Limited English Proficiency, Social Network Characteristics, and Depressive Symptoms Among Older Immigrants

Sadhma Diwan

School of Social Work, San Jose State University, California.

Objectives. The purpose of the study was to examine differences in social network characteristics and their relationship to depressive symptoms among two groups of older Asian Indian immigrants: those with limited English proficiency and those proficient in English.

Methods. Telephone surveys were conducted with 226 English-speaking (Sample 1) and 114 Gujarati-speaking (Sample 2) immigrants in Atlanta.

Results. The samples differed significantly in demographics and patterns of social integration. Sample 2 had shorter residence in the United States, a more traditional ethnic identity, greater reliance on family for social activities, greater participation in religious events, lower likelihood of having good friends nearby, and less frequent interactions with friends. Rates of depressive symptoms did not differ, and network composition was unrelated to symptoms. For both samples, poorer health and a more traditional ethnic identity were related to depressive symptoms. Quality of relationship with children was predictive of symptoms for Sample 2.

Discussion. I found no differences in depressive symptoms despite differing social network structures. This may be due to the differing expectations of social ties among older immigrants. Interventions to improve well-being should focus on issues that generate acculturative stress. Cognitive and social support interventions may help individuals develop the adaptive coping strategies needed to live in a different culture.

Key Words: Immigrants—Depression—Acculturation—Family—Social support.

A large volume of literature points to the salutary influence of social integration (social ties, support, and participation) on physical and psychological well-being among older persons (Berkman & Glass, 2000). With the changing demographics of immigration patterns in this country, the largest proportion of new immigrants now comes from Asia and Latin America (J. P. Smith & Edmonston, 1997). The older populations within these ethnic groups have also increased, making it necessary to develop a better understanding of their patterns of social integration within the ethnic and the larger communities.

Little is known about the social integration of older persons who immigrate later in the life course. The literature notes the existence of distinct subgroups of older immigrants—those who immigrated earlier in the life course on the basis of skills and who are generally well off, as compared to those who immigrate later in life primarily to join their adult children. Many in the latter category are unable to communicate adequately in English, remain isolated from mainstream society (Wilmoth, 2001), and face many barriers to accessing benefits and services or understanding other information provided by federally funded programs and activities (Administration on Aging, 2006). Among Mexican American elders, non-English-speaking immigrants have higher levels of depressive symptoms as compared to more acculturated Mexican American elders (Gonzalez, Haan, & Hinton, 2001).

These distinctions within immigrant groups have significant implications for developing appropriate community-based outreach programs as, over the next decade, one should expect to see greater numbers of ethnic and minority elders who will be in need of community-based wellness and mental health services (Mills & Henretta, 2001). Thus, this study examined the relationship between social integration and mental health among English-speaking and non-English-speaking immigrant Asian Indian elders.

Social Integration and Mental Health

Researchers explain the relationship between physical and mental health and social relations by using Durkheim’s theory on social integration (see Su & Ferraro, 1997). According to the theory, social integration facilitates cohesion, provides individuals meaning and purpose in life, and promotes a sense of well-being. Social integration refers to the existence of social ties or a network of relationships that individuals maintain with family, friends, and other groups such as social, cultural, and religious organizations. It is through these ties that individuals are integrated into the larger society in which they live, and these ties may control or regulate individuals’ behaviors and thoughts that could influence health and mental health (Seeman, 1996). Researchers commonly assess mental health through the presence or absence of depressive symptoms, life satisfaction, morale, and so on (Ryff, 1989).

Empirical studies in the United States and in Europe have also linked patterns of social integration as defined by the types of networks to which people belong to mental health outcomes. For example, Wenger (1997) and Fiori, Antonucci, and Cortina...
(2006) noted that networks that are local (family, friends, and involvement in community groups) are associated with the lowest risk for depression and loneliness as compared to networks characterized by a lack of family nearby and local sources of informal support. Also, networks that include friendships appear to be related to better mental health outcomes as compared to those without such ties. The impact of an absence of family in the context of community support (e.g., friends) is not as damaging as is the absence of friends in the context of family support (Fiori et al., 2006). However, Krause (1995) noted that it is not just the structural aspects of the network (i.e., ties with particular groups) but the perceived quality of the relationships that has an impact on well-being. Thus, both the composition and the perceived quality of the relationships in the social network have been associated with depressive symptoms.

**Immigrants, Social Integration, and Depressive Symptoms**

Research on social integration has shown that the nature of social networks among older persons may vary due to individual factors such as age, gender, and personality, and situational factors such as the availability of roles and resources (see Antonucci & Akiyama, 1995; Fiori et al., 2006). Among immigrants, additional factors relevant to understanding social integration include language proficiency, acculturation, and availability of culture- or ethnic-specific resources (Treas & Mazumdar, 2002).

Language proficiency can influence patterns of social integration of older immigrants as it limits immigrants’ ability to interact with members of the larger society and participate in activities geared toward the mainstream culture. Asian American seniors aged 65 years and older have the highest rates of limited English proficiency among the major racial and ethnic groups in the United States. A majority of Filipino, Korean, and Chinese and a near majority of Asian Indian seniors experience limited English proficiency (Asian American Justice Center, 2006).

Acculturation, which is the degree to which individuals are influenced by and actively engage in the traditions, norms, and practices of one or more cultures, can vary by the amount of exposure to those cultures. Language proficiency influences acculturation, as language provides access to the culture. However, Gonzalez and colleagues (2001) noted conflicting findings on the relationship between increased acculturation (length of residence in the United States and English language proficiency) and depressive symptoms among older Mexican immigrants. Thus, maintaining a traditional ethnic identity as an immigrant can be both a risk and a resource in terms of its impact on well-being. Previous work with Asian Indian immigrants has found that having a less traditional and more bicultural ethnic identity is predictive of fewer depressive symptoms (Diwan, Jonnalagadda, & Balaswamy, 2004; Mehta, 1998).

Limited English proficiency, transportation barriers, declining health, and changes in one’s social networks through the process of immigration can be important barriers to social integration and well-being among older immigrants (Kalavars & Van Willigen, 2005; Treas & Mazumdar, 2002). However, strong family relationships and membership in religious or cultural organizations with close ties may serve to overcome these barriers, as these organizations play a vital role in promoting social ties and community support. Research among minorities and immigrants has shown geographic proximity to and strong kinship ties among family members, and coresidence with family, to be important factors contributing to well-being (Kim & McKenny, 1998; Wilmoth & Chen, 2003). Conversely, research has linked dissatisfaction with the support received from adult children to depressive symptoms among Chinese elders (Mui, 1998) and lower life satisfaction among Arab American elders (Ajrouch, 2007).

Given these variations between and within immigrant groups, little is known about the diversity in patterns of social integration among older, first-generation immigrants and the impact these patterns might have on mental health. Asian Indian immigrants in the United States are unique in that there is significant diversity in education level and socioeconomic status and within-group differences in language, diet, and religious affiliation as compared to other minority immigrant groups. As a group, Asian Indians are highly educated, with the average education level being a bachelor’s degree, and they are economically well-off, with a median family income higher than that of all other groups (Reeves & Bennett, 2004). However, there exist a sizable number of older Indians who have immigrated later in life primarily to join their adult children. Many of these individuals have lower levels of education and experience language and other barriers in the process of settling in in a new country.

A comparative examination of factors related to depressive symptoms among diverse groups within this ethnic community provides an opportunity to develop a better understanding of the relationships between patterns of social integration, acculturation, socioeconomic status, gender, health, and mental health. A better insight into these issues can allow program planners, service providers, and community leaders to design more culturally responsive programs to address the needs of diverse groups of ethnic elders.

This study, which used two samples of middle-aged and older immigrants (one proficient in English and the other with limited English proficiency), examined patterns of social integration and their relationship with depressive symptoms among two distinct groups of older persons within an immigrant community. Based on the literature on older immigrants, I propose the following hypotheses:

**Hypothesis 1:** Asian Indian immigrants with limited English proficiency will differ in the composition of their social networks and in social participation as compared to their English-speaking counterparts.

**Rationale:** Immigrants with limited English proficiency are more likely to have family members and ethnic community resources in their social network because opportunities for social participation may be limited.

**Hypothesis 2:** Level of depressive symptoms in the two samples will be influenced by the different patterns of social integration (network composition and perceived quality of relationships). Specifically, (a) immigrants with limited English proficiency will have more depressive symptoms; and (b) for immigrants with limited English proficiency, quality of relationship with family members will have greater impact on depressive symptoms.
Rationale: Social networks consisting primarily of family (and without friends) are associated with increased depressive symptoms. For immigrants, relationship with family (adult children) is likely to have greater impact on depressive symptoms given the greater reliance on family networks among immigrant elders.

The conceptual model used to guide the analyses was based on the theory of social integration outlined earlier. For immigrants, a more traditional ethnic identity and limited language proficiency can be significant barriers to building relationships with the larger community. However, strong relationships with family members and participation in social, cultural, and religious functions can work as protective mechanisms that facilitate social integration within the ethnic community. Depressive symptoms are related to levels and patterns of social integration (assessed by social ties, social participation, and perceived quality of relationships). Demographics, such as gender and education, and health status are associated with depressive symptoms and were included as controls in the model. Thus, it would be reasonable to assume that there are differences in how the samples are integrated into the community and that these variations may have different impacts on depressive symptoms.

METHODS

Sample

Two samples of Asian Indian immigrants residing in the Atlanta area were surveyed by telephone during 1999 and 2000. Asian Indians are the largest Asian American ethnic group in the Atlanta area, constituting 27% of the Asian and Pacific Islander population in Atlanta (Asian American Justice Center, 2006). Georgia (specifically Atlanta) has experienced the second largest percentage point increase in the growth of the Asian and Pacific Islander population in the country (A. S. Smith, Ahmed, & Sink, 2000). Although much of the growth in this population is occurring outside of California, New York, and Hawaii, most research has focused on these larger, more established communities (Asian American Justice Center, 2006).

The target population for the first sample (Sample 1) was English-speaking immigrants older than 50 years of age who had lived in the United States for at least 5 years. I constructed a sampling frame consisting of membership lists of persons identified as aged 50 or older from 10 Asian Indian community organizations. Eight organizations represented different linguistic communities, one represented Indians in general, and one was a professional network association with members from diverse Indian communities. Many older, first-generation Asian Indian immigrants belong to one or more of these ethnic community organizations, given the significance of these organizations in maintaining social, cultural, and religious traditions. Asian Americans have a greater likelihood of participating in nationality groups as compared to other minorities (Kim & McKenry, 1998). This sampling approach was necessary as existing data sets on aging populations in the United States do not include sufficient numbers of Asians to enable an examination of various subgroups. I sent initial recruitment letters to a total of 542 individuals in the sampling frame, of which 6% were unreachable due to incorrect phone numbers, and 26% were unreachable after numerous attempts on evenings, weekends, and additional efforts to locate them at varying times over several months. I calculated the response rate on the basis of the number of individuals with whom an actual phone contact was made (Dillman, 1978). Of the 365 individuals successfully contacted by telephone, 237 (65%) completed the survey, 75 (20%) refused, 40 (11%) were younger than 40 years of age, and 13 (4%) were unable to communicate in English. A preliminary analysis of completed surveys revealed 11 respondents to be younger than age 50, and I excluded them from this study.

The target population for the second sample was older non-English-speaking Asian Indian immigrants. Among the different languages, Gujarati is the second most common language spoken by Indian immigrants (U.S. Census Bureau, 1999). I obtained Sample 2 by recruiting participants (aged 50 and older) from the congregations of two Indian temples where greater numbers of non-English-speaking immigrants could be found. The primary language spoken in both temples was Gujarati. By distributing flyers describing the study, I recruited 114 individuals from two local temples. Temple leaders encouraged respondents for Sample 2 to volunteer for the study, and participants from both samples were offered a long-distance calling card as an incentive for participation. The sampling strategy used for this study was purposive and nonrandom, as I attempted to include a wider range of Asian Indian immigrants than previously studied in the literature. For both samples, eligible spouses were interviewed whenever possible in order to get an adequate representation of men and women. The samples were comparable in that they were drawn from the same geographic area through membership in different ethnic or cultural organizations and were interviewed during a limited time period.

Measures

The following measures were used. The number of depressive symptoms was assessed using seven of the eight items in the Center for Epidemiologic Studies–Depression (CES-D) short form used in the Health and Retirement Study of older adults (Steffick, 2000). Individuals responded (yes/no) to whether they experienced each symptom much of the time during the past week. The items included were feeling sad, happy, depressed, lonely; enjoyed life; could not get going; and sleep was restless. The short form with the abbreviated responses yields valid measures of depression (based on a score of four or more symptoms) among older people (Steffick, 2000). Based on previous work, I did not use the item “everything I did felt like an effort” in the analysis as it did not correlate well with other items and the overall scale (see Diwan, Jonnalagadda, & Gupta, 2004). In both samples, the validity of the CES-D short form could be seen through its positive and significant relationship with a variable that asked respondents whether they had felt “sad, blue, or depressed for two weeks in a row.”

Self-rated health was assessed by a single item, used extensively in the literature, that asked individuals to rate their health as excellent, very good, good, fair, and poor. The validity of this measure was seen in both samples with its
moderate and significant relationship with a variable measuring self-report of number of chronic conditions.

Acculturation was assessed by one variable, ethnic identity, which was a single item asking respondents to rate themselves as being very Indian (1), mostly Indian (2), Indian and American (3), mostly American (4), and very American (5). Higher scores indicated a more American identity or orientation. The validity of the identity variable as a measure of acculturation could be observed through its significant bivariate correlations with other proxy measures of acculturation (data not shown). For both samples, these variables included preference for type of food (mostly Indian to mostly American) consumed at home and when dining out. A more Indian identity was associated with a greater preference for Indian food. For the English-speaking sample, younger age at immigration and longer length of stay in this country were associated with a more bicultural or American identity. This relationship was not significant for the non-English-speaking sample, perhaps because they had immigrated at later ages and had lived in this country for a shorter period of time.

Patterns of integration were assessed with the following variables: (a) Participation in cultural and religious activities was assessed through a 2-item scale that asked respondents whether they regularly attended spiritual discourses and religious functions or events. Higher scores indicated greater attendance. For both samples, the scale was positively and significantly correlated with another variable that asked respondents to rate "how important is religion to you." (b) Two objective measures of social ties were whether respondents had any good friends nearby (yes/no) and frequency of socializing or contact with friends. The response categories were 0 = never, 1 = 1 to 5 times a year, 2 = every month or two, 3 = every 2 to 3 weeks, 4 = once a week, 5 = more than once a week. (c) Individuals’ assessment of their ties with children was assessed subjectively with one variable asking about their satisfaction with the relationship with their children. The response categories ranged from 1 to 4: very satisfied, somewhat satisfied, somewhat dissatisfied, and very dissatisfied. Higher scores indicated greater dissatisfaction. Given the salience of kin in immigrant networks, for older immigrants who move to the United States to live with or be closer to their adult children, satisfaction with this aspect of their lives may be a key variable in maintaining a sense of well-being.

Demographic variables included age, gender, and education (ordinal scale measuring years of schooling). For the non-English-speaking sample, the questionnaire was translated into Gujarati with the assistance of a certified interpreter and back-translated into English to ensure equivalence of translated items. Both surveys were pilot-tested to ensure comprehension and ease of response.

Data Analysis

Using STATA Version 8 (StataCorp, 2003), I conducted separate negative binomial regression analyses on the correlates of depressive symptoms because the dependent variable was based on a count of the number of depressive symptoms reported by an individual (see McCullagh & Nelder, 1989). Count outcomes are characterized by the fact that most individuals have a score of zero, and the proportion of individuals with a specific positive value decreases as the value of the count increases. Counts in which the variance is greater than the mean are overdispersed, and a commonly used alternative for model estimation in the presence of over-dispersion is to fit a negative binomial model to the data.

Negative binomial regression coefficients are interpreted in the same manner as those from a Poisson regression (Long, 1997). The incidence rate ratio (IRR) represents the percent change in the dependent variable (a count measure) for one category of a categorical independent variable relative to the reference category, holding other variables constant. For a continuous independent variable, the IRR shows the expected factor change in the dependent variable for each point increase in the value of the independent variable. The regression analyses used a robust variance estimator for data clustered by couples. This method of estimation, which yields consistent standard errors for clustered data, was appropriate because of the presence of several married couples in both samples where some correlation was likely between the responses of husbands and wives.

RESULTS

Table 1 presents the demographic characteristics of the samples and descriptive statistics on social integration and depressive symptoms. There were significant differences between the samples in that English-speaking immigrants (i.e., Sample 1) were slightly younger, had lived in the United States longer, were more educated, had an ethnic identity that was more bicultural, and had better self-rated health than those with limited English proficiency (Sample 2).

The samples also differed in their patterns of social integration. Sample 2 had a greater proportion of widows, was more likely to live with their children and attend religious functions and events, was less likely to have good friends nearby, and had lower frequency of contact with friends. As a follow-up to the question on frequency of socializing, respondents were asked with whom they were most likely to engage in social/leisure activities. Responses were the following: mostly members from the ethnic community, mostly members of the larger community, or both. Although both samples were equally likely to engage in social/leisure activities with other members of the ethnic community (58% for Sample 1 vs 56% for Sample 2), a much smaller percentage of Sample 2 was likely to engage in social activities that included nonethnic participants (39% vs 10%). Sample 2 reported greater engagement in social activities with other family members (35%) as compared to Sample 1 (3%). There were no differences between the samples on satisfaction with children, with the vast majority in both samples expressing satisfaction (95% in Sample 1 vs 97% in Sample 2). Although Sample 2 had a slightly higher score on mean number of depressive symptoms and a greater percentage of individuals in the category of possible depression (four or more symptoms), these differences were not statistically significant.

Table 2 presents the Pearson correlation coefficients for all of the variables used in the analyses. In both samples, having less education, being female, having poorer health, and being dissatisfied with children were significantly related to increased depression at the bivariate level. For Sample 1, having good friends nearby and having a more bicultural identity were related to fewer depressive symptoms.

Table 3 presents data from the negative binomial regression analyses examining the correlates of depressive symptoms for
each sample. I entered all variables into the equation simultaneously and dropped cases with data missing on any of the variables from the analyses. I observed no patterns with regard to missing data in the sample. The analyses suggested that different variables were associated with depressive symptoms in the two samples.

For Sample 1, Wald $\chi^2(8, N = 215) = 59.63, p < .0001$. The variables significantly associated with increased depressive symptoms were being female, having a more ethnic (Indian) identity, and rating one’s health more negatively. None of the variables assessing social integration that were significant at the bivariate level were significant in the full regression model. For women, the rate of increased depressive symptoms was 120% greater as compared to men (IRR = 2.20). For each point increase in the ethnic identity variable (i.e., respondents identifying themselves closer to having a very American identity), there was a 35% lower rate of reporting depressive symptoms (IRR = 0.65). For each point increase in reporting poorer self-rated health, there was a 32% higher rate of reporting depressive symptoms (IRR = 1.32). This variable, however, was marginally significant ($p = .05$). Individuals who were dissatisfied with their children had a 197% higher rate of reporting increased depressive symptoms (IRR = 2.97).

**DISCUSSION**

This study contributes to the research on mental health among older, first-generation, ethnic minority immigrants by examining their pattern of social integration and its relationship to depressive symptoms among two distinct groups of older immigrants. Significant differences in demographic characteristics existed between the samples. Consistent with earlier research on immigrants (Wilmoth, 2001), elders with limited English proficiency tended to (a) be older, less educated, and more likely to live with adult children; (b) have shorter residence in the United States and a more Indian ethnic identity; and (c) rate their health poorer as compared to the English-speaking sample.

Consistent with established data on prevalence of depressive symptoms (Steffick, 2000), the majority of respondents in both samples reported no depressive symptoms. A total of 7% of respondents in Sample 1 and 11% in Sample 2 had a CES-D
Table 2. Correlation Between Variables in the Regression Models

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Depressive symptoms</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2. Gender</td>
<td>0.31*</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>3. Identity</td>
<td>−0.18*</td>
<td>−0.08</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>4. Education</td>
<td>−0.17*</td>
<td>−0.25*</td>
<td>0.23*</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>5. Health</td>
<td>0.29*</td>
<td>0.17*</td>
<td>−0.06</td>
<td>−0.02</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>6. Participation</td>
<td>−0.03</td>
<td>0.07</td>
<td>−0.15*</td>
<td>0.11</td>
<td>−0.05</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>7. Friends</td>
<td>−0.14*</td>
<td>−0.12</td>
<td>−0.00</td>
<td>0.08</td>
<td>−0.21*</td>
<td>0.24*</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>8. Socialize</td>
<td>−0.06</td>
<td>0.00</td>
<td>−0.05</td>
<td>0.03</td>
<td>−0.01</td>
<td>0.18*</td>
<td>0.01</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>9. Child satisfaction</td>
<td>0.13*</td>
<td>−0.04</td>
<td>0.07</td>
<td>0.11</td>
<td>0.21*</td>
<td>−0.10</td>
<td>−0.10</td>
<td>−0.16*</td>
<td>—</td>
</tr>
</tbody>
</table>

Sample 1: English speaking

Sample 2: Limited English proficiency

Note: *p < .05.

Table 3. Predictors of Depressive Symptoms in Samples

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Incidence Rate Ratio</th>
<th>SE</th>
<th>z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>2.20</td>
<td>.47</td>
<td>3.66**</td>
</tr>
<tr>
<td>Ethnic identity</td>
<td>0.80</td>
<td>.08</td>
<td>−2.11*</td>
</tr>
<tr>
<td>Education</td>
<td>0.90</td>
<td>.06</td>
<td>−1.53</td>
</tr>
<tr>
<td>Self-rated health</td>
<td>1.39</td>
<td>.15</td>
<td>3.05**</td>
</tr>
<tr>
<td>Social integration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation</td>
<td>0.89</td>
<td>.12</td>
<td>−0.78</td>
</tr>
<tr>
<td>Frequency of socializing</td>
<td>0.93</td>
<td>.06</td>
<td>−0.94</td>
</tr>
<tr>
<td>Friends</td>
<td>0.95</td>
<td>.22</td>
<td>−0.21</td>
</tr>
<tr>
<td>Satisfaction with children</td>
<td>1.21</td>
<td>.20</td>
<td>1.17</td>
</tr>
</tbody>
</table>

Sample 2: Limited English proficiency (N = 105)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Incidence Rate Ratio</th>
<th>SE</th>
<th>z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>1.05</td>
<td>.36</td>
<td>0.17</td>
</tr>
<tr>
<td>Ethnic identity</td>
<td>0.65</td>
<td>.13</td>
<td>−2.03*</td>
</tr>
<tr>
<td>Education</td>
<td>0.94</td>
<td>.09</td>
<td>−0.54</td>
</tr>
<tr>
<td>Self-rated health</td>
<td>1.32</td>
<td>.19</td>
<td>1.90</td>
</tr>
<tr>
<td>Social integration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation</td>
<td>0.74</td>
<td>.20</td>
<td>−1.07</td>
</tr>
<tr>
<td>Frequency of socializing</td>
<td>1.03</td>
<td>.08</td>
<td>0.46</td>
</tr>
<tr>
<td>Friends</td>
<td>1.13</td>
<td>.36</td>
<td>0.40</td>
</tr>
<tr>
<td>Satisfaction with children</td>
<td>2.97</td>
<td>.72</td>
<td>4.47**</td>
</tr>
</tbody>
</table>

Notes: Negative binomial regression. SE = standard error.

*χ²(8, N = 215) = 59.63, p < .0001.

*χ²(8, N = 105) = 41.10, p < .0001. 

*p = .05; *p < .05; **p < .01.

score of four or more symptoms (cutoff for the 8-item scale). Thus, although the newer immigrants did show higher rates of depression in the expected direction, the differences between the samples were not statistically significant. The prevalence rate for depression in Sample 2 resembled the 12.8% prevalence rate for Wave 3 of the Health and Retirement Study and was slightly lower than the 14% in Wave 2 of the Health and Retirement Study (Steffick, 2000). Sample 1 had a lower prevalence than these established rates, which may partly be explained by the smaller proportion of women in the sample (28%). However, given that I had to drop one item from the CES-D from the analyses, the data on prevalence rates need further research and validation.

Confirming the first hypothesis related to different patterns of social integration, elders with limited English proficiency were less likely to have good friends nearby, interacted with friends less frequently, and relied more on family and organizations within the ethnic community as a means of remaining socially connected as compared to the English-speaking sample, which had more resources at its disposal—language proficiency, good friends nearby, and higher education.

In contrast to previous research, I found no significant associations for either sample between the composition of social network and depressive symptoms. That is, despite differences in the samples’ patterns of social integration, there were no differences in their rates of depressive symptoms and no significant relationships between depressive symptoms and network composition variables (i.e., availability of friends, frequency of socializing with friends, and participation in religious events and activities). This may be in part due to the differing expectations of social ties and networks among older immigrants. That is, those with limited English proficiency expect to have most of their social interactions revolve around members of the family and ethnic community and are satisfied with their networks, despite these networks being quite different from those of the English-speaking sample. Another possible explanation for this finding may be that the smaller sample sizes limited the ability to examine social ties of subgroups within each sample, thereby reducing the heterogeneity in relationships between social networks and mental health outcomes that has been found in other studies.

The only social network variable that had a different impact on depressive symptoms was satisfaction with one’s children.
Although there were no differences between the samples on level of satisfaction with children, this variable was significantly associated with depressive symptoms for Sample 2. Thus, the perceived quality of the relationship with adult children was a significant predictor of depressive symptoms in the sample with limited English proficiency. This finding is similar to studies by Ajrouch (2007) and Mui (1998) described earlier. It is important to note that common notions of cohesive family relationships among Asian families may lead one to overlook family relationships as sources of distress for older immigrants. Social and medical service providers should assess for quality of relationship with adult children, especially among elders with limited English proficiency, given that the adult children are usually their primary source of connection to the outside world.

For the correlates of depressive symptoms, the significant variables for Sample 1 were female gender, poorer health, and a more traditional ethnic identity. These findings are consistent with other studies of the larger community (Nolen-Hoeksema, Larson, & Grayson, 1999) as well as previous findings on Asian Indian immigrants (Diwan, Jonnalagadda, & Balaswamy, 2004). For Sample 2, the correlates of depressive symptoms were poorer health, a more traditional ethnic identity, and dissatisfaction with children. It is interesting that gender (although significant at the bivariate level) was not a significant correlate of depression in the multivariate analysis. This may perhaps be due to the larger proportion of women in Sample 2 and the strong impact of the satisfaction with children variable, which may have reduced the impact of gender on depressive symptoms. Additional research with larger samples may help in providing clearer answers to this finding.

Thus, interventions to reduce depressive symptoms among older immigrants need to focus on particular issues that generate acculturative stress. It is necessary to learn which aspects of the culture or environment seem most alienating to individuals and how these characteristics interfere with maintaining psychological well-being. Of course, the causal direction of this relationship could go the other way (i.e., depressed individuals may have greater difficulty adapting to a new culture). In either case, cognitive and social support interventions are likely to be successful in helping individuals develop adaptive coping strategies to alleviate depressive symptoms and to negotiate living in an environment that is socioculturally different. Strategies to address these issues include cognitive reframing and finding supportive relationships within and outside the ethnic community. Health promotion activities that are embedded in the context of family and religious and cultural institutions within the ethnic community would also be important interventions to improve both physical and psychological well-being.

In conducting further research on the impact of diversity within immigrant groups, it is necessary to qualify the findings of this study. First, the assessment of limited English proficiency was done by the interviewers, who asked respondents how comfortable they felt in responding to questions in English as compared to their own language. This does not capture the range of proficiency, and, thus, the extent of the respondent’s ability to integrate with the larger community in terms of access to culture is not well defined. Despite this limitation, I did indeed find differences between samples in the expected directions.

It is possible that the findings of this study may be attributable to sample selection issues. Therefore, generalizability is limited to the groups represented in the samples (members of various organizations) but not to other individuals (e.g., those with limited English proficiency who come from other linguistic communities but who do not belong to such ethnic organizations or temples). Those who do not join ethnic organizations may differ from joiners in social integration (i.e., they do not perceive a need for remaining connected with the ethnic community). They may also differ in their cultural identity (i.e., less ethnically identified individuals may not belong to ethnic organizations but instead may join other groups). The non-English-speakers came from one linguistic community (Gujarati), and the applicability of the findings to similar persons from other linguistic communities is unknown. Furthermore, community structures such as temples and cultural organizations may be organized quite differently depending upon the size and nature of the community. Thus, non-English-speakers from other smaller Indian communities may be at a greater disadvantage for not having access to social networks through organized religious and cultural activities. Future studies should attempt to explore the network patterns of non-English-speaking elders from these diverse Indian groups, as this may provide additional insights into the protective nature of organized community structures among immigrants. Finally, I do not have any data on individuals who refused to participate in the study and therefore cannot say for sure whether any systematic differences existed between the respondents and nonrespondents.

Despite these issues, the major strength of the study is that it represents two important segments of an immigrant community with respect to diversity in language proficiency, socioeconomic status, and social resources. The demographics of the English-speaking sample (e.g., level of education, median income) compare favorably to the overall demographic characteristics of the Asian Indian population as described by Reeves and Bennett (2004). For Sample 2, however, no established data are available for comparisons.

By comparing these two distinct groups, the study provides useful insight into patterns of social integration and depressive symptoms among older immigrants. Comparisons of the two samples appear to confirm the themes of different patterns of social integration indicated by qualitative data on members of this ethnic group (Kalavar & Van Willigen, 2005) as well as larger research on older immigrants (Wilmoth, 2001). However, the quantitative analyses point to important variables associated with depressive symptoms that could be addressed in order to improve mental health. Thus, multifaceted interventions that increase social support, offer strategies for coping with acculturative stress and family conflict, and improve well-being through health promotion activities might prove to be useful mechanisms for promoting the overall well-being of elders in the community. However, fine-tuning these interventions by attending to within-group differences could add to the success of these community-based interventions.

Acknowledgment

This study was funded in part by Grants T32-AG0017 and RO3AG19049 from the National Institute on Aging.

Correspondence

Address correspondence to Dr. Sadhna Diwan, School of Social Work, San Jose State University, One Washington Square, San Jose, CA 95192. E-mail: sdiwan@sjsu.edu
REFERENCES


StataCorp. (2003). Stata statistical software: Release 8.0 [Computer software]. College Station, TX: Author.


Received August 29, 2007
Accepted February 25, 2008
Decision Editor: Kenneth F. Ferraro, PhD