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Familism Is Associated With Psychological Well-Being and Physical Health: Main Effects and Stress-Buffering Effects

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Abstract

Familism is a core Latino value that emphasizes close family relationships and prioritizing of family before the self. Familism has implications for well-being and health, but it is not clear whether these values are generally beneficial or beneficial under stress. We examined whether the associations of familism with well-being/health were consistent with a main effect or stress-buffering model in Latinos and non-Latinos. Latino (n = 171), European (n = 225), and East Asian Americans (n = 415) completed measures of familism, stress, well-being, and health. In terms of general benefits, familism was negatively associated with loneliness, depression, and physical symptoms. In terms of stress-buffering benefits, the combination of high familism with high stress was associated with higher self-esteem and subjective health than the combination of low familism with high stress. These patterns were consistent across groups, suggesting that familism can be beneficial for Latinos and non-Latinos.

Keywords

familism, well-being, physical health, subjective health, Latino American, East Asian American, European American

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Research indicates that cohesive, nurturing family environments are associated with psychological and physical health (Ross, Marrinan, Schattner, & Gullone, 1999). At the same time, beliefs about how family relationships should be, including the extent to which they should be close and supportive, vary across cultural groups (Umaña-Taylor, Updegraff, & Gonzales-Backen, 2011). *Familism* (or *familismo*) is one way of valuing family relationships that emphasizes close family ties, interconnectedness, and prioritizing family before the self (e.g., Bardis, 1959; Sabogal, Marin, Otero-Sabogal, VanOss Marin, & Perez-Stable, 1987). Familism is a central feature of Latino culture (e.g., Sabogal et al., 1987). It has been shown to be associated with psychological health (Campos, Ullman, Aguilera, & Dunkel Schetter, 2014) and theorized to be relevant for physical health (Katiria Perez & Cruess, 2014). While the relevance of familism for health is increasingly clear, it is not yet clear whether these values are beneficial directly or beneficial only under stress (e.g., Campos et al., 2014; Schwartz et al., 2010). This is an important distinction that researchers who study relationships and health consider critical to understanding how relationships can protect health (Cohen & Wills, 1985). To advance understanding of the role of familism for health, we drew from methods developed by relationship scholars (i.e., main effects and stress-buffering effects) and tested the association of familism with a set of psychological well-being and physical health outcomes.

Familism

Broadly defined, familism is a way of valuing how family relationships should be (Campos et al., 2014). Familism is characterized by three dimensions: familial obligations, family as referents, and perceived support from family. Familial obligations refer to the perceived obligation to help family members both financially and emotionally. Family as referents is defined as consulting close relatives in major decisions. Support from family refers to the perception that the family unit should serve as a source of help and support (Sabogal et al., 1987). Overall, individuals with high levels of familism tend to (a) endorse family interconnectedness, (b) show strong feelings of loyalty and reciprocity within the family, and (c) respect and uphold family honor (Lugo Steidel & Contreras, 2003; Sabogal et al., 1987). The close family ties and responsibilities to family emphasized by familism play a significant role in creating strong bonds in both nuclear and extended family networks (Katiria Perez & Cruess, 2014; Sabogal et al., 1987).

Familism has been most extensively studied as a Latino cultural construct, but it is applicable across cultures (e.g., Sabogal et al., 1987; Schwartz, 2007). For instance, research indicates that although European Americans typically

place a higher value on independence (i.e., the pursuit of personal goals, less felt obligation to family members, and more contact with individuals outside one's kin network), their mean endorsement of familism does not always differ from Latinos and non-Latino Blacks (Freeberg & Stein, 1996; Schwartz, 2007). Moreover, evidence shows that Asian Americans endorse collectivist values that are similar to familism; filial piety, the most important family value orientation for Asian Americans, emphasizes filial obligations such as respect, obedience, and attendance to parents' needs rather than an open exchange of giving and receiving social support among family members (Chang, 2014; Kim, Sherman, & Taylor, 2008; Taylor et al., 2004; Yeh & Bedford, 2003). Overall, Schwartz et al. (2010) found that measures of familism, filial piety, and communalism (a measure of family primacy in African culture) comprised a single latent family primacy relationship construct in a diverse U.S. sample that consisted of Latino Americans, Asian Americans, African Americans, and European Americans.

Although research indicates that familism, whether widely applicable or culturally specific, is linked to well-being outcomes, it is not clear if the links with health are in general or in the context of stress. To date, research on familism and psychological well-being has been sparse and mostly focused on whether familism is beneficial or not. For instance, Campos et al. (2014) studied the association of familism with psychological health but did not examine whether the observed pattern held true overall as well as in the context of stress. Similarly, researchers speculate that familism may influence the quality of life, self-care, and disease experience related to HIV, diabetes, and breast cancer among Latinos (Katiria Perez & Cruess, 2014), but the specific associations of familism with physical health have not been tested. As we describe in the section below, understanding the specific circumstances under which familism is beneficial is an important next step for understanding the role of familism for health.

Familism and Health: Main Effect and Stress-Buffering Model

Researchers who study social relationships and health have delineated two distinct models through which relationships can be beneficial for health (Cohen & Wills, 1985). The *main effect model* proposes that social relationships are directly beneficial and benefits are obtained independent of people's stress levels (Cohen & Wills, 1985). For example, the more social support one derives from one's relationships, the better health outcomes one experiences even when the individual is under low levels of stress. In contrast, the *stress-buffering model* proposes that social relationships are advantageous

during times of stress (e.g., transition to college, final exams) because they can provide social support that mitigates the negative effects of stress. In other words, those who have the most social relationship resources are less affected by stress. Statistically, the model suggests that there should be a significant difference in the outcomes of individuals with low and high levels of support under stressful conditions (Cohen & Wills, 1985). In both models, relationship factors may be linked to high self-esteem, increased physical health, decreased depression, and less loneliness (e.g., West, Kellner, & Moore-West, 1986). Extending this framework to the study of familism is important for understanding how familism is linked with health and whether it is a factor that can be harnessed to help reduce stress-related poor health.

The evidence to date supports the possibility that familism is generally beneficial (i.e., main effect model), at least as it pertains to psychological health outcomes. Familism is a strong predictor of positive psychosocial functioning as indicated by increased prosocial behaviors and well-being (Calderón-Tena, Knight, & Carlo, 2011; Schwartz et al., 2010). Specifically, Calderón-Tena et al. (2011) found that Mexican American mothers who were high in familism were more likely to engage in parenting behaviors that promoted prosocial behaviors (i.e., expecting children to help with sibling care) and, in turn, this influenced their children's familism levels and prosocial tendencies (i.e., comforting and helping others). In addition, Schwartz and colleagues (2010) found that values that prioritize family over self (i.e., familism, filial piety, and communalism) were strongly associated with high self-esteem, life satisfaction, meaning in life, and overall well-being. These associations were consistent in a diverse sample of Latino, European, Asian, and African American students. However, familism also had a small but positive relationship with psychological distress (e.g., anxiety), perhaps indicating that the emphasis that familism places on putting others' welfare before the self can also be costly (Schwartz et al., 2010).

Far less research has examined the possibility that familism can be stress-buffering. Calderón-Tena et al. (2011) and Schwartz et al. (2010) tested only the main effect model. Studies that have examined the role of familism in helping Latinos adapt to stressful situations indicate that familism may be stress-buffering but the stressors that Latinos are encountering in their everyday lives may overwhelm any protective effects of familism (Stein, Gonzalez, Cupito, Kiang, & Supple, 2013; Umaña-Taylor et al., 2011). Three studies that are relevant for understanding the possibility of stress-buffering are described below.

Campos et al. (2008) found that familism was beneficial for a community sample of Latina and European American pregnant women. The results of this study indicated that women were less likely to report feelings of stress

and pregnancy-related anxiety if they had high levels of familism. This association was stronger in Latinas than European Americans. However, the authors did not conduct the statistical tests needed to formally test for a stress-buffering model pattern.

Umaña-Taylor et al. (2011) examined whether familism attenuated the effects of stress faced by Mexican-origin adolescent mothers for internalizing (i.e., depressive symptoms) and externalizing behaviors (i.e., risky behaviors). Results indicated that familism did not moderate the association of perceived discrimination, acculturative stress, and economic stress, with depressive symptoms. On the other hand, familism did serve as a moderator between discrimination and risky behaviors. At low levels of discrimination, adolescents who reported high levels of familism engaged in fewer risky behaviors (e.g., lying and contact with police) than adolescents with low levels of familism (Umaña-Taylor et al., 2011). In sum, results indicated no direct effects of familism on depressive symptoms or risky behaviors when controlling for acculturative and economic stress in the context of adolescent motherhood. However, it is important to acknowledge that this context may be a particularly high stress situation in which mothers must balance competing responsibilities as well as adjust to the physical and social changes characteristic of adolescent development. Thus, this context can be considered a high bar for the protective effects of familism.

Stein et al. (2013) also examined the moderating role of familism but in a sample of Latino middle and high school–aged adolescents. The authors hypothesized that familism would attenuate the negative effects of stress in their sample because middle and high school–aged adolescents did not have additional stressors (i.e., adolescent motherhood) that directly affected their family relationships. Results indicated that while familism had a main effect on adolescents' depressive symptoms and school belonging, it did not buffer against the effects of peer discrimination, acculturative stress, or economic stress on depressive symptoms, school belonging, and perceived barriers to college.

Altogether, the empirical evidence thus far indicates that familism may be directly beneficial but not beneficial under the highly stressful conditions that have thus been studied. Consequently, more research is needed to understand whether familism is generally associated with health or buffers the effects of stress.

The Current Study

The present study tested both the main and stress-buffering effects of familism. We selected self-esteem, loneliness, depression, subjective health,

and physical symptoms as outcomes to study because they span a variety of psychological processes and physical experiences that are implicated in health and influenced by social relationships (Taylor, 2012). Our work focused on Latino Americans but we also explored whether the observed patterns extended to East Asian Americans and European Americans, two groups that systematically vary in the extent to which familism is culturally normative (Campos et al., 2014; Schwartz et al., 2010).

Drawing on our analysis of the familism and social support literatures, we hypothesized that familism would consistently show main effect model associations but only modest stress-buffering model associations. This pattern would be consistent with the social support literature that finds that social support is generally beneficial but is less consistently beneficial in the context of stress (Cohen & Wills, 1985). If familism operates as a main effect model, we expected that familism would be associated with higher self-esteem, less loneliness, fewer depressive symptoms, greater subjective health, and fewer physical symptoms. If familism operates as a stress-buffering model, we expected that familism would buffer the negative effects of stress on psychological well-being (i.e., self-esteem, loneliness, and depression) and physical health (i.e., subjective health and physical symptoms). That is, at high levels of stress, participants who reported high levels of familism would report higher self-esteem, less loneliness, fewer depressive symptoms, greater subjective health, and fewer physical symptoms compared with participants with low familism. For our study, we used a measure of global stress rather than a measure of specific stressors (e.g., economic, culturally-specific), as stress can come from many sources and perceived stress takes into account the subjective experience across situational demands (Cohen, Kamarck, & Mermelstein, 1983). The use of perceived stress may result in different findings for familism as a moderator and predictor across cultures and in comparison with past research. We expected that main effects and stress-buffering effects, if detected, would be consistent across all three cultural background groups.

Method

Participants

A sample of 811 participants were drawn from a larger study on family relationships and social cognition ($N = 1{,}350$). Participants were included in this study if they self-reported a Latino American ($n = 171$), East Asian American ($n = 415$), or European American ($n = 225$) background. All other participants, including those of non-East Asian (i.e., Filipino, Pacific Islander, and Indian) and mixed backgrounds, were excluded because the extent to which

familism is held in these sociocultural contexts is unclear and precludes specific predictions. The final sample consisted of 624 women (77%) and 180 men (22%) between the ages of 18 and 45, with an average age of 20.42 ($SD = 2.15$). Less than 1% of participants ($n = 7$) did not indicate their gender. The Latino American sample included 126 participants from Mexican backgrounds (73.7%), 38 participants from South and Central American backgrounds (e.g., Colombian, Guatemalan; 22.2%), and seven participants from mixed Latino backgrounds (4.1%). The East Asian American sample consisted of participants from Chinese ($n = 241$, 58.1%), Japanese ($n = 40$, 9.6%), Korean ($n = 108$, 26.0%), and mixed East Asian backgrounds ($n = 26$, 6.3%). The majority of the sample was born in the United States (85%). European American participants ($n = 182$, 80.9%) primarily reported speaking only English at home, whereas Latino Americans ($n = 152$, 88.9%) and East Asian Americans ($n = 353$, 85.1%) reported primarily speaking a language other than English at home.

Procedure

Participants were recruited at a large, public university in California (United States). Participants signed up for the study through the university's research participation pool and received a link to an online survey to be completed at their convenience. The study was voluntary and confidential; participants were not obligated to answer any of the questions and could opt out at any point in the study. Participants consented by reading the information sheet at the beginning and proceeding with the survey. The survey took approximately 30 to 60 minutes to complete. All participants were compensated for their time with extra credit that could be applied to the eligible course of their choice. This study was approved by the university's Institutional Review Board.

Measures

Reliabilities were assessed for all study measures using Cronbach's alpha and are reported for the total sample and each of the cultural background groups of interest in Table 1.

Demographics. Participants reported their age, gender, cultural background, place of birth, and language spoken at home. Participants indicated their cultural background by self-reporting their ethnicity from a list of categories.

Familism. Participants completed the 14-item Sabogal et al. (1987) Familism scale, one of the most widely used self-reported familism scales. This scale measures how much individuals value close and supportive family

Table 1. Reliabilities (Cronbach's α) for Major Study Measures.

Scale (number of items)	Total sample (N = 811)	Latino Americans (n = 171)	East Asian Americans (n = 415)	European Americans (n = 225)
Familism (14)	0.85	0.85	0.87	0.81
Perceived stress (14)	0.81	0.81	0.78	0.85
Subjective health (2)	0.87	0.85	0.86	0.88
Self-esteem (1)				
Depression (9)	0.82	0.84	0.80	0.86
Loneliness (20)	0.92	0.91	0.91	0.93
Physical symptoms (33)	0.95	0.94	0.96	0.94

Note. Reliability was not computed for self-esteem; it is a one-item measure.

relationships and prioritize family commitments and obligations before the self. The scale is comprised of three distinct subscales: (a) Familial Obligations (six items), (b) Perceived Support From the Family (three items), and (c) Family as Key Referents for Decision Making (five items). All items were rated on a 5-point Likert-type scale (1 = *very much in disagreement*, 5 = *very much in agreement*). As previous work has shown that the scale consists of one underlying latent factor (Campos et al., 2014), we used item scores to compute an overall mean familism score. Higher scores indicated higher familism. Sample items include "When one has problems, one can count on the help of relatives" and "Much of what a son or daughter does should be done to please the parents."

Perceived stress. The 14-item Perceived Stress Scale (PSS; Cohen et al., 1983) was used to measure the degree to which a person's demands exceed their ability to cope. Participants were asked to rate how often they felt a certain way during the last month on a 5-point Likert-type scale (1 = *never*, 5 = *almost always*). Sample items included "How often have you been upset because of something that happened unexpectedly?" and "How often have you felt confident about being able to handle your personal problems?" The seven positive items were reverse-scored. Items were averaged to create a scale score, where higher scores indicated higher perceived stress.

Psychological well-being

Self-esteem. The Single Item Self-Esteem Scale (SISE; Robins, Hendin, & Trzesniewski, 2001) was used to measure the thoughts and feelings people had about themselves. This single item measure has been shown to be a practical and reliable alternative to the 10-item Rosenberg Self-Esteem Scale (Robins et al., 2001). Participants were asked how much they agreed with the

following statement: "I have high self-esteem" on a 5-point Likert-type scale (1 = *strongly agree*, 5 = *strongly disagree*). The item was reverse-scored.

Loneliness. The 20-item UCLA (University of California, Los Angeles) Loneliness Scale (Russell, Peplau, & Ferguson, 1978) was used to measure subjective feelings of social isolation that are the defining characteristic of loneliness. Participants were asked to rate how often they felt the way described; sample items included "I am unhappy doing so many things alone" and "I have nobody to talk to." Ratings were made on a 4-point Likert-type scale (1 = *always*, 4 = *never*). The appropriate items were reverse-scored, and the scale was created by averaging across items, where higher scores indicated higher loneliness.

Depression. The nine-item Center for Epidemiologic Studies Depression Scale (CES-D; Santor & Coyne, 1997) was used to measure depressive symptoms during the past 7 days. Participants were asked to rate how often they felt a certain way using a 4-point Likert-type scale (1 = *rarely or none of the time*, 4 = *most or all of the time*). Sample items included "I was bothered by things that usually don't bother me" and "I felt that I could not shake off the blues even with help from my family or friends." Items were summed to create a scale score where a higher score indicated more depressive symptoms.

Physical health

Subjective health. Two items were used to assess participants' perceptions of their own health and well-being. The items "How would you characterize your health?" and "Your health is _____ compared with others your age (and gender)?" were drawn from various studies measuring subjective health (Quesnel-Vallee, 2007). Participants rated their health on a 5-point Likert-type scale (1 = *poor*, 5 = *excellent*). The items were averaged to create a scale score, where higher scores indicated higher subjective health. Self-reported physical health is a widely used measure and a good predictor of objective health outcomes such as mortality and specific health problems (Manor, Matthews, & Power, 2001; McGee, Liao, Cao, & Cooper, 1999).

Physical symptoms. The 33-item Cohen-Hoberman Inventory of Physical Symptoms (CHIPS; Cohen & Hoberman, 1983) was used to measure participants' physical symptoms. Participants were asked to rate how much specific problems (e.g., sleep problems, weight change, and back pain) had bothered or distressed them in the past 2 weeks, including the day they answered the questions. The CHIPS is commonly used to assess physical symptomatology

and physical health (e.g., Benham, 2006; Cohen & Hoberman, 1983; Lawler et al., 2005; Pbert, Doerfler, & DeCosimo, 1992). The 5-point Likert-type scale ranged from 0 (*extremely bothered*) to 4 (*not at all bothered*). To create a total score, items were reverse-scored and summed so that higher scores reflect higher distress from physical symptoms.

Data Analysis Plan

To test whether the associations between familism and psychological well-being and physical health were consistent with the main effects or stress-buffering model, we conducted multiple ordinary least squares regressions consistent with Cohen and Wills's (1985) original conceptualization of these processes. Step 1 of the regressions included the control variables: cultural background and gender. Step 2 included the main effect terms of familism and perceived stress. All independent variables were centered, and an interaction term was created for familism and perceived stress (Aiken & West, 1991). The interaction term was included in Step 3. We considered our results to be consistent with the main effects model if there were main effects of familism and no significant interaction between familism and stress. On the other hand, we considered our results to be consistent with the stress-buffering model if there was a significant interaction between familism and stress in the form of Familism × Stress (Cohen & Wills, 1985); in this case, the main effects were interpreted as artifacts of the significant interaction.

To test whether familism and other major study variables differed by cultural background, we conducted ANOVA and Bonferroni post hoc tests. To examine whether the main effects or stress-buffering models were consistent across cultural backgrounds, we conducted regression analyses that included interaction terms involving two dummy variables indexing cultural background using Latino Americans as the reference group. In each set of regressions, gender was controlled in Step 1, and stress, familism, and cultural background (two dummy-coded variables) were included in Step 2. Step 3 included all the possible two-way interactions between familism, stress, and cultural background (one dummy-coded variable for each regression to simplify the analyses). Step 4 included the three-way interaction.

Results

Preliminary Analysis

Bivariate correlations of the major study variables are presented in Table 2. Means and standard deviations of the major study variables by cultural

Table 2. Zero-Order Correlations Among Study Variables for the Overall Sample (N = 811).

Variable	1	2	3	4	5	6	7	8
1. Gender (1 = male; 0 = female)	1.00							
2. Familism	−.02	1.00						
3. Perceived stress	−.11*	.00	1.00					
Psychological well-being								
4. Self-esteem	.13**	.10*	−.41**	1.00				
5. Loneliness	.04	−.18**	.44**	−.41**	1.00			
6. Depression	−.03	−.08*	.60**	−.34**	.46**	1.00		
Physical health								
7. Subjective health	.17**	.09*	−.32**	.38**	−.29**	−.29**	1.00	
8. Physical symptoms	−.12**	−.09*	.34**	−.24**	.29**	.49**	−.28**	1.00
M	0.22	3.47	2.93	2.42	2.15	13.88	3.51	59.31
SD	0.42	0.65	0.49	1.08	0.46	4.82	0.87	22.67
n	804	785	809	810	809	810	806	810

*p < .05. **p < .01.

Table 3. Means and Standard Deviations for Familism, Perceived Stress, Psychological Well-Being, and Physical Health by Cultural Background.

	Latino Americans (n = 171)	East Asian Americans (n = 415)	European Americans (n = 225)	
Measure	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*F*
Familism	3.54 (0.67)[a]	3.54 (0.66)[a]	3.29 (0.61)	12.03**
Perceived stress	2.88 (0.49)[a]	3.00 (0.44)	2.85 (0.54)[a]	8.09**
Psychological well-being				
Self-esteem	3.75 (1.01)[a]	3.41 (1.08)	3.76 (1.09)[a]	10.72**
Loneliness	1.99 (0.45)	2.25 (0.43)	2.08 (0.47)	12.03**
Depression	13.63 (4.74)[a]	14.00 (4.65)[a]	13.87 (5.19)[a]	0.37
Physical health				
Subjective health	3.46 (0.87)[a]	3.41 (0.86)[a]	3.72 (0.86)	9.78**
Physical symptoms	60.36 (22.42)[a]	59.49 (23.99)[a]	58.20 (20.28)[a]	0.46

Note. In each row, means with same superscript are not significantly different at p < .017 based on Bonferroni post hoc paired comparisons.
*p < .05. **p < .01.

background, along with the associated ANOVA results with Bonferroni post hoc tests, are shown in Table 3. Significant mean differences by cultural background were found for five of the seven major study variables. Latino Americans and East Asian Americans were both higher in familism than European Americans but did not differ from each other. East Asian Americans were higher in perceived stress than Latino Americans and European

American, but the latter two groups did not differ from each other. For self-esteem, Latino Americans and European Americans reported higher self-esteem than East Asian Americans but did not differ from each other. For loneliness, East Asian Americans were higher than Latino Americans and European Americans, but European Americans were also higher than Latino Americans. Latino Americans reported the lowest levels of loneliness of the three groups. For subjective health, European Americans scored higher than both Latino Americans and East Asian Americans; the latter two groups did not differ from each other. There was no difference by cultural background for either depressive or physical symptoms.

Table 4 shows the unstandardized regression coefficients predicting self-esteem, loneliness, depression, subjective health, and physical symptoms. Cases with missing values were excluded from the regression models; less than 3.5% of values were missing per variable. In terms of gender, women reported lower self-esteem, lower loneliness, lower subjective health, and more physical symptoms than did men. There was no gender difference in depressive symptomatology. In terms of cultural background, there was no significant difference in depression or physical symptoms. There was also no significant difference between Latino Americans' and European Americans' self-esteem. However, Latino Americans reported lower loneliness and lower subjective health than European Americans and higher self-esteem and lower loneliness than East Asian Americans. There was no significant difference between Latino Americans' and East Asian Americans' subjective health. Last, findings indicated that high levels of perceived stress predicted lower self-esteem, higher loneliness, higher depressive symptoms, lower subjective health, and increased physical symptoms for all cultural background groups.

Were the Associations of Familism Consistent With the Main Effects Model?

As Table 4 shows, our results indicated that the associations of familism with psychological well-being and physical health were consistent with the main effects model for the following outcomes: loneliness, depression, and physical symptoms. For these three outcomes, there was a main effect where familism was associated with health outcomes but the Familism × Perceived Stress interaction term was not significant. Model 2c showed that higher familism levels predicted lower loneliness. Model 3c showed that higher familism predicted lower depression. Model 5c showed that higher familism levels predicted fewer physical symptoms.

Table 4. Regression Results of Perceived Stress and Familism Predicting Psychological Well-Being and Physical Health.

	Self-esteem			Loneliness			Depression			Subjective health			Physical symptoms		
	Model 1a	Model 1b	Model 1c	Model 2a	Model 2b	Model 2c	Model 3a	Model 3b	Model 3c	Model 4a	Model 4b	Model 4c	Model 5a	Model 5b	Model 5c
Gender[a]	0.37** (0.09)	0.27* (0.08)	0.28* (0.08)	0.03 (0.04)	0.08* (0.03)	0.07* (0.03)	−0.39 (0.42)	0.39 (0.34)	0.38 (0.34)	0.35** (0.07)	0.29** (0.07)	0.29** (0.07)	−6.14* (1.93)	−4.21* (1.83)	−4.31* (1.83)
European American[b]	−0.04 (0.11)	0.00 (0.10)	−0.01 (0.10)	0.11** (0.05)	0.08* (0.04)	0.08* (0.04)	0.39 (0.51)	0.36 (0.41)	0.37 (0.41)	0.23* (0.09)	0.25* (0.09)	0.25* (0.09)	−1.34 (2.33)	−1.91 (2.21)	−2.31 (1.98)
East Asian American[b]	−0.38** (0.10)	−0.27* (0.09)	−0.27* (0.09)	0.26** (0.04)	0.21** (0.04)	0.21** (0.04)	0.42 (0.45)	−0.36 (0.36)	−0.36 (0.37)	−0.09 (0.08)	−0.02 (0.08)	−0.02 (0.08)	−0.33 (2.09)	−2.31 (1.97)	−1.81 (2.21)
Familism		0.20** (0.05)	0.21** (0.05)		−0.13** (0.02)	−0.14** (0.02)		−0.49* (0.22)	−0.50* (0.22)		0.17** (0.05)	0.18** (0.05)		−3.23* (1.17)	−3.37* (1.18)
Perceived stress		−0.82** (0.07)	−0.80** (0.07)		0.39** (0.03)	0.38** (0.03)		6.01** (0.29)	6.00** (0.29)		−0.53** (0.06)	−0.52** (0.06)		15.32** (1.57)	15.17** (1.57)
Familism × Perceived Stress			0.32* (0.10)			−0.07 (0.04)			−0.23 (0.41)			0.21** (0.08)			−2.62 (2.19)
Constant	2.71 (0.08)	2.67 (0.08)	2.67 (0.08)	1.98 (0.04)	2.00 (0.03)	2.00 (0.03)	13.66 (0.39)	13.89 (0.31)	13.89 (0.31)	3.42 (0.07)	3.39 (0.06)	3.39 (0.06)	61.14 (1.78)	61.89 (1.68)	61.89 (1.68)
R^2	.05	.19	.20	.06	.26	.26	.00	.36	.36	.05	.15	.16	.01	.13	.13
F	12.94	36.76	32.77	15.11	54.16	45.75	.55	87.91	73.25	13.67	27.78	24.37	3.54	23.31	19.68
R^2 change		.15	.01		.21	.00		.36	.00		.10	.01		.12	.00
n		776			775			775			772			774	

[a]Male = 1, female = 0.
[b]Relative to Latino Americans.
*$p < .05$. **$p < .01$.

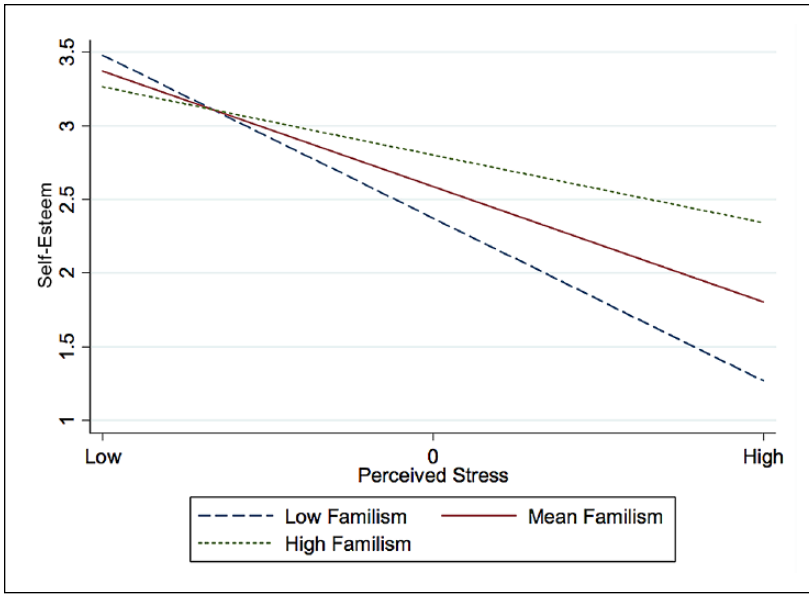

Figure 1. Regression of self-esteem on high and low perceived stress for three values of familism.
Note. High and low values are plotted 1 *SD* above and 1 *SD* below the mean.

Were the Associations of Familism Consistent With the Stress-Buffering Model?

Table 4 shows that the associations between familism and psychological well-being and physical health were consistent with the stress-buffering effects model for the following outcomes: self-esteem and subjective health. Model 1c revealed a significant interaction between familism and perceived stress in relation to self-esteem. Specifically, there was no significant difference in the self-esteem of participants with low and high familism at low levels of stress, $t(769) = 0.99$, $p = .32$. However, at high levels of stress, participants with high levels familism reported higher self-esteem than participants with low familism, $t(769) = -4.55$, $p < .001$ (see Figure 1). Model 4c also revealed that the relationship between stress and subjective health was moderated by familism. Participants with low and high familism had similar levels of subjective health at low levels of stress, $t(765) = 0.34$, $p = .74$. However, at high levels of stress, participants with high familism had greater subjective health than participants with low familism, $t(765) = -3.92$, $p < .001$ (see Figure 2).

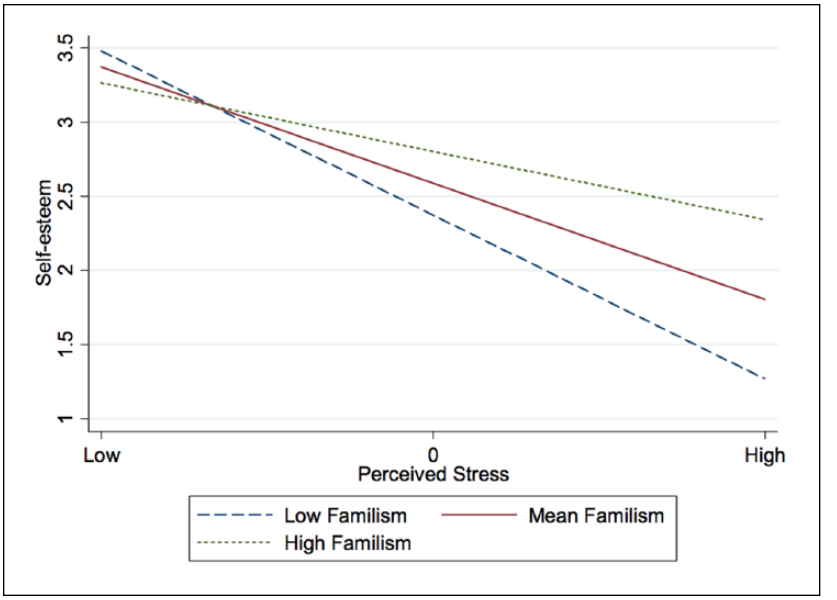

Figure 2. Regression of subjective health on high and low perceived stress for three values of familism.
Note. High and low values are plotted 1 *SD* above and 1 *SD* below the mean.

Were the Main Effects or Stress-Buffering Patterns Consistent Across Cultural Backgrounds?

The results reported in the previous sections were consistent across the three cultural background groups. None of the 30 two- and three-way interaction terms involving cultural background across the analyses were significant.

Discussion

Researchers have theorized that familism promotes health by making it easier for individuals to benefit from family relationships (Campos et al., 2014). However, the specific circumstances under which familism is beneficial (i.e., in general or in the context of stress) are unknown. As there have been no empirical analyses of these competing possibilities, this study sought to understand whether familism had main effects and stress-buffering effects across a diverse sample. Our analyses revealed three findings. First, familism appears to be generally beneficial (main effect model) and beneficial under stress (stress-buffering model), but this depends on the outcome examined.

A main effect was found for loneliness, depression, and physical symptoms, while stress-buffering was found for self-esteem and subjective health. Second, the observed results were consistent across the three cultural background groups studied. Last, our study found that Latino Americans and East Asian Americans (who did not differ from each other) reported higher familism levels than did European Americans.

Taken together, our findings advance understanding of the pattern by which familism may benefit psychological well-being and physical health and provide new evidence for the relevance of familism values across sociocultural contexts that vary in the extent to which familism is prevalent. Specifically, the main effects of familism on loneliness, depression, and physical symptoms that we found are consistent with the growing line of empirical research showing that familism values may play a beneficial role in psychological health. Our findings also provide new evidence for the association of familism values with specific health outcomes (i.e., subjective health and physical symptoms).

We observed familism to have a stress-buffering effect on self-esteem and subjective health. The stress-buffering patterns observed in this study are consistent with the results of studies on stress-buffering relationship properties (e.g., social support) where evidence for stress-buffering is less consistently found than evidence for main effects. As has been discussed in the social support literature, the expectation of finding stress-buffering effects sets a high bar; the effects of stress may be too strong to be counteracted by variables that harness relationship benefits. Our findings are consistent with previous studies that found that familism was not able to attenuate the negative effects of discrimination reported by adolescent mothers (Umaña-Taylor et al., 2011). Indeed, research indicates that under particularly stressful circumstances, the obligations and responsibilities associated with familism may result in negative outcomes. For example, psychological distress that results from a failure to meet family obligations has been shown to negatively affect the immune system (e.g., Fuligni et al., 2009).

Based on our results, we can conclude that familism protects health in general (i.e., familism exerts a main effect) and offers some protection against the negative effects of stress (i.e., stress-buffering effect). These patterns are consistent with the results observed for social support; both familism and social support show main and stress-buffering effects, depending on the outcome examined. These findings are important because stressors can eventually lead to detrimental changes in mood, well-being, and increases in personal suffering (Schneiderman, Ironson, & Siegel, 2005). Therefore, it is useful to know whether cultural values can provide general benefits but also attenuate stressful life events and perhaps help prevent individuals from

developing further stress-related disorders such as depression and anxiety disorders (Schneiderman et al., 2005).

Future studies should investigate the specific mechanisms by which familism is associated with psychological well-being and physical health. For instance, the possibility that familism operates through proximal relationship pathways that are known to be good for health (e.g., closeness and support) merits further testing. If familism promotes high-quality family relationships, it may, in turn, increase individual well-being and/or encourage engagement in healthy behaviors (e.g., Campos et al., 2014; Katiria Perez & Cruess, 2014).

Our results indicated that familism's main effects and stress-buffering effects were consistent across three cultural groups. There was, however, a difference in the extent to which familism was valued across groups. Latino Americans and East Asian Americans endorsed familism to a greater extent than European Americans. This finding is consistent with previous research showing that familism is a cultural value rooted in the Latino community (e.g., Sabogal et al., 1987) and replicates the Schwartz et al. (2010) finding that Latino and Asian individuals share similar family primacy values such as familism, filial piety, and communalism.

While this study furthers our understanding of the overall positive role and stress-buffering qualities of familism, it has limitations. First, our study was cross-sectional; thus, additional research is needed to conclude whether familism levels or its protective qualities are causally linked. Second, our sample was composed mainly of women (77%). While our analyses controlled for gender, women and men may benefit differently from familism; we were limited in our ability to examine this possibility. Last, our study sampled university students; findings may differ for young adults who are not in college and presumably face similar, or perhaps more powerful, stressors. Despite these limitations, the current study identified one factor through which individuals can obtain psychological and health benefits from family relationships.

Familism may make individuals feel less isolated, less depressed, and more valued. Familism may also be able to reduce the effects of stress, a risk factor for depression and physical disease. For these reasons, researchers should continue to examine familism and related variables that may maximize the benefits that family relationship values can provide for health in people from all cultural backgrounds. With additional research, we can begin to understand whether familism may be used in future interventions to attenuate the negative effects that elevated levels of stress can have, including increases in illness, negative affect, and disruptions in immune functioning (Cohen & Wills, 1985).

Declaration of Conflicting Interests

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

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