Why do Hispanics Report Poorer Health Status than Whites?

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A large body of research documents that, in general, higher SES is associated with better health outcomes. In recent decades, however, social demographers studying health differentials have found that, despite being of relatively low average socioeconomic status, Hispanics appear to have better mortality (and some health) outcomes than do individuals of other racial/ethnic groups with similar levels of SES.[1] This appears to be especially true for infants, the elderly, Mexican-Americans, the foreign-born, and the relatively unacculturated (Franzini et al 2001). Another important and consistent finding in the field of health-related demography is the effectiveness of self-reported global health ratings as independent predictors of mortality and health outcomes, even after controlling for objective health status and a host of other factors (see, for example, Fayers & Sprangers, 2002).

Taking these two findings together, one might expect to find that Hispanics self-report their health status more positively than do individuals of other race/ethnicities with similar levels of SES. However, research has found that this is not the case. In fact, Hispanics as a whole seem less likely than other groups to report themselves as being in good health, despite the fact that for many other measures of health status Hispanics appear to do better than would be expected given their average levels of SES (e.g., Ren and Amick 1996, Shetterly et al 1996, and Cho et al 2004).

Previous research has proposed many possible explanations for the (generally consistent) finding that Hispanics are particularly likely to self-report themselves as being in sub-optimal health. Many of these explanations focus on immigrant/acculturation-related factors, such as language of interview (Angel and Guarnaccia 1989), reference groups (Cho et al 2004), culturally-dependent cognitive understandings of and reactions to health status and problems (Shetterly et al 1996, Angel and Thoits 1987), and stress related to immigrants' documentation status (Finch & Vega 2003). Previous findings also suggest that individuals' "objective" health status and health behaviors, social support, demographic characteristics, and socioeconomic status may influence an individual's self-reported health status[2] (Goldman et al 2003, Angel & Angel 1992, Manderbacka et al 1999, Goldman 2001). Fairly recently, researchers have also begun to explore the role that community or neighborhood-level factors may play in influencing individuals' self-assessments of their health status. These studies (some of which focus on Hispanics and others of which have broader samples) suggest that factors such as neighborhood socioeconomic status, cohesion/social trust, ethnic homogeneity and social standing may have a role to play in individuals' self-assessed health status (Patel et al 2003, Malmstrom et al 1999, Submaranian et al 2002, Browning & Cagney 2002).

While past research provides many possible explanations for Hispanics' poorer reports of self-rated health, few (if any) studies have been able to simultaneously consider the impact that these factors may have on Hispanics' self-rated health (see Mantzavinis et al 2005 for a discussion of this limitation as applied to most multivariate studies of self-rated health status). This study uses data from the Los Angeles Family and Neighborhood Survey to identify the individual and neighborhood factors that are most predictive of fair/poor self-rated health status. Through exploring the role that many of the explanatory factors identified in previous research play in influencing Hispanics' self-rated health status, I hope to gain a more comprehensive understanding of what lies behind Hispanics' self reports of their global health status and how this differs from the processes underlying non-Hispanic whites' self-assessments of health.

[1] This is often referred to in the literature as the "Hispanic Paradox."

[2] While some of these studies focus on the self-rated health status of Hispanics (or a sub-group of Hispanics, such as Mexicans) in particular, others use broader samples to try to identify factors that may influence self-rated health status in general.

Data and Methods

Data for this paper come from the first wave of the Los Angeles Family and Neighborhood Survey (L.A.FANS). This is a survey of 65 neighborhoods (census tracts) in Los Angeles County. The survey is based on a stratified random sample design which oversamples poor neighborhoods and households with children. Data for Wave 1 were gathered from approximately 40-50 households in each neighborhood between April of 2000 and January of 2002. The current analyses utilize data from both the public-use datasets and the restricted versions 1 and 2.

Because different questions were asked of the various types of respondents in L.A.FANS, it was necessary to employ several sub-samples in the present analyses in order to test the various hypotheses. Three sub-samples are identified for analysis. Due to insufficient sample sizes of non-white, non-Hispanic groups, the three samples for analysis are limited to native-born non-Hispanic whites and Hispanics in order to be able to make clear comparisons between groups. The primary sample consists of adults over age 18 selected as the Randomly Selected Adults (RSA) in each household (N for analysis = 1,675). A second sample (used to examine the role of depressive symptoms in SRH) includes adults who are identified as the Primary Caregivers (PCG) of the focal child in each household (N for analysis = 1,192). Because in some households one individual can be both the RSA and the PCG, there is some overlap between these two samples. The third and final sample pools together RSAs and PCGs in order to maximize the sample size to permit comparisons between Mexican-origin and non-Mexican origin Latinos (N for analysis = 2,296).

Methods

For each of the three samples, descriptive statistics were first produced for the total sample as well as for each racial/immigrant subgroup. Bivariate comparisons were made using one-way ANOVA tests with Scheffe adjustments for multiple comparisons. Next, binomial logistic regressions were used to predict fair/poor self-rated health status for each of the three samples. Nested models are employed in order to test the effects of adding in groups of variables one at a time (see description of groups below). Odds ratios are presented for each set of models, as are predicted probabilities for each racial/immigrant group.

Variables

The dependent variable for all analyses is a dichotomous measure of fair/poor self-rated health status. Following from a large body of prior research which has transformed a four or five-category measure of SRH into a dummy measure of fair/poor SRH, this variable was coded as a dichotomous measure of fair/poor self-rated health status.

Explanatory variables were divided into the following substantive groups:

- *Race/immigrant/legal documentation status*
- *Spanish language of interview*
- *Health status*, including: overweight/obese; heavy drinking; current smoking; health condition that limits work; diagnosed by physician with cancer/malignancy, heart attack, chronic heart disease or lung disease; usual place to go when sick; and mental health status (for one sub-sample)
- *Demographic characteristics*, including: sex; age; ever had/adopted child; and current marital status
- *Individual SES*, including: educational attainment; current employment; mean family income; and current health insurance
- *Individual social support*, including: frequency of religious service attendance and participation in organizations in previous year

- *Neighborhood-level characteristics*, including: neighborhood-level cohesion and trust; tract-level poverty status, and tract being predominately Latino.

Preliminary Results

Preliminary descriptive results suggest that approximately 23 percent of all Randomly-Selected Adults (RSA) in the sample self-report themselves as being in fair/poor health status. When Hispanics are divided into native-born and foreign-born, I find that native-born Hispanics are not significantly more likely than native-born non-Hispanic whites to self-report fair/poor health status. Both documented and undocumented Hispanic immigrants are more likely than native-born whites and native-born Hispanics to report fair/poor health status (See Table 1).[3]

Table 1. Proportion of RSAs in fair/poor self-reported health status, by race and immigrant status

	Total	NB*, non-Hisp white	Hisp FB* Undoc	Hisp FB* Doc	NB* Hispanic
N	1,675	497	311	586	281
Fair/poor SRH (%)	22.8	10.7 [2,3]	32.8 [1,4]	31.6 [1,4]	15.0 [2,3]

* NB: native born, FB: foreign born

[1] Significantly different from white non-H native (p<.05)

[2] Significantly different from Hispaninc FB undocumented (p<.05)

[3] Significantly different from Hispanic FB documented (p<.05)

[4] Significantly different from Hispanic NB (p<.05)

Preliminary multivariate results (See Table 2) support this descriptive finding that there is a significant difference between foreign-born and native-born Hispanics' self-assessed health status. Among foreign-born Hispanics, those who are undocumented are more likely than those with legal documentation to report fair/poor self-rated health status, even after controlling for a host of other factors. Those who lack legal documentation may face legal stress and discrimination, and may also be less acculturated than other immigrants. It is likely that my limited acculturation proxy measure (Spanish language of interview) does not capture all of the effect of low levels of acculturation.

In keeping with findings from previous literature, these multivariate results also show that many other characteristics are significantly related to fair/poor self-rated health status. Being overweight/obese, having a health problem that limits work, and having been diagnosed by a doctor with at least one serious condition are all associated with an increased likelihood of reporting fair/poor SRH. Results from the PCG-based sample (not shown here) demonstrate that individuals who exhibit symptoms of depression are more likely than others to report fair/poor SRH. Men and younger individuals are less likely than women and people of older ages to report fair/poor SRH. Having more education and a high income is associated with better health, and having health insurance is marginally associated with lower odds of fair/poor SRH. In terms of neighborhood characteristics, while living in a cohesive neighborhood is not significantly associated with SRH, those who live in a non-poor or Latino neighborhood are significantly less likely than others to report fair/poor SRH.

These findings suggest that many factors, including neighborhood-level characteristics, are relevant for individuals' self-ratings of health. However, even after controlling for these other factors, Hispanic immigrants remain more likely than both native-born whites and native-born Hispanics to self-report fair/poor health. Preliminary results from analyses using the third sample (not shown here) focusing on Hispanics of Mexican and non-Mexican origin suggest that the differences between foreign-born and

[3] Results from Primary Caregiver (PCG) sample also show that the percentage of native-born Hispanics reporting fair/poor SRH is not significantly different from that of native-born non-Hispanic whites, and that both of these groups differ significantly from both documented and undocumented foreign-born Hispanics.

native-born Hispanics are greater than the differences between Hispanics of Mexican and non-Mexican origin. In summary, it appears that the difference between Hispanics' and non-Hispanic whites' self-assessments of health may be largely due to immigrant characteristics that are not fully explained by the many other variables included in these models.

Table 2. Odds ratios for fair/poor self-reported health status among RSAs*	
N=1,675	
Race/immigrant status (White native-born omitted)	
Hispanic, undocumented foreign-born	3.502**
Hispanic, documented foreign-born	2.890**
Hispanic, native-born	1.72
Spanish interview	1.388
Health status	
Overweight/obese	1.384*
Heavy drinker	1.407^
Health problem limits work	9.658**
Told by doctor has serious condition[1]	5.909**
Usual place of care when sick	1.413*
Demographic characteristics	
Male	0.574**
Age	1.019**
Individual SES	
Educational attainment (Less than secondary degree omitted)	
Secondary degree	0.540**
More than secondary degree	0.461**
Family income (bottom quartile omitted)	
2nd quartile	0.875
3rd quartile	0.801
4th quartile	0.376**
Currently uninsured	1.390^
Individual social support (NS)	
Neighborhood characteristics	
Neighborhood cohesion	1.193
Neighborhood poor/very poor	1.608^
Neighborhood predominately Latino	0.200*
Latino*predominately Latino	3.585^
Log Likelihood	-645.464
Pseudo R2	0.282
** p<0.01; *p<0.05; ^ p<0.10 two tailed	

* Model also includes current marital status, ever had child, religious services attendance, participation in activities, current smoking, Latino*serious condition, and neighborhood cohesion. None of these variables was significant in the full model.

[1]Includes heart attack, cancer/malignancy, chronic heart disease and chronic lung disease

Works Cited

Angel, J. & Angel, R. (1992). Age at migration, social connections, and well-being among elderly Hispanics. *Journal of Aging and Health, 4:4*. 480-499.

Angel, R. & Guarnaccia, P. (1989). Mind, body, and culture: Somatization among Hispanics. *Social Science and Medicine, 28:12*. 1229-1238.

Angel, R. & Thoits, P. (1987). The impact of culture on the cognitive structure of illness. *Culture, Medicine and Psychiatry, 11*, 465-494.

Browning, C. & Cagney, K. (2002). Neighborhood structural disadvantage, collective efficacy, and self-rated physical health in an urban setting. *Journal of Health and Social Behavior, 43*, 383-399.

Cho, Y., Frisbie, W., & Rogers, R. (2004). Nativity, duration of residence, and the health of Hispanic adults in the United States. *The International Migration Review, 38:1*,184-211.

Fayers, P. & Sprangers, M. (2002). Understanding self-rated health. *The Lancet, 359*, 187-188.

Finch, B. & Vega, W. (2003). Acculturation stress, social support, and self-rated health among Latinos in California. *Journal of Immigrant Health, 5:3*, 109-117.

Franzini, L., Ribble, J., & Keddie, A. (2001). Understanding the Hispanic paradox. *Ethnicity and Disease, 11*, 496-518.

Goldman, N. (2001). Social inequalities in health: disentangling the underlying mechanisms. *Annals of the New York Academy of Sciences, 954*, 118-139.

Goldman, N., Glei, D., & Chang, MC. (2003). The role of clinical risk factors in understanding self-rated health. *Annals of Epidemiology, 14*, 49-57.

Malmstrom, M., Sundquist, J., & Johansson, S. (1999). Neighborhood environment and self-reported health status: A multilevel analysis. *American Journal of Public Health, 89:8*, 1181-1186.

Mantzavinis, G., Pappas, N., Dimoliatis, I., & Ioannidis, J. (2005). Multivariate models of self-reported health often neglected essential candidate determinants and methodological issues. J*ournal of Clinical Epidemiology, 58*, 436-443.

Patel, K., Eschbach, K., Rudkin, L., Peek, K. & Markides, K. (2003). Neighborhood context and self-rated health in older Mexican Americans. *Annals of Epidemiology, 13*, 620-628.

Ren, X. & Amick, B. (1996). Racial and ethnic disparities in self-assessed health status: Evidence from the National Survey of Families and Households. *Ethnicity and Health, 1:3*, 293-304.

Shetterly, S., Baxter, J., Mason, L., & Hamman, R. (1996). Self-rated health among Hispanic vs non-Hispanic white adults: The San Luis Valley Health and Aging Study. *American Journal of Public Health, 86:12*, 1798-1801.

Submaranian, S., Kim, D., & Kawachi, I. (2002). Social trust and self-rated health in US communities: a multilevel analysis. *Journal of Urban Health: Bulletin of the New York Academy of Medicine, 79:4*, 521-534.