Ethnicity and nativity status as determinants of perceived social support: Testing the concept of familism

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ABSTRACT

Research has demonstrated a protective effect of social support on health. Social support is most often treated as an independent variable. However, as with disease risk factors, which are not randomly distributed, health-promoting resources such as social support are also systematically patterned. For example, in the USA, family support is thought to be high among Latinos, Mexican Americans in particular. Using data from the Project on Human Development in Chicago Neighborhoods, we explored the relationships between ethnicity/nativity status, socioeconomic status (SES) and perceived social support from family and friends. We also assessed the role of retention of culture—measured as primary language spoken at home—on social support. Finally, we tested whether SES moderated the relationship between ethnicity/nativity status and social support. Foreign and US-born Latinos, most notably, foreign-born Mexicans, reported higher family support compared to non-Latino whites. Primary language spoken at home seems to account for the relationship between ethnicity/nativity and familial social support. Mexican-born and US-born Latino immigrants reported lower social support from family at higher levels of SES. Each ethnic minority group reported lower perception of friend support compared to non-Latino whites. There was a strong SES gradient in subjective support from friends with higher support reported among those with higher SES. This study provides evidence for the notion that Latinos in the USA, specifically foreign-born Mexicans, may rely on family ties for support more than do non-Latino whites. Findings also help identify ethnicity/nativity status, primary language spoken and SES as determinants of social support. Specifically, the higher familial social support found among Latino immigrants may be due to retention of culture. Effect modification by SES suggests that Latinos of lower and higher SES may differ with regard to the traditionally-held value of *familism*.

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Introduction

Epidemiologic research has consistently demonstrated a link between social networks/social support and outcomes ranging from mental health to mortality (Berkman & Glass, 2000; House, Umberson, & Landis, 1988; Kawachi & Berkman, 2001). The association between lack of social ties and poor mental health has been especially well-established (Bassuk, Glass, & Berkman, 1999; Berkman, Melchior, Chastang, Niedhammer, Leclerc, & Goldberg, 2004; Cacioppo et al., 2002; Hamrick, Cohen, & Rodriguez, 2002; Kawachi & Berkman, 2001). According to Seeman (1996), the data on mental health outcomes have consistently demonstrated the generally protective effects of being socially integrated and conversely, the deleterious effects of social isolation.

Compared to the large and well-established body of literature on social support and its association with health, the conceptualization and operationalization of social support is often inconsistent across and within disciplines (Turner & Marino, 1994). For example, the debate of whether actual receipt of support or subjective evaluation of support is what matters for health continues today (Berkman & Glass, 2000; House et al., 1988; Turner & Marino, 1994). While both may be important to health through different mechanisms, the vast majority of studies have found that perceived social support is more strongly associated with health than received support (House, 1981; Pearlin, 2000; Seeman, 1996). A further debate in the literature surrounds whether social support impacts health through "main" or "buffering" effects (Kawachi & Berkman, 2001; Thoits, 2000; Turner, 1999; Turner & Marino, 1994). The "main effects" theory suggests that social support is relevant to health in all circumstances, regardless of whether significant stress is present (Kawachi & Berkman, 2001; Thoits, 2000; Turner, 1999; Turner & Marino, 1994). Accordingly, social support is directly

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beneficial and absence or dearth of this resource is detrimental to health (Kawachi & Berkman, 2001; Seeman, 1996; Turner, 1999). In contrast, the "buffering hypothesis" argues that social support primarily benefits health by mediating or buffering the deleterious effects of stress (Turner & Marino, 1994). Cobb, (1976) further asserted that social support is essentially a moderator of stress (Cassel, 1976; Turner, 1999; Vega & Miranda, 1985). According to Kawachi and Berkman (2001), the perception of available social support can mitigate the response to stress and ultimately prevent a cascade of subsequent adverse reactions.

Despite the extensive scholarship on how inequalities in disease risk arise, we know little about how social support varies across population subgroups (House, 1981; House et al., 1988; Turner & Marino, 1994). It is well known that health and disease are not randomly distributed, rather they are socially patterned such that certain groups are more or less likely to be affected by disease relative to others (Berkman & Kawachi, 2000). Membership in socially defined groups often dictates differential exposure to stressors which have noxious effects on health (Eaton & Muntaner, 2000; Pearlin, 2000; Thoits, 2000; Turner & Marino, 1994). Similar to the social patterning in exposure to health-damaging factors, there is reason to assume that variation in the availability of health-promoting resources such as social support is also systematically shaped by a group's social status or ranking (Turner & Marino, 1994).

Gaps in the literature

The literature on social support during the past decade has treated it almost exclusively as an independent, mediating or moderating variable. However, because social support is regarded as an independent predictor of health, we must also focus our attention on the factors that give rise to social networks and social support (House et al., 1988). House et al. (1988) similarly argued that for research, practice and policy reasons, social support must be investigated as a dependent variable (House et al., 1988). In order to develop interventions that are conducive to health, we must illuminate structural conditions that engender resources such as social support (Turner & Marino, 1994). This sentiment was closely echoed by Berkman and Glass (2000) in their call to focus on the context and structural basis that facilitate the exchange of social support. Because access to health-promoting resources such as education often varies across socially defined groups, it follows that access to social support as a health-advancing resource is also differentially distributed (Berkman & Glass, 2000; Lin & Peek, 1999; Turner & Marino, 1994).

While most researchers have focused on how gender, marital status and age are related to the provision and receipt of social support, fewer have turned their attention to differences in social support across racial/ethnic groups, immigrant, and socioeconomic status (SES) (Bassuk et al., 1999; Berkman & Glass, 2000; House et al., 1988; Seeman, 1996; Turner, 1999; Turner, Grankel, & Levin, 1983; Turner & Marino, 1994). Studies have suggested that disadvantaged social groups such as racial/ethnic minority may rely on informal sources of support such as kin because economic and social barriers restrict their access to more formal sources of social assistance (Landale, Orpesa, & Bradatan, 2006). Latinos are one such example. Studies of social support among Latino immigrants in the US have suggested that this ethnic group, specifically, Mexicans Americans, have large extended family networks and high levels of social support within these networks, both of which ameliorate the adverse consequences of poverty on health (Landale et al., 2006). The term *familism* is a used to describe this commonly cited value of Latino culture, and reflects the centrality and importance of family (Franzini, Ribble, & Keddie, 2001; Mindel, 1980; Vega & Miranda, 1985). Ethnographic research has found that in contrast to non-

Latino whites who maintain fewer ties with kin and are often long distance in nature, Mexican Americans generally live in closer proximity to extended kin networks, which facilitates healthy exchange of social support (Moore, 1989; Moore & Pinderhughes, 1993; Vega, 1990). Furthermore, Mindel (1980) suggested that while non-Latino (whites) migrate away from family networks, Latinos migrate towards them (Markides & Coreil, 1986; Vega, 1990). Given the widely cited notion of Latinos as family-oriented, the established relationship between social support and health, as well as the lack of attention paid to social support as a dependent variable, the need to examine the race/ethnicity and immigrant status as predictors of social support is justified (Franzini et al., 2001; Guarnaccia, 2002; Markides & Coreil, 1986; Vega & Miranda, 1985). While the protective role of family support for Latinos, other racial/ethnic minority, and persons of low SES has been explored, the benefits of non-kin support on health are less clear (Franzini & Fernandez-Esquer, 2004; Jung & Khalsa, 1989; Pugliesi & Shook, 1998; Schwartz, 2007; Walen & Lachman, 2000). In light of Mindel's claim that non-Latino whites migrate away from family networks, and the fact that migration can result in loss of social ties, often non-kin ties, it is possible that ethnicity/nativity status is associated with differences in source of support (Finch & Vega, 2003; Menjivar, 2000). Although studies have widely documented the effect of support on health, few have provided information on the source of support, the potentially distinct effects on health, and how this resource varies across ethnicity/nativity status (Dean, Kolody, & Wood, 1990). Not only may support from kin and non-kin differ with regard to the source, but support from non-kin may also be distinguished by its voluntary rather than obligatory nature (Dean et al., 1990). Moreover, friendship ties may be subject to fewer structural constraints and obligations, and may therefore engender feelings of attachment based on egalitarianism, consensus and sharing good times (Matt & Dean, 1993).

Study objectives

Overall, we were interested in understanding the social patterning of social support, in particular across ethnicity/nativity status. Our first objective was to test whether ethnicity/nativity status was associated with familial social support, based on our hypothesis that Latinos, chiefly foreign-born Mexicans would report higher kin-based support compared to other ethnic groups, especially non-Latino whites. Second, we sought to test whether ethnicity/nativity status was associated with social support from friends. Given their newcomer status, we hypothesized that immigrants would have had less time to develop friendship ties compared to native-born, and would therefore report lower support from friends. Our third hypothesis was that retention of culture would account for any increased family support reported by foreign-born Latinos. Therefore, we tested whether retention of culture, as measured by primary language spoken at home, could explain any differences in kin support across ethnicity/nativity status. Our final goal was to examine how SES influences the relationship between ethnicity/nativity status and perceived social support, guided by our hypothesis that *familism* may be lower at higher levels of SES.

Methods

Data for this study came from the Project on Human Development in Chicago Neighborhoods (PHDCN). The PHDCN is a prospective, multidisciplinary study of children and their families residing in Chicago neighborhoods. Sampling methodology for this study is well described elsewhere (Sampson, Morenoff, &Raudenbush, 2005; Sampson, Raudenbush, & Earls, 1997). The Longitudinal

Cohort Study involved three waves of data collection between 1995 and 2002 from selected children and their caregivers. One primary caregiver for children in all the age cohorts (0, 3, 6, 9, 12 and 15 years) except the 18 year olds was recruited for participation. This study focused on primary caregiver's reports of perceived social support. During the baseline face-to-face interview, a total of 4356 primary caregivers provided extensive information on themselves and their children. If primary caregivers were missing complete information on the outcome of interest they were excluded from the analysis. This resulted in a total of 3968 participants which formed the basis of our analysis.

Outcome variable

The two main outcomes of interest were perception of social support from family and perception of social support from friends. Social support was measured with the Provision of Social Relation Scale (PSR), which is able to assess support from family and friends separately, and provides an opportunity to consider the significance of source of support (Turner et al., 1983; Turner & Marino, 1994). This 15-item instrument was adapted from an 18-item scale designed by Turner et al. (1983), and includes items such as 'I know my family will always stand by me' and 'no matter what happens, I know that my family will always be there for me should I need them' to assess support from family and items such as 'I have at least one friend that I could tell anything to' and 'people who know me think I'm good at what I do' to assess friendship support. The number of response options was also revised from the original 5-point scale to a 3-point scale for the PHDCN study. Participants were asked to rate how closely (very true; somewhat true; not true), each of the 15-items described their relationships with family and with friends. This scale provides a continuous mean score of the respondent's perception of social support provided by these two distinct sources, with higher scores indicative of greater perceived social support. Previous tests of the internal consistency reliability of the PSR (family support and friend support subscales) indicate satisfactory reliability, with alpha coefficients ranging from 0.75 to 0.87 in two separate studies, and 0.83 for friend support and 0.94 for family support in another study (Turner et al., 1983; Turner & Marino, 1994). Our own test of internal consistency reliability also yielded satisfactory reliability with an alpha of 0.63 for family support and 0.75 for friend support.

Independent variables

The main predictor variables were race/ethnicity and nativity status. Because our primary interest was to assess whether subjective social support differed between racial/ethnic groups, and generation status, we coded this variable as non-Latino white; non-Latino black; Asian; foreign-born Mexican Latino; foreign-born non-Mexican Latino and US-born Latino (Mexican and non-Mexican). Although the data contain some foreign-born non-Latino white, black and Asian participants, the small numbers prevented us from making these separate categories of the variable. Approximately 60% of the foreign-born non-Mexican Latinos were Puerto Rican. The data precluded us from disaggregating the US-born Latino category. However, the two main sub-ethnicities were Mexican and Puerto Rican. Covariates included in the analysis were age, gender, marital status, education level, past year total household income, employment status, citizenship status and primary language spoken at home which was used as proxy measures of retention of culture. Education level was categorized < high school, high school, some college or college degree. To test whether SES modified the association between ethnicity/nativity status and social support we used a composite measure of SES which included

three variables—parental income, education, and occupational prestige code—which was created as part of the PHDCN study using principal components analysis. All information on covariates was self-reported during the structured household interview.

Data analysis

All descriptive analyses were conducted with SAS software version 9.0. Multivariable analyses were conducted with MLwiN software, version 2.0, which uses the iterative generalized least squares algorithm and accounts for clustering of individuals within neighborhoods (Rasbash, Steele, Browne, & Prosser, 2005). Below is a representation of a generic regression model that was estimated: a two-level random intercepts model with a continuous response for individual i living in neighborhood j.

$$Y_{ij} = \beta_0 X_{0ij} + \beta_k X_k + \mu_{0j} + e_{0ij}$$

The equation consist of predictors in the fixed part ($\beta_0 X_{0ij} + \beta_k X_k$) estimating the conditional coefficients for the exposure variable and covariates, where $\beta_k X_k$ is a vector of predictors, and two random intercepts for individuals e_{0ij} and neighborhoods μ_{0j} which are assumed to have an independent and identical distribution and variance estimated at each level. While we were not expressly interested in the random terms, we used multilevel modeling to account for the correlated nature of the data, as this method explicitly models dependence and adjusts the standard errors to account for the loss of independence (Rasbash et al., 2005).

Results

Social support from family

Table 1 describes the sample's socio-demographic and economic characteristics as well as the mean perceived familial and friendship support by these variables. The majority (93%) of the participants were female due to the fact that primary caregivers who were home at the time of the interview were more likely to be women. We assessed the extent of variation in primary language spoken at home between ethnic/nativity status groups and found that foreign-born Mexicans were more likely to speak Spanish at home compared to all other ethnic/nativity status groups, including foreign-born non-Mexican Latinos (87.1% vs. 58.9%, respectively, $p < 0.0001$). Table 2 shows results of the association between ethnicity/nativity status and subjective kin support. The first model (crude association) demonstrates that foreign-born Mexican Americans had significantly higher perceptions of support ($b = 0.119$, $p < 0.001$) compared to non-Latino whites. Differences in appraisal of social support between non-Latino whites and non-Latino blacks, Asian and US-born Latinos were not statistically significant.

In model 2, after accounting for age, gender, marital status and SES, foreign-born Mexicans and foreign-born non-Mexican Latinos continued to report significantly higher social support compared to non-Latino whites ($b = 0.136$, $p < 0.001$ and $b = 0.060$, $p < 0.01$, respectively). With the inclusion of these variables, US-born Latinos also reported significantly higher support relative to non-Latino whites. Having a college education was associated with higher subjective social support compared to having less than a high school education ($b = 0.053$, $p < 0.01$). In the final model we added primary language spoken at home and citizenship status as proxy measures of retention of culture. After controlling for these variables, the association between Latino ethnicity and foreign-born status was reduced. For example, among the effect of being a foreign-born Mexican on social support was reduced by 65%, so

Table 1
Demographics of sample and bivariate association between social support and individual covariates (n = 3968).

Characteristic	n (%)	Mean (SD)	Range	Mean family support	Mean friend support
Gender					
Female (reference)	3732 (93)			2.56	2.49
Male	298 (7)			2.54	2.54
Age	4030 (100)	33.9 (9)	14–81		
Marital status					
Married (reference)	2432 (60)			2.58	2.56
Divorced/separated	463 (11)			2.50*	2.57
Single	1064 (26)			2.47*	2.55
Widowed	71 (3)			2.56	2.59
Ethnicity/nativity status					
Non-Latino white	723 (18)			2.52	2.71
Non-Latino black	1358 (34)			2.49	2.61*
Non-Latino Asian/other	184 (5)			2.51	2.57*
Non-Mexican Latino (foreign-born)	260 (6)			2.55	2.45*
Mexican Latino (foreign-born)	1056 (26)			2.64*	2.41*
All Latino (US-born)	449 (11)			2.52	2.56*
Primary language spoken					
English (reference)	2462 (61)			2.50	2.63
Spanish	1117 (28)			2.64*	2.39*
Bilingual	291 (7)			2.54	2.49*
Other	160 (4)			2.56	2.59
Citizenship status					
US citizen (reference)	2839 (70)			2.51	2.61
Non-US citizen	1191 (30)			2.61*	2.43*
Education level					
<High school (reference)	1641(41)			2.55	2.45
High school diploma	520 (13)			2.55	2.55*
Some college	1362 (34)			2.51*	2.62*
College degree	445 (11)			2.57	2.74*
Household income (past year)					
<$10,000 (reference)	991 (25)			2.51	2.47
$10,000–20,000	799 (20)			2.56*	2.48
$20,000–40,000	1226 (30)			2.56*	2.56*
>$40,000	1014 (25)			2.55*	2.69*
Employment status					
Currently employed	2257 (56)			2.55	2.59
Unemployed <5 years	910 (23)			2.53	2.54*
Unemployed >5 years	863 (21)			2.55	2.48*
Socio-economic status (quartiles)					
Lowest quartile (reference)	1010 (25)			2.57	2.43
Second quartile	1004 (25)			2.53	2.51*
Third quartile	1009 (25)			2.53	2.57*
Highest quartile	1007 (25)			2.55	2.71*

Key: *significantly different from the referent group at 0.05 p-value.

that the associated coefficient was rendered statistically insignificant. Participants whose primary language spoken at home was Spanish reported significantly higher familial support compared to persons whose primary language was English ($b = 0.127$, $p < 0.001$).

Social support from friends

Table 3 presents the coefficients for the predictors of perception of social support from friends. In the unadjusted model, each ethnic/nativity status group reported significantly lower social support compared to non-Latino whites (non-Latino blacks $b = -0.102$; Asian $b = -0.133$; foreign-born Mexican American $b = -0.297$; foreign-born non-Mexican Latino $b = -0.248$; US-born Latinos $b = -0.146$, $p < 0.001$, respectively). In model 2, the relationship between each racial/ethnic and nativity status group and friendship support remained significantly lower than non-Latino whites (non-Latino black $b = -0.05$, $p < 0.01$; Asian $b = -0.097$, $p < 0.01$; foreign-born Mexican American $b = -0.204$, $p < 0.001$; foreign-born non-Mexican Latino $b = -0.187$, $p < 0.001$; US-born Latino $b = -0.076$, $p < 0.001$, respectively). This model also shows the graded relationship between education and social support, as well as the gradient in social support by income, such that at higher education and income levels, people reported higher perceived support from friends. Finally, inclusion of primary language spoken at home and citizenship status decreased the magnitude of effect for each ethnic minority group; most notably for foreign-born Mexicans, whose coefficient decreased by more than 50%. Each ethnic minority group, however, continued to report significantly lower support relative to non-Latino whites. Respondents who spoke primarily Spanish at home and those who were bilingual reported significantly lower perceived social support compared to English speakers ($b = -0.133$, $p < 0.001$; $b = -0.091$, $p < 0.001$, respectively).

Table 2
Effects of race/ethnicity and nativity status on perception of social support from family (n = 3968).

	Model 1	Model 2[a]	Model 3[a]
Parameter	b coefficient (SE)	b coefficient (SE)	b coefficient (SE)
Constant	2.51	2.46	2.44
Ethnicity/nativity status			
Non-Latino white	Reference	Reference	Reference
Non-Latino black	−0.024 (0.015)	0.019 (0.016)	0.024 (0.016)
Non-Latino Asian/other	−0.012 (0.025)	0.004 (0.025)	−0.003 (0.025)
Non-Mexican Latino (foreign-born)	0.041 (0.022)	0.060 (0.022)**	−0.010 (0.027)
Mexican Latino (foreign-born)	0.119 (0.015)***	0.136 (0.017)***	0.041 (0.027)
All Latino (US-born)	0.007 (0.018)	0.042 (0.019)*	0.029 (0.020)
Education level			
<High school degree		Reference	Reference
High school degree		0.025 (0.015)	0.028 (0.015)
Some college		−0.001 (0.012)	0.005 (0.012)
College degree		0.053 (0.019)**	0.055 (0.019)**
Income (annual)			
<$10,000		Reference	Reference
$10,000–$20,000		0.012 (0.015)	0.008 (0.015)
$20,000–$40,000		0.017 (0.014)	0.018 (0.014)
>$40,000		0.018 (0.017)	0.08 (0.017)
Employment status			
Currently employed		Reference	Reference
Unemployed <5 years		−0.006 (0.012)	−0.008 (0.012)
Unemployed >5 years		−0.008 (0.013)	−0.012 (0.013)
Citizenship status			
US citizen			Reference
Not US citizen			−0.004 (0.018)
Primary language spoken at home			
English			Reference
Spanish			0.127 (0.024)***
Bilingual			0.036 (0.022)
Other			0.049 (0.027)
−2 LL	1668.22	1599.64	1568.05

Key: *p < 0.05, **p < 0.01, ***p < 0.001.
[a] Model adjusted for age, gender and marital status.

Table 3
Effects of race/ethnicity and nativity status on perception of social support from friends (n = 3968).

Parameter	Model 1	Model 2[a]	Model 3[a]
	b coefficient (SE)	b coefficient (SE)	b coefficient (SE)
Constant	2.71	2.49	2.51
Ethnicity/nativity status			
Non-Latino white	Reference	Reference	Reference
Non-Latino black	−0.102 (0.018)***	−0.050 (0.019)**	−0.058 (0.019)**
Non-Latino Asian/other	−0.033 (0.030)***	−0.097 (0.029)**	−0.084 (0.030)**
Non-Mexican Latino (foreign-born)	−0.248 (0.027)***	−0.187 (0.026)***	−0.103 (0.032)**
Mexican Latino (foreign-born)	−0.297 (0.018)***	−0.204 (0.019)***	−0.088 (0.033)**
All Latino (US-born)	−0.146 (0.022)***	−0.076 (0.023)***	−0.055 (0.024)*
Education level			
<High school degree		Reference	Reference
High school degree		0.037 (0.018)*	0.035 (0.018)
Some college		0.076 (0.015)***	0.071 (0.015)***
College degree		0.126 (0.022)***	0.123 (0.022)***
Income (annual)			
<$10,000		Reference	Reference
$10,000–$20,000		0.029 (0.017)	0.034 (0.017)
$20,000–$40,000		0.070 (0.016)***	0.070 (0.017)***
>$40,000		0.125 (0.020)***	0.115 (0.020)***
Employment status			
Currently employed		Reference	Reference
Unemployed <5 years		0.005 (0.015)	0.008 (0.015)
Unemployed >5 years		−0.005 (0.015)	−0.002 (0.016)
Citizenship status			
US citizen			Reference
Not US citizen			−0.012 (0.022)
Primary language spoken at home			
English			Reference
Spanish			−0.133 (0.029)***
Bilingual			−0.091 (0.026)***
Other			−0.045 (0.033)
−2LL	3182.90	3025.79	2999.40

Key: *p < 0.05, **p < 0.01, ***p < 0.001.
[a] Model adjusted for age, gender and marital status.

Interaction effects among individual correlates

We explored whether the effects of ethnicity/nativity status on social support differed by SES. Specifically, we thought that higher social status among Latino immigrants may be accompanied by movement away from kin networks and the associated support. For purposes of the interaction, we used a composite measure of SES that was created in the original PHDCN study that we felt captured the level of human and financial capital, as well as prestige. Results of two-way interaction between ethnicity/nativity status and SES demonstrated that foreign-born Mexicans and US-born Latinos reported lower kin support at higher levels of SES ($b = -0.035$, $p < 0.01$; $b = -0.028$, $p < 0.05$, respectively). Perception of family social support did not significantly differ for non-Latino blacks, Asians or non-Latino whites across SES (Fig. 1). We did not find that SES significantly modified the relationship between ethnicity/nativity status and friend-based social support. Moreover, results of interactions between ethnicity/nativity and citizenship status in the US were not statistically significant.

Discussion

Following calls to investigate the social distribution of social support, we examined whether perception of social support from family and friends differed across racial/ethnic, nativity status and SES in a sample of adult primary caregivers in Chicago, IL (Berkman

& Glass, 2000; Turner et al., 1983; Turner & Marino, 1994). We also explored the cited, but seldom quantitatively tested assumption that Latinos, in particular Mexican Americans are more family-oriented than other racial/ethnic groups, and whether this social resource is diminished among subsequent generations of US-born Latinos (Keefe, 1984; Landale et al., 2006; Moore, 1989; Moore & Pinderhughes, 1993). Results of our study lend credence to the notion that foreign-born Mexicans do have stronger familial social support than other racial/ethnic groups. Moreover, our finding that US-born Latinos report lower perceived familial social support than their foreign-born counterparts provides evidence that this facet of *familism* might wane with time. Adjusting for SES did not diminish the positive effects of Mexican immigrant status on evaluation of family social support. In fact, the addition of SES strengthened the positive effects for foreign-born Mexican and non-Mexican Latino immigrants, as well as US-born Latinos.

Ethnographic work suggests that disadvantaged minority groups may develop strong support networks among their co-ethnics and extended family as a way of coping with the poverty and discrimination they experience (House et al., 1988). Our finding that Latinos, most notably foreign-born Mexicans report stronger family support relative to non-Latino whites provides some evidence for this idea. However, this pattern did not hold for non-Latino blacks, who are also economically disadvantaged. It is possible that the economic deprivation this group faces is accompanied by lack of informal social resources as well. Although this study did not have a validated measure of acculturation we had information on primary language spoken at home, which according to Vega and Gil (1998) is used as a reference point for cultural attachment (Turner, Lloyd, & Taylor, 2006). The addition of this variable reduced the magnitude of effect of Latino ethnicity and foreign-born nativity on perceived family support insignificant. Persons who primarily spoke Spanish at home reported significantly higher evaluation of this form of social support compared to English speakers. These results suggest that Spanish as a primary language spoken at home, which may be a marker for retention of traditional cultural values is one explanation for why foreign-born Latinos, most notably Mexicans report strong family support.

Our exploration of interaction effects revealed that at higher levels of SES, both foreign-born Mexican and US-born Latinos report lower familial social support than non-Latino whites. Interestingly, among foreign-born non-Mexican Latinos, familial social support did not differ by SES. Although these findings are not entirely clear, they may point to the idea that waning *familism* is a byproduct of increased exposure to US white norms, or that higher SES Latinos face fewer barriers to more formal support resources. In contrast to reporting the highest familial social support, foreign-born Mexicans had the lowest appraisal of social support from friends. This finding echoes the suggestion that while non-Latino whites migrate away from family networks and perhaps towards friendship networks, Latinos, particularly foreign-born Mexicans, may migrate towards them (Markides & Coreil, 1986; Mindel, 1980; Vega, 1990). We found gradients in perceived friend social support by education level and income. Our initial interpretation of this finding was that educational settings could provide an opportunity to develop supportive non-kin ties. Reasons for the income gradient in friendship social support are not entirely clear, but may be due to differences in both time and means to maintain voluntary, friendship ties. A further difference between familial and friend support arose with the introduction of a variable which we used to capture retention of culture. Whereas primary use of Spanish at home seemed to account for why foreign-born Mexicans had higher appraisals of familial social support, the inclusion of this variable did not completely diminish the negative association between Latino ethnicity and support from friends. Therefore,
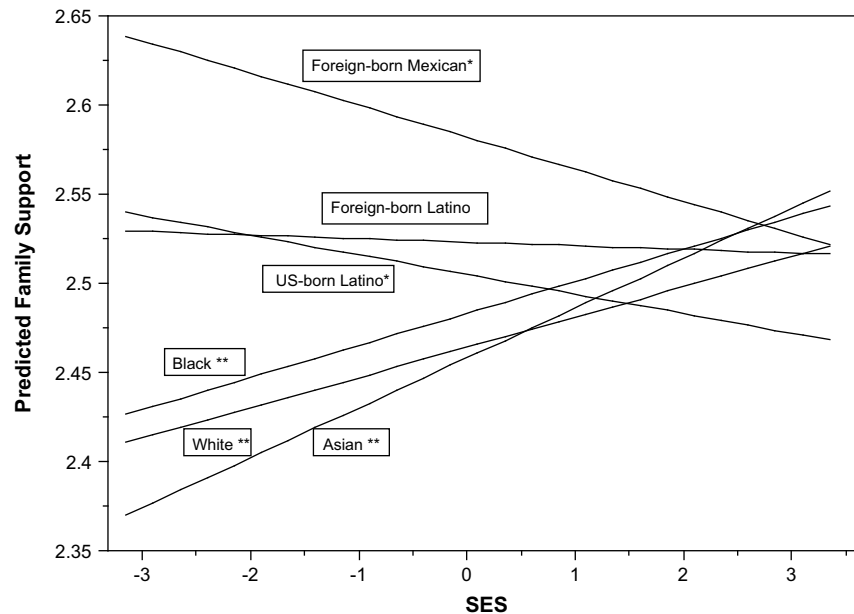
Fig. 1. Plot of interaction between ethnicity/nativity status and socioeconomic status on perceived familial support. *p-value <0.05. **Numbers too small to calculate effect for foreign-born counterparts.

regardless of possible linguistic isolation, both first and second generation Latinos seem to regard their friendship ties as less supportive than do Anglos.

Why ethnic minority, especially Latinos have lower perceived friendship support is not all together clear. Loss of non-kin social ties due to migration is one potential explanation. However, this would not explain why US-born Latinos and non-Latino blacks also report lower social support from friends than non-Latino whites. While Massey's assertion that "every act of migration creates a set of friends and relatives" seems to hold true for our finding on family support, it did not inform our finding on friendship support (Massey, Arango, Hugo, Kouaouci, Pellegrino & Taylor, 1993). It is possible that immigrants lack the non-kin ties that US-born participants have, but this explanation is only applicable for non-US-born and does not explain why non-Latino blacks and US-born Latinos report lower friendship support. Given that racial/ethnic minorities are on average of lower SES than non-Latino whites, evidence suggesting that relations with extended kin among the middle class may have loosened while those with friends may have gained importance helps illuminate the observed pattern of friendship support (Hollinger & Haller, 1990). Moreover, the idea that foreign-born Mexican Americans are more likely to use their extended family for social support, while Anglo–Americans more often rely on friends, neighbors and coworkers supports our findings of ethnic differences in kin vs. non-kin support (Miller-Loncar, Erwin, Landry, Smith, & Swank, 1998). Furthermore, our study substantiated the idea that US-born Latinos and Latinos of higher SES may rely less on family support than their foreign-born and socioeconomically disadvantaged counterparts. These findings may in part explain why the health advantage that Latino immigrants experience dissipates with increased acculturation and subsequent generations of US-born Latinos. Future research should expressly address the potential role of waning *familism* in negative acculturation.

Several limitations warrant mention. The goal of the PHDCN study was to examine health and social outcomes among children ages 0–18 years. Primary caregivers of children under age 18 were included in the study as a means of procuring information on children who could not provide information themselves. While researchers were interested in characteristics of the primary care-givers and collected data on them, the children were the focus of the study. Therefore, participants for the present study are not a random sample of adults and as such generalizability is limited. Moreover, the vast majority of the participants were women, which further limits the generalizability of our results. Another limitation is the small sample size of foreign-born non-Latino whites, blacks and Asians, which precluded us from assessing any nativity effects within these ethnic groups. The data also prevented us from dis-aggregating sub-ethnicities within the US-born Latino ethnic/nativity grouping. Moreover, the cross-sectional nature of the data limit our ability to infer causality, specifically with regard to the notion that speaking primarily Spanish at home—a proxy for retention of culture—is the mechanism by which foreign-born Mexicans report higher familial support. Finally, social support is not always positive, and data for this study did not allow us to assess the downside of these social ties. A strength of our study is that the PSR has two subscales which allowed us to assess the determinants of different sources and types of social support (Turner et al., 1983). An additional strength of our study is that we disaggregated Mexican immigrants from other Latino immigrants; by avoiding a pan-ethnic categorization of Latinos, we were able to consider the idea of sub-ethnic variations in social support and tested a characteristic attributed to all Latinos. Our quantitative study helps to bolster results from qualitative studies and provides evidence about a growing and important population in the US.

Findings from this study provide insight into the social patterning of social support and how it varies based on the source and perhaps type of that support. Overall our results uphold the widely-held assumption that the social support component of *familism* is different across ethnicity and nativity status. However, this social resource seems to be diminished among US-born Latinos, those Latinos who primarily speak English at home and among higher SES Latinos. These results advance the theory that *familism* may be lower among subsequent generations of US-born immigrants and at increased levels of acculturation (Landale et al., 2006; Rodriguez, Mira Bingham, Paez, & Myers, 2007; Turner et al., 2006). The variation in perceived social support across generation seems to parallel the decline in Latino health advantage over time.

Therefore, our finding regarding differences in familial support by nativity status and primary language spoken at home may help resolve the question of why Latinos' health advantage diminishes with increased years in the US (Abraido-Lanza, Dohrenwend, Ng-Mak, & Turner, 1999; Landale et al., 2006). Our study lends credence to the idea that friendship ties may be less central to ethnic minority and the foreign-born, and that the social patterning of support differs based on the source of support. Finally, we would argue that *familism* should be further examined as a protective social resource to be preserved among the large and growing population of Latinos in this country.

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