States. Social Science & Medicine. 2007; 64:477–495. DOI: 10.1016/j.socscimed. 2006.08.030 [PubMed: 17049701]
- Noh S, Avison WR. Asian immigrants and the stress process: A study of Koreans in Canada. Journal of Health and Social Behavior. 1996; 37:192–206. DOI: 10.2307/2137273 [PubMed: 8690879]
- Park NS, Jang Y, Lee BS, Ko JE, Haley WE, Chiriboga DA. An empirical typology of social networks and its association with physical and mental health: A study with older Korean immigrants. The Journal of Gerontology: Psychological Sciences. 2015; 70:67–76.

Pearlin LI, Schooler C. The structure of coping. Journal of Health and Social Behavior. 1978; 19:2–21. DOI: 10.2307/2136319 [PubMed: 649936]

- Pinquart M, Sörensen S. Influences of socioeconomic status, social network, and competence on subjective well-being in later life: A meta-analysis. Psychology and Aging. 2000; 15:187–224. DOI: 10.1037/0882-7974.15.2.187 [PubMed: 10879576]
- Pratt CC, Wilson W, Benthin A, Schmall V. Alcohol problems and depression in later life: Development of two knowledge quizzes. The Gerontologist. 1992; 32:175–183. DOI: 10.1093/geront/32.2.175 [PubMed: 1577312]
- Ridgeway CL. The social construction of status value: Gender and other nominal characteristics. Social Forces. 1991; 70:367–386. DOI: 10.2307/2580244
- Robbins, SP., Judge, TA. Organizational behavior. Upper Saddle River, NJ: Pearson Prentice Hall; 2009
- Roh S, Jang Y, Chiriboga DA, Kwag KH, 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]
- Rote S, Markides K. Aging, social relationships, and health among older immigrants. Generations. 2014; 38:51–57.
- Schafer MH. Health and network centrality in a continuing care retirement community. The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences. 2011; 66:795–803. DOI: 10.1093/geronb/gbr112
- Scott, J. Social network analysis: A handbook. London, England: Sage; 1991.
- Stiffman AR, Freedenthal S, Dore P, Ostmann E, Osborne VA, Silmere H. The role of providers in mental health services offered to American-Indian youths. Psychiatric Services. 2006; 8:1185–1191. DOI: 10.1176/appi.ps.57.8.1185
- Census Bureau, US. The Asian population: 2010. 2012. Retrieved from www.census.gov/prod/cen2010/briefs/c2010br-11.pdf
- Xu, Q., Du, Y. The effects of minority and immigration status on elderly health: A community social capital perspective. In: Vakalahi, HFO.Simpson, GM., Giunta, N., editors. The collective spirit of aging across cultures. New York, NY: Springer; 2014. p. 113-132.
- Zarit, SH., Pearlin, LI., Schaie, KW. Personal control in social and life course contexts. New York, NY: Springer; 2003.
- Zhang W, Ta VM. Social connections, immigration-related factors, and self-rated physical and mental health among Asian Americans. Social Science & Medicine. 2009; 68:2104–2112. DOI: 10.1016/j.socscimed.2009.04.012 [PubMed: 19427087]

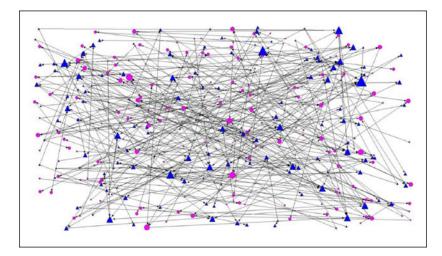


Figure 1. Visualization of emotional confidants.

Note. Circular shapes indicate women and triangular shapes men. The size of the shapes represents the magnitude of in-degree centrality. This graph only includes the 339 participants with at least one degree of ties (no isolates).

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Table 1

Sample Characteristics (N= 675).

	$M \pm SD$ (range) or %	
Demographic characteristics		
Age	$70.18 \pm 6.87 \ (60-96)$	
Gender (male)	41.2	
Marital status (married)	76.6	
Education (high school)	70.5	
Health conditions		
Chronic conditions	$1.35 \pm 1.24 (0-9)$	
Functional disability	$1.81 \pm 4.46 \; (040)$	
Health perception	$6.26 \pm 1.69 (3-11)$	
Depressive symptoms	$7.24 \pm 4.63 \ (0-27)$	
Psycho-socio-cultural resources		
Sense of mastery	$20.13 \pm 3.37 \ (8-28)$	
Family network	$11.80 \pm 3.03 \ (3-18)$	
Acculturation	$15.77 \pm 7.56 (0 - 35)$	
Community activity	$4.66 \pm 2.74 (0 – 17)$	
In-degree centrality	$0.49 \pm 0.95 \; (0 – 7)$	
0	70.2	
1	18.4	
2	7.1	
3	1.8	
4	1.8	
5	0.4	
6	0.1	
7	0.1	

Table 2

Poisson Regression Model on In-Degree Centrality.

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	В	SE
Demographic characteristics		
Age	0.01	0.01
Male $(yes = 1)$	0.71 ***	0.15
Married ($yes = 1$)	-0.36	0.18
High school (yes = 1)	0.55 **	0.19
Health conditions		
Chronic conditions	-0.04	0.06
Functional disability	-0.07*	0.03
Health perception	0.08	0.05
Depressive symptoms	-0.04*	0.02
Psycho-socio-cultural resources		
Sense of mastery	-0.04	0.02
Family network	-0.02	0.02
Acculturation	-0.01	0.01
Community activity	0.08***	0.02
Intercept	-1.95	1.06
Log-likelihood	-489.25	

^{*} p < .05.

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^{**} p<.01.

^{***} p<.001.