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Familialism, Social Support, and Stress: Positive Implications for Pregnant Latinas

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Abstract

This study examined the association of familialism, a cultural value that emphasizes close family relationships, with social support, stress, pregnancy anxiety, and infant birth weight. Foreign-born Latina (*n* = 31), U.S.-born Latina (*n* = 68), and European American (*n* = 166) women living in the United States participated in a prospective study of pregnancy in which they completed measures of familialism, social support, stress, and pregnancy anxiety during their second trimester. As expected, Latinas scored higher on familialism than European Americans. Familialism was positively correlated with social support and negatively correlated with stress and pregnancy anxiety in the overall sample. As predicted, however, the associations of familialism with social support and stress were significantly stronger among Latinas than European Americans. Moreover, higher social support was associated with higher infant birth weight among foreign-born Latinas only. Implications of cultural values for relationships and health are discussed.

Keywords

familialism; Latinas; social support; stress; pregnancy

In the best of circumstances, a woman's pregnancy is an eagerly anticipated life event welcomed by the woman and her social relations. During the course of pregnancy, an expectant mother's relationships can offer social support and provide a buffer against the stress and anxiety that accompanies this major life change (Dunkel-Schetter, Gurung, Lobel, & Wadhwa, 2000; Sagrestano, Feldman, Killingsworth-Rini, Woo, & Dunkel-Schetter, 1999). Indeed, previous research suggests that the higher social support that social

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relationships can provide plays an important role in promoting healthy pregnancy outcomes (Collins, Dunkel-Schetter, Lobel, & Scrimshaw, 1993; Cutrona, Hessling, Bacon, & Russell, 1998; Dunkel-Schetter, Sagrestano, Feldman, & Killingsworth, 1996; Oakley, 1992; Sagrestano et al., 1999).

One factor that may influence the extent to which relationships benefit a pregnant woman is her cultural background. Researchers have suggested that cultural influences on relationship processes may play a role in promoting healthy pregnancies (Dunkel Schetter & Rini, 2004; Dunkel-Schetter et al., 1996; James, 1993; Morling, Kitayama, & Miyamoto, 2003). Cultural values in particular can offer insight into the expectations and behavior of pregnant women and their social network. *Familialism* is one such cultural value emphasizing close family relationships that is known to be high among Latinos (Marin, 1993; Sabogal, Marin, Otero-Sabogal, VanOss Marin, & Perez-Stable, 1987). In this research, we hypothesized that familialism would be associated with higher social support and lower stress. Further, we reasoned that being embedded in a cultural system in which high levels of familialism are normative should augment the benefits that social support can provide to pregnancy outcomes. Our rationale for these predictions is brought into focus by a discussion of Latino culture and the value it places on warm interpersonal relations, especially family relationships.

Cultural Values, Latinos, and Relationships

Cultural values are beliefs about the social world shared by a coherent group of people, of which national or ethnic groups are the most typical examples (Markus & Kitayama, 1991; Triandis, 1995). Cultural values about self, others, and relationships provide individuals with a contextual framework for processing relevant social information and are frequently internalized as personal values (Fiske, Kitayama, Markus, & Nisbett, 1998; Heine, Lehman, Peng, & Greenholtz, 2002; Markus & Kitayama, 1991). For example, Heine et al. (2002) showed that individuals use their own cultural group as a natural comparison point when evaluating their own personalities. Similarly, cultural values about relationships have been found to influence both the perceived quality of one's close relationships and the social behavior enacted during the course of relationship interaction (Endo, Heine, & Lehman, 2000; Iyengar & Lepper, 1999).

Cultural psychologists characterize Latino culture as a collectivist culture that prioritizes warm, emotionally positive social interaction (Marin, 1993; Sabogal et al., 1987; Sanchez-Burks, Nisbett, & Ybarra, 2000; Triandis, Marin, Lisansky, & Betancourt, 1984) and places special importance on close family relationships (Marin, 1993; Sabogal et al., 1987). As evidence of this interpersonal orientation, members of Latino cultures have been found to be more likely to offer assistance to strangers (Levine, Norenzayan, & Philbrick, 2001) and attend to interpersonal relations in the workplace than members of other cultures (Sanchez-Burks et al., 2000). Although these values are believed to be broadly held in Latin American countries, it is important to note that they have been largely studied in Mexican Americans, not other Latinos (Marin, 1993). There is also significant within-group variation, and not all Latinos personally hold these values.

Familialism, also called familism, is the name given to the particular importance placed on close family relationships in Latino culture (Freeberg & Stein, 1996; Marin, 1993; Sagrestano et al., 1999; Steidel & Contreras, 2003). Collectivist cultures and low socioeconomic status (SES) groups generally place greater emphasis on family relationships relative to individualist cultures and high-SES groups (Fuligni, Tseng, & Lam, 1999; Gaines et al., 1997; Triandis, 1995; also cf. Romero, Robinson, Haydel, Mendoza, & Killen, 2004). Latino familialism, however, is distinct in the extent to which it stresses emotionally

positive, supportive family relationships (Marin, 1993; Sabogal et al., 1987). Studies on Latinos have found a greater tendency to socialize and exchange emotional support with an extended family network than European Americans (Keefe, Padilla, & Carlos, 1979; Knouse, 1991). In contrast, Asians and Asian Americans, whose collectivist culture has been extensively studied, have been found to be less likely to perceive family as an appropriate source of social support than European Americans (Kim, Sherman, Ko, & Taylor, 2006; Taylor, Sherman, Kim, Jarcho, Takagi, & Dunagan, 2004). Sabogal et al. (1987) proposed that Latino familialism consists of three attitudinal factors: family obligation, family as a social referent, and family support. In their study of U.S. Latinos of Mexican, Cuban, and Central American origin whose families had been in the United States for varying lengths of time, Sabogal et al. (1987) found all Latinos to be higher on these three aspects of familialism than European Americans.

This pattern of empirical evidence supports the view that Latino culture places great importance on warm interpersonal relations and indicates that supportive relationships, particularly family relationships, are a highly valued cultural ideal. Although not all individuals desire or obtain this cultural ideal of positive relationships, our analysis suggests that the expectations surrounding these cultural values may create a context that makes it easier for members of the culture to perceive, obtain, and benefit from social support from their close relationships, including family relationships.

Latino Cultural Values and Health

The emphasis that Latinos place on positive, supportive social relationships has been proposed to contribute to the "Latino health paradox" (Fuentes-Afflick & Lurie, 1997; James, 1993; Sorlie, Backlund, Johnson, & Rogot, 1993). The Latino health paradox has two components. First, Latinos in the United States have better health than would be expected given their socioeconomic disadvantages (Abraído-Lanza, Dohrenwend, Ng-Mak, & Turner, 1999; Hessol & Fuentes-Afflick, 2000). Despite the established link between low SES and poorer health (Adler et al., 1994), the health outcomes of low-SES Latinos are frequently comparable to their more affluent European American counterparts (Abraído-Lanza et al., 1999; Hessol & Fuentes-Afflick, 2000). The second component is that Latino health outcomes tend to grow worse with increased time in the United States, sometimes called the "healthy migrant effect" (Abraído-Lanza et al., 1999; Fuentes-Afflick & Lurie, 1997). That is, it appears that becoming more acculturated to the United States somehow negatively impacts Latino health outcomes.

The Latino paradox is particularly relevant to pregnancy outcomes such as infant birth weight, a key indicator of infant health, and is also predictive of later child health and development (Callister & Birkhead, 2002; Sable & Wilkinson, 2000). Poor Latina women in the United States give birth to infants of comparable birth weight relative to more affluent European Americans (Martin et al., 2005). Although we know of no studies that have directly examined the link between cultural values about relationships and health, research on pregnancy suggests that psychosocial resources may be important in promoting healthy pregnancy outcomes for all women (Dunkel-Schetter et al., 2000; Paarlberg, Vingerhoets, Passchier, Dekker, & Van Geijin, 1995). In particular, social support can contribute to higher infant birth weight by means of reduced stress and anxiety and perhaps by other means (Cohen & Wills, 1985; Collins et al., 1993; Feldman, Dunkel-Schetter, Sandman, & Wadhwa, 2000; Hogue, Hoffman, & Hatch, 2001; Sable & Wilkinson, 2000). In contrast, stress and anxiety are risk factors for preterm delivery, low birth weight, and other adverse child and maternal outcomes (Dunkel-Schetter, 1998; Institute of Medicine, 2007; Lobel, 1994; Pickett & Collins, 2004; Rini, Dunkel-Schetter, Wadhwa, & Sandman, 1999; Sable & Wilkinson, 2000).

Although there is very little research on the topic, Latinas have reported highly positive attitudes toward pregnancy and motherhood that are consistent with familialistic values in some studies. For example, pregnant Latinas have been found to report highly positive attitudes toward pregnancy and motherhood and more support from the infant's father and family relative to others (Engle, Scrimshaw, Zambrana, & Dunkel-Schetter, 1990; Zambrana, Dunkel-Schetter, Collins, & Scrimshaw, 1999). Pregnant Latinas also report more frequent and satisfying interactions with family compared with other groups (Sagrestano et al., 1999). These findings dovetail with evidence that social support can contribute to healthier birth outcomes and provide the basis for our hypothesis that familialism would augment the benefits of social support for pregnancy.

The Present Research

Guided by this analysis of Latino cultural values, we investigated the link among familialism, social support, perceived stress, pregnancy anxiety, and infant birthweight in a sample of foreign-born Latinas, U.S.-born Latinas, and European Americans from MS-BIPS (Multisite Behavior in Pregnancy Study), which is a large study on stress and preterm delivery. Our predictions were as follows. First, Latinas were expected to have higher familialism than European Americans. Second, familialism was expected to be positively associated with social support and negatively associated with stress and pregnancy-related anxiety in the overall sample, and these associations were predicted to be significantly stronger in Latinas relative to European Americans. Third, social support was expected to be positively associated with infant birthweight in the overall sample, and these associations were predicted to be significantly stronger in foreign-born Latinas relative to U.S.-born Latinas and European Americans. For this last prediction, we reasoned that personally held and contextually normative familialism values should augment the benefits of social support for pregnancy. Foreign birth is associated with a greater likelihood of being guided by culture of origin values (Benet-Martinez, Leu, Lee, & Morris, 2002; Kasirye et al., 2005; Marin, 1993; Sabogal et al., 1987); thus, foreign-born Latinas, the group most likely to regard familialism as a socially desirable norm, should show the strongest association between social support and infant birthweight.

Method

Participants

Two hundred and sixty-five pregnant women from MS-BIPS were assessed in the present study: 31 foreign-born Latinas, 68 U.S.-born Latinas, and 166 U.S.-born European Americans. The sample of foreign-born Latinas consisted of women born in Mexico ($n = 21$), El Salvador ($n = 4$), Guatemala ($n = 3$), and other Latin American countries ($n = 3$) who had been in the United States for an average of 24 ($SD = 16$) years. The sample of U.S.-born Latinas was largely Mexican American (88%), and this majority reported having parents who were either both born in Mexico or both born in the United States.

MS-BIPS is a multidisciplinary, prospective study of stress and birth outcomes conducted from 1997 to 2002. Data collection occurred at two large urban medical centers in a region in California where Latinos are a near majority and maintain strong, distinct cultural communities. Women who were either receiving primary care at a study site or were referred to the study by their primary caregiver were screened by research nurses at clinic visits to determine whether they met research criteria. Women who were at least 18 years of age, with a singleton, intrauterine pregnancy, and fluent enough in English as assessed by research nurses to complete extensive interviews were eligible for MS-BIPS and were invited to participate in the study. Women were deemed ineligible for MS-BIPS if they had current or prior medical conditions that could influence cardiovascular, neuroendocrine,

hepatic, or renal functioning. Women who smoked cigarettes, used controlled substances, or had otherwise identifiably at-risk pregnancies (e.g., systemic maternal disease, placental or cord abnormalities, uterine anomalies, congenital malformations, or chromosomal abnormalities) were also excluded. Women were not excluded from MS-BIPS on the basis of ethnicity, number of past births, or any other demographic factor, but the subsample in the present study was limited to Latina and European American women.

Procedure

MS-BIPS participants underwent psychosocial and biological assessments at least three times during the pregnancy and once postpartum. Assessments were taken at 18 to 20 weeks (Time 1), 24 to 26 weeks (Time 2), and 32 to 34 weeks (Time 3) gestation and at 6 to 8 weeks postpartum (Time 5). Each session involved in-depth, semistructured interviews, medical exams, blood samples, and ultrasonograms administered by trained interviewers and research nurses. Participants were compensated $15 per visit to offset travel, parking, and child-care costs and were given a $30 gift certificate to a national toy store at their postpartum session. A complete description of the MS-BIPS sample and procedures can be obtained from the investigators. The measures we report in the present study were taken at Time 1 or 2 during the second trimester with the exception of birth weight, which was obtained from participants' medical charts.[1]

Demographics—Demographic information was obtained at Time 1 and included age; ethnicity and race; country of birth for self, mother, and father; years living in United States; level of education completed; annual household income; marital status; and number of previous births. Two of these variables, annual household income and level of education, were standardized and summed to create a proxy measure of SES.

Familialism—A 10-item Familialism Scale (Gaines et al., 1997) administered at Time 2 was used to measure orientation toward the welfare of one's immediate and extended family. This scale was developed to be widely applicable across cultural contexts but is also consistent with previous treatments of familialism in Latino culture (e.g., Sabogal et al., 1987). Participants used Likert scales (1 = *strongly disagree*; 4 = *strongly agree*) to indicate agreement with items related to valuing and maintaining connection with family (e.g., "When it comes to social responsibility, blood really is thicker than water; I cherish the time I spend with my relatives"). Responses were averaged to create scale scores. In past research, this scale has shown a reliable factor structure, acceptable internal validity and consistency, and modest correlations with measures of cultural collectivism (Gaines et al., 1997). In the present study, Cronbach's alpha coefficient was acceptably high in the overall sample and across groups (.78 –.85).

Perceived Social Support—The 19-item MOS Social Support Survey (Sherbourne & Stewart, 1991) was administered at Time 2 to measure participant perceptions of being socially supported in four ways: (a) affectionate support (expressions of love and affection; three items); (b) emotional/informational support (expressions of positive affect and understanding, offering advice and guidance; eight items); (c) positive social interaction support (availability to do fun things; four items); and (d) tangible support (material aid or behavioral assistance; four items). Participants rated support items using Likert scales (1 = *none of the time*; 5 = *all of the time*), and responses were averaged to create scale scores. In

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[1]The stress and pregnancy anxiety variables were measured multiple times throughout the pregnancy, and the patterns of association with familialism remained consistent. Therefore, we report Time 2 data for stress and pregnancy anxiety because these data were collected at the same time as the familialism and social support measures.

the present study, Cronbach's alpha coefficient for the subscales and overall measure was high in the overall sample and across groups (.83 –.97).

UCLA Pregnancy Anxiety Scale—This reliable 10-item scale was specifically developed for use in pregnancy research (Rini et al., 1999) and measures pregnancy-specific sources of anxiety, including concerns about labor, delivery, and the infant (e.g., "I am concerned or worried about having a hard or difficult labor and delivery"). Participants rated their pregnancy anxiety using Likert scales (1 = *not at all*; 4 = *very much*) at Time 2, and responses were averaged to create scale scores. In the present study, Cronbach's alpha coefficient were acceptable in the overall sample and across groups (.75 – .85).

Perceived Stress—At Time 2, a short version of Cohen, Kamarck, and Mermelstein's (1983) Perceived Stress Scale was used to measure subjective perceptions of stress during the previous week (e.g., "How often have you found that you could not cope with all the things you had to do?"). Participants rated their perceived stress on 12 items[2] using Likert scales (1 = *never*; 4 = *always*), and responses were averaged to create scale scores. This measure is reliable and reflects a perception that personal resources are taxed (Cohen et al., 1983). In the present study, Cronbach's alpha coefficient was .85 in the overall sample and in each subgroup.

Infant Birth Weight—Infant weight at time of birth was obtained from participants' medical records and analyzed as a continuous measure. A birth weight greater than 2,500 g is considered normal. Birth weight equal to or below 2,500 g is medically defined as low birth weight and places the infant at higher risk of developing problems in the neonatal period and potentially thereafter (Institute of Medicine, 2007).

Results

Data Analytic Approach

Planned comparisons were used to test hypotheses about familialism, social support, perceived stress, pregnancy-related anxiety, and infant birth weight. The intercorrelations among study variables are reported in Table 1 and elaborated in the context of the hypothesis testing. For ease of presentation, differences between foreign-born and U.S.-born Latinas are addressed as relevant in the testing of the third hypothesis.

Demographics—Previous research has shown that Latinos are socioeconomically disadvantaged relative to European Americans, and the demographic differences in our sample replicated this pattern. One-way analyses of variance (ANOVAs) comparing Latinas and European Americans showed that European American women were older ($M = 32$, $SD = 4.59$ vs. $M = 28$, $SD = 5.88$), $F(1, 263) = 30.85$, $p < .001$, and had more years of education ($M = 15.42$, $SD = 1.81$ vs. $M = 13.47$, $SD = 2.22$), $F(1, 263) = 68.60$, $p < .001$, and higher household income ($M = \$74,500$ vs. $\$44,500$), $F(1, 263) = 68.58$, $p < .001$, whereas Latinas reported a higher number of previous births ($M = 0.99$, $SD = 1.05$ vs. $M = 0.47$, $SD = 0.85$), $F(1, 263) = 22.32$, $p < .001$. A chi-square test found that European Americans were more likely to be married than Latinas (81% vs. 63%), $\chi^2(4, N = 265) = 20.82$, $p < .001$.

Familialism—Our first hypothesis held that Latinas would be higher in familialism than European Americans. Familialistic values, however, have also been associated with SES (Fuligni et al., 1999; Romero et al., 2004). Thus, we controlled for SES to provide a more

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[2]The original scale contains 14 items. Short versions used in prior pregnancy studies by this team had four and eight items. This present version used the largest subset of items from the original scale that could be translated into Spanish accurately.

conservative test of familialism across groups. As expected, an analysis of covariance, with SES as the covariate, showed that Latinas reported significantly higher levels of familialism ($M = 3.25$, $SD = 0.46$) than European Americans ($M = 3.20$, $SD = 0.45$), $F(1, 262) = 3.80$, $p < .05$, $d = .11$. We also considered whether familialism might covary with number of previous births or marital status, but correlations and partial correlations did not reveal any significant relation between these potential control variables and familialism. Thus, these variables were not included in analyses.

Social Support, Stress, and Pregnancy Anxiety—To test whether familialism was positively associated with social support and negatively associated with perceived stress and pregnancy anxiety, we began by examining mean differences between Latinas and European Americans on the stress and social support variables. As Table 2 shows, one-way ANOVAs, with SES as a covariate on the social support and stress variables, revealed one mean difference: Latinas reported higher pregnancy anxiety than European Americans, $F(1, 262) = 4.56$, $p < .03$, $d = .01$.

Our second hypothesis predicted that familialism would be positively associated with social support and this association would be more pronounced among Latinas. As Table 3 shows, correlational tests revealed that familialism was positively associated with overall social support and each of the four types of support (i.e., affectionate, emotional–informational, positive social interaction, and tangible) in the sample as a whole. To test whether these associations were significantly stronger among Latinas than European Americans, we used planned Fisher z tests of the difference between correlations (Rosenthal & Rosnow, 1991). As expected, the association between familialism and overall social support was significantly stronger among Latinas than European Americans (see Table 3). When each support type was examined separately, the association between familialism and three of the four support types remained significantly stronger for Latinas than European Americans. Affectionate support was the only exception.

In contrast to the positive association with support, familialism was predicted to be negatively associated with the stress variables and this association was expected to be more pronounced among Latinas. As Table 3 shows, familialism was significantly and negatively associated with perceived stress and pregnancy anxiety in the entire sample. In partial support of our predictions, planned Fisher z tests of the difference between correlations revealed that this negative association between familialism and perceived stress was significantly stronger among Latinas than European Americans, but this was not true for pregnancy anxiety.

Familialism in Cultural Context: Social Support and Birth Weight—Analyses thus far revealed that Latinas were higher on familialism and familialism was more strongly associated with social support and perceived stress among Latinas. Our third hypothesis predicted that social support would be positively associated with birth weight and this association would be most pronounced among foreign-born Latinas. To examine this possibility, we separated the Latina sample into foreign- and U.S.-born subgroups. Demographic variables and associations among familialism, social support, stress, and pregnancy anxiety did not differ in the two Latina subgroups. Thus, we turned to examining the associations of social support with birth weight in the three groups. In partial support of our hypothesis, greater social support was associated with higher infant birth weight for foreign-born Latinas only (Table 4). When each support type was examined separately, affectionate support and positive social interaction remained significantly associated with higher infant birth weight. In contrast, our perceived stress and pregnancy anxiety variables were not significantly associated with birth weight in foreign-born Latinas. For U.S.-born Latinas and European Americans, there were no significant associations of birth weight with

social support, perceived stress, or pregnancy anxiety. Although we did not expect associations of familism with birth weight, we explored this issue at reviewer request. Familialism was not directly associated with birth weight in the overall sample ($r = -.02$, *ns*) or among the three subgroups (foreign-born Latinas, $r = .03$, *ns*; U.S.-born Latinas, $r = -.09$, *ns*; European Americans, $r = -.00$, *ns*).

Discussion

For Latinas and European Americans alike, familialism was positively associated with feeling more supported, less stressed, and less anxious about pregnancy. Consistent with our cultural analysis, however, Latinas reported higher levels of familialism, and the associations of familialism with social support and stress were more pronounced among Latinas relative to European Americans. Moreover, for foreign-born Latinas, greater social support, particularly affectionate and positive social interaction support, was associated with higher infant birth weight. These findings suggest that cultural values emphasizing positive social relationships may be associated with psychological benefits that have implications for physical and mental health and may contribute to processes underlying the Latino health paradox.

The present work has a number of unique strengths. First, it examines a culturally grounded construct, familialism, that is salient in relationship experience, pregnancy, and childbirth but that has been little studied in these contexts. Second, this study is the first to examine how familialism relates to social support and stress, two constructs that have well-documented relationships to physical and mental health (e.g., Cohen & Wills, 1985; House, Landis, & Umberson, 1988). An intriguing implication of this work is that familialism may be one exogenous resilience factor that indirectly plays a role in effective social support processes and possibly in stress and anxiety regulation as well. That is, cultural ideals that emphasize a positive relationship orientation may make it easier for individuals to seek, receive, and benefit from valuable social support; in turn, this ease may help undo the effects of stress and anxiety.

In addition to its strengths, we also note the limitations of this study. First, the subgroup of foreign-born Latinas was not large enough to conduct complex multivariate analyses that could test the possibility of indirect links among familialism, social support, and birth weight. Also, although our foreign-born Latina sample represented the group most likely to regard familialistic values as a norm, this group had been residing in the United States for a long time, and it is not clear how acculturation may have influenced the perceptions of these women. To clarify the role of acculturation in perceptions that familialism is a norm, future research should involve more direct measures of acculturation and social reference groups. Finally, measures of family support per se would have been desirable insomuch as the measure of perceived social support we used could have conceivably included support from friends as well as family.

Despite these limitations that reduced our power to detect effects, we obtained some significant associations that we regard as worthy of further study. For researchers to better understand the influence of familialism on close relationships, social support, and health, our findings suggest several avenues of future inquiry. One important step will be to work toward a better understanding of how familialism manifests itself across differing social environments. Cultural values about close family relationships may mean different things to different people, and the benefits and costs of familialism may vary accordingly. The literature suggests that Latinos derive closeness and support from family, but there may also be circumstances when familialistic expectations may become a source of stress rather than support. For example, financial strain may make it difficult to meet family obligations or, if

close family relationships are not personally desirable, the expectations associated with familialism may be an unwelcome burden. In these situations, cultural expectations that emphasize familialism may actually have greater costs for Latinos, prompting higher levels of distress than might be observed among members of cultures that emphasize independence and separation from family. In this study, we have focused on the possible benefits of familialism but are mindful that there may also be circumstances in which familialism is associated with greater stress or compromised health. In our view, the possible benefits and costs of cultural ideals that highly value supportive family relationships both merit further investigation.

Future research can help elucidate the most intriguing finding of the present study: that social support was associated with infant birth weight among foreign-born Latinas but not U.S.-born Latinas or European American women. We hypothesized that familialistic values would augment the benefits of social support for pregnancy such that the association between social support and birth weight would be most pronounced among our foreign-born Latina sample. However, how do we account for the absence of findings for European American and U.S.-born Latina women? For European American women, social support may be a mixed benefit that conflicts with cultural norms of autonomy and independence. For U.S.-born Latinas, we offer an explanation that is consistent with emerging perspectives on the influence of bicultural systems on the individual (e.g., Benet-Martinez et al., 2002). U.S.-born Latinas may be more likely to regard familialism ambivalently, as having both positive and negative aspects. For example, familialism may be a source of undesirable difference from European American culture's emphasis on independence and separation from family. A U.S.-born Latina may self-report high familialism but also feel that this family-focused orientation is regarded by European Americans as a sign of inappropriate family enmeshment or lack of independence. If so, these perceptions may weaken the benefits that the association of familialism with social support might otherwise provide and thereby account for the difference observed between the two Latina groups in the present study. We acknowledge, however, that the present data cannot fully address this issue. Future research should explore these possibilities with more sensitive measures of cultural values, social reference groups, and acculturation.

The cultural systems in which individuals are embedded influence how the social world is perceived. Our research suggests that cultural contexts in which positive family relationships are highly valued and expected may augment the benefits of social support for pregnant women. We believe this research sheds light on one role that culture may play in relationship and health processes and hope future research continues to examine this promising research direction.

Acknowledgments

References

Abraído-Lanza AF, Dohrenwend BP, Ng-Mak DS, Turner JB. The Latino mortality paradox: A test of the "salmon bias" and health migrant hypotheses. American Journal of Public Health 1999;89:1543–1548. [PubMed: 10511837]

Adler NE, Boyce T, Chesney M, Cohen S, Folkman S, Kahn R, et al. Socioeconomic status and health: The challenge of the gradient. American Psychologist 1994;49:15–24. [PubMed: 8122813]

Benet-Martinez V, Leu J, Lee F, Morris MW. Negotiating biculturalism: Cultural frame switching in biculturals with oppositional versus compatible cultural identities. Journal of Cross-Cultural Psychology 2002;33:492–516.

Callister LC, Birkhead A. Acculturation and perinatal outcomes in Mexican immigrant childbearing women: An integrative review. Journal of Perinatal and Neonatal Nursing 2002;16:22–38. [PubMed: 12472187]

Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. Journal of Health and Social Behavior 1983;24:385–396. [PubMed: 6668417]

Cohen S, Wills TA. Stress, social support, and the buffering hypothesis. Psychological Bulletin 1985;98:310–357. [PubMed: 3901065]

Collins NL, Dunkel-Schetter C, Lobel M, Scrimshaw SCM. Social support in pregnancy: Psychosocial correlates of birth outcomes and postpartum depression. Journal of Personality and Social Psychology 1993;65:1243–1258. [PubMed: 8295121]

Cutrona CE, Hessling RM, Bacon PL, Russell DW. Predictors and correlates of continuing involvement with the baby's father among adolescent mothers. Journal of Family Psychology 1998;12:369–387.

Dunkel-Schetter C. Maternal stress and preterm delivery. Prenatal and Neonatal Medicine 1998;3:39–42.

Dunkel-Schetter, C.; Gurung, RAR.; Lobel, M.; Wadhwa, PD. Psychological, biological, and social processes in pregnancy: Using a stress framework to study birth outcomes. In: Baum, A.; Revenson, T.; Singer, J., editors. Handbook of health psychology. Hillsdale, NJ: Erlbaum; 2000. p. 495-518.

Dunkel Schetter, C.; Rini, C. Pregnancy outcomes: Psychosocial aspects. In: Anderson, NB., editor. Encyclopedia of health and behavior. Vol. Vol. 2. Thousand Oaks CA: Sage; 2004. p. 669-671.

Dunkel-Schetter, C.; Sagrestano, LM.; Feldman, P.; Killingsworth, C. Social support and pregnancy. In: Pierce, GR.; Sarason, BR.; Sarason, IG., editors. Handbook of social support and the family. New York: Plenum Press; 1996. p. 375-412.

Endo Y, Heine SJ, Lehman DR. Culture and positive illusions in close relationships: How my relationships are better than yours. Personality and Social Psychology Bulletin 2000;26:1571–1586.

Engle PL, Scrimshaw SCM, Zambrana RE, Dunkel-Schetter C. Prenatal and postnatal anxiety in Mexican American women giving birth in Los Angeles. Health Psychology 1990;9:285–299. [PubMed: 2340819]

Feldman PJ, Dunkel-Schetter C, Sandman CA, Wadhwa PD. Maternal social support predicts birthweight and fetal growth in human pregnancy. Psychosomatic Medicine 2000;62:715–725. [PubMed: 11020102]

Fiske, AP.; Kitayama, S.; Markus, HR.; Nisbett, RE. The cultural matrix of social psychology. In: Gilbert, DT.; Fiske, ST.; Lindzey, G., editors. The handbook of social psychology. 4th ed.. Vol. Vol. 2. New York: McGraw-Hill; 1998. p. 915-981.

Freeberg AL, Stein CH. Felt obligation toward parents in Mexican-American and Anglo-American young adults. Journal of Social and Personal Relationships 1996;13:457–471.

Fuentes-Afflick E, Lurie P. Low birth weight and Latino ethnicity: Examining the epidemiologic paradox. Archives of Pediatric Adolescent Medicine 1997;151:665–674.

Fuligni AJ, Tseng V, Lam M. Attitudes toward family obligations among American adolescents with Asian, Latin American, and European backgrounds. Child Development 1999;70:1030–1044.

Gaines SOJ, Marelich WD, Bledsoe KL, Steers WN, Henderson MC, Granrose CS, et al. Links between race/ethnicity and cultural values as mediated by racial/ethnic identity and moderated by gender. Journal of Personality and Social Psychology 1997;72:1460–1476. [PubMed: 9177025]

Heine SJ, Lehman DR, Peng K, Greenholtz J. What's wrong with cross-cultural comparisons of subjective Likert scales? The reference-group effect. Journal of Personality and Social Psychology 2002;82:903–918. [PubMed: 12051579]

Hessol NA, Fuentes-Afflick E. The perinatal advantage of Mexican origin Latina women. American Journal of Epidemiology 2000;10:516–523.

Hogue CJR, Hoffman S, Hatch M. Stress and preterm delivery: A conceptual framework. Pediatric and Perinatal Epidemiology 2001;15:30–40. [PubMed: 11520398]

House JS, Landis KR, Umberson D. Social relationships and health. Science 1988;241:540–544. [PubMed: 3399889]

Institute of Medicine. Preterm birth: Causes, consequences, and prevention. Washington, DC: National Academies Press; 2007.

Iyengar SS, Lepper MR. Rethinking the value of choice: A cultural perspective on intrinsic motivation. Journal of Personality and Social Psychology 1999;76:349–366. [PubMed: 10101874]

James SA. Racial and ethnic differences in infant mortality and low birthweight: A psychosocial critique. Annals of Epidemiology 1993;3:130–136. [PubMed: 8269064]

Kasirye OC, Walsh JA, Romano PS, Beckett LA, Garcia JA, Elvine-Kreis B, et al. Acculturation and its association with health risk behaviors in a rural Latina population. Ethnicity and Disease 2005;15:733–739. [PubMed: 16259501]

Keefe SE, Padilla AM, Carlos ML. The Mexican American extended family as an emotional support system. Human Organization 1979;38:144–152.

Kim HS, Sherman DK, Ko D, Taylor SE. Pursuit of comfort and pursuit of harmony: Culture, relationships, and social support seeking. Personality and Social Psychology Bulletin 2006;32:1595–1607. [PubMed: 17122173]

Knouse SB. Social support for Hispanics in the military. International Journal of Intercultural Relations 1991;15:427–444.

Levine RV, Norenzayan A, Philbrick K. Cross-cultural differences in helping strangers. Journal of Cross-Cultural Psychology 2001;32:543–560.

Lobel M. Conceptualizations, measurement, and effects of prenatal stress on birth outcomes. Journal of Behavioral Medicine 1994;17:225–272. [PubMed: 7932680]

Marin, G. Influence of acculturation on familialism and self-identification among Hispanics. In: Bernal, ME.; Knight, GP., editors. Ethnic identity: Formation and transmission among Hispanics and other minorities. Albany, NY: SUNY Press; 1993. p. 181-196.

Markus HR, Kitayama S. Culture and the self: Implications for cognition, emotion and motivation. Psychological Review 1991;98:224–253.

Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, Munson ML. Births: Final data for 2003. National Vital Statistics Reports 2005;54:1–116.

Morling B, Kitayama S, Miyamoto Y. American and Japanese women use different coping strategies during normal pregnancy. Personality and Social Psychology Bulletin 2003;29:1533–1546. [PubMed: 15018684]

Oakley A. Social support in pregnancy: Methodology and findings of a 1-year follow-up study. Journal of Reproductive and Infant Psychology 1992;10:219–231.

Paarlberg KM, Vingerhoets AJJM, Passchier J, Dekker GA, Van Geijin HP. Psychosocial factors and pregnancy outcome: A review with emphasis on methodological issues. Journal of Psychosomatic Research 1995;39:563–595. [PubMed: 7490693]

Pickett, KE.; Collins, JWJ. Low birth weight: Psychosocial aspects. In: Anderson, NB., editor. Encyclopedia of health and behavior. Vol. Vol. 2. Thousand Oaks, CA: Sage; 2004. p. 589-592.

Rini CK, Dunkel-Schetter C, Wadhwa PD, Sandman CA. Psychological adaptation and birth outcomes: The role of personal resources, stress, and sociocultural context in pregnancy. Health Psychology 1999;18:333–345. [PubMed: 10431934]

Romero AJ, Robinson TN, Haydel KF, Mendoza F, Killen JD. Associations among familism, language preference, and education in Mexican-American mothers and their children. Developmental and Behavioral Pediatrics 2004;25:34–40.

Rosenthal, R.; Rosnow, RL. 2nd ed.. New York: McGraw-Hill; 1991. Essentials of behavioral research: Methods and data analysis.

Sable MR, Wilkinson DS. Stress, major life events, and pregnancy attitudes: Relationship to birth outcomes. Family Planning Perspectives 2000;32:288–294. [PubMed: 11138865]

Sabogal F, Marin G, Otero-Sabogal R, VanOss Marin B, Perez-Stable EJ. Hispanic familism and acculturation: What changes and what doesn't? Hispanic Journal of Behavioral Sciences 1987;9:397–412.

Sagrestano LM, Feldman P, Killingsworth-Rini CK, Woo G, Dunkel-Schetter C. Ethnicity and social support during pregnancy. American Journal of Community Psychology 1999;27:873–902.

Sanchez-Burks J, Nisbett RE, Ybarra O. Cultural styles, relational schemas, and prejudice against out-groups. Journal of Personality and Social Psychology 2000;79:174–189. [PubMed: 10948972]

Sherbourne CD, Stewart AL. The MOS Social Support Survey. Social Science and Medicine 1991;32:705–714. [PubMed: 2035047]

Sorlie PD, Backlund E, Johnson NJ, Rogot E. Mortality by Hispanic status in the United States. Journal of American Medical Association 1993;270:2464–2468.

Steidel AGL, Contreras JM. A new familism scale for use with Latino populations. Hispanic Journal of Behavioral Sciences 2003;25:312–330.

Taylor SE, Sherman DK, Kim HS, Jarcho J, Takagi K, Dunagan MS. Culture and social support: Who seeks it and why? Journal of Personality and Social Psychology 2004;87:354–362. [PubMed: 15382985]

Triandis, HC. Individualism and collectivism. Boulder, CO: Westview Press; 1995.

Triandis HC, Marin G, Lisansky J, Betancourt H. Simpatia as a cultural script of Hispanics. Journal of Personality and Social Psychology 1984;47:1363–1375.

Zambrana RE, Dunkel-Schetter C, Collins NL, Scrimshaw SCM. Mediators of ethnic-associated differences in infant birth weight. Journal of Urban Health 1999;76:102–116. [PubMed: 10091194]

Table 1

Intercorrelations Among Familialism, Social Support, Perceived Stress, Pregnancy Anxiety, and Birthweight in Overall Sample

Study Variables	1	2	3	4	5
1. Familialism	—				
2. Social support	.37*	—			
3. Perceived stress	−.22*	−.31*	—		
4. Pregnancy anxiety	−.14*	−.26**	.25*	—	
5. Birthweight	−.02	.03	.08	−.03	—

Note. N = 265.

*
p < .05.

Table 2

Mean Differences in Social Support, Perceived Stress, and Pregnancy Anxiety Among Latinas and European Americans

	Latinas **(n = 99)** **M (SD)**	**European Americans** **(n = 166)** **M (SD)**
Social Support		
Overall	3.97 (.79)	4.11 (.59)
Affectionate	4.52 (.73)	4.67 (.58)
Emotional/Informational	4.13 (.91)	4.35 (.68)
Positive social interaction	4.22 (.95)	4.35 (.77)
Tangible	4.05 (1.01)	4.10 (.78)
Stress & Anxiety		
Perceived stress	1.15 (.40)	1.08 (.33)
Pregnancy anxiety	1.89 (.50)*	1.74 (.41)*

Note. $N = 265$. Significant mean differences of $p < .05$ are indicated with an asterisk.

Table 3

Correlation Coefficients for Familialism with Social Support, Perceived Stress, and Pregnancy Anxiety

	All ethnicities (*N* = 265)	Latinas (*n* = 99)	European Americans (*n* = 166)	Fisher's z test of difference between correlations
Social Support				
Overall	.37*	.55*	.26*	Latinas vs. European Americans: *diff* = 2.74, *p* < .006
Affectionate	.30*	.38*	.22*	Latinas vs. European Americans: *diff* = 1.37, *ns*
Emotional/Informational	.33*	.53*	.27*	Latinas vs. European Americans: *diff* = 2.44, *p* < .01
Positive social interaction	.33*	.54*	.19*	Latinas vs. European Americans: *diff* = 3.20, *p* < .001
Tangible	.31*	.49*	.16*	Latinas vs. European Americans: *diff* = 2911, *p* < .004
Stress & Anxiety				
Perceived stress	−.22*	−.37*	−.11*	Latinas vs. European Americans: *diff* = −2.16, *p* < .03
Pregnancy anxiety	−.14*	−.09	−.20*	Latinas vs. European Americans: *diff* = .87, *ns*

Note. N = 265.

*
p < .05.

Table 4

Correlation Coefficients for Birthweight With Social Support, Perceived Stress, and Pregnancy Anxiety

	All Ethnicities (N = 265)	Foreign-born Latinas (n = 31)	U.S.-born Latinas (n = 68)	European Americans (n = 166)	Fisher's z test of difference between correlations
Social support					
Overall	−.03	.31†	−.09	−.05	Foreign-born vs. U.S.-born Latinas: $diff = 1.82, p = .06$ Foreign-born Latinas vs. European Americans: $diff = 1.81, p = .07$
Affectionate	−.05	.34†	−.13	−.12	Foreign-born vs. U.S.-born Latinas: $diff = 2.14, p < .03$ Foreign-born Latinas vs. European Americans: $diff = 2.14, p < .02$
Emotional/ Informational	.01	.28	−.09	−.04	Foreign-born vs. U.S.-born Latinas: $diff = 1.67, ns$ Foreign-born Latinas vs. European Americans: $diff = 1.60, ns$
Positive social interaction	−.01	.37*	−.09	−.07	Foreign-born vs. U.S.-born Latinas: $diff = 2.12, p < .03$ Foreign-born Latinas vs. European Americans: $diff = 2.21, p < .03$
Tangible	.02	.22	−.05	−.00	Foreign-born vs. U.S.-born Latinas: $diff = 1.21, ns$ Foreign-born Latinas vs. European Americans: $diff = 1.09, ns$
Stress and anxiety					
Perceived stress	.08	.03	.04	.14	Foreign-born vs. U.S.-born Latinas: $diff = −.04, ns$ Foreign-born Latinas vs. European Americans: $diff = −.54, ns$
Pregnancy anxiety	−.03	−.20	.01	−.01	Foreign-born vs. U.S.-born Latinas: $diff = −.94, ns$ Foreign-born Latinas vs. European Americans: $diff = −.59, ns$

Note. N = 265.

*
$p < .05$.

†
$p = .06 – .10$.