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The Roles of Familism and Emotion Reappraisal in the Relations Between Acculturative Stress and Prosocial Behaviors in Latino/a College Students

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Abstract

Researchers have demonstrated mixed associations between acculturative stress and prosocial behaviors (actions intended to benefit others) among Latino/a adolescents and emerging adults. The current study aimed to examine the relations between acculturative stress and Latino/a young adults' prosocial behaviors via familism values and emotion reappraisal. Participants were 1,527 Latino/a college students ($M_{\text{age}} = 20.35$ years, $SD = 3.88$; 75.2% women) from universities across the United States. The results demonstrated direct and indirect links between acculturative stress and prosocial behaviors. Specifically, acculturative stress was positively related to familism values, which in turn were positively associated with multiple forms of prosocial behaviors. Additionally,

emotion reappraisal was positively associated with specific forms of prosocial behaviors. There was also evidence that familism and emotion reappraisals moderated the associations between acculturative stress and specific forms of prosocial behaviors. Discussion focuses on the interplay of culture-related and emotion-regulation processes associated with Latino/a young adults' positive social outcomes.

Abstract

Investigadores han demostrado relaciones mixtas entre estrés de aculturación y comportamientos prosociales (acciones que benefician a otros) en adolescentes y adultos jóvenes Latino/as. Esta investigación examinó las relaciones entre estrés de aculturación y comportamientos prosociales de parte de valores de la familia y reevaluaciones de emociones. Los sujetos eran 1,527 estudiantes universitarios de patrimonio Latino/a (M edad = 20.35 años, SD = 3.88; 75.2% mujeres) en universidades en los Estados Unidos. Los resultados demostraron asociaciones directas y indirectas entre estrés de aculturación y comportamientos prosociales. Específicamente, estrés de aculturación estaba asociado positivamente con varias formas de comportamientos prosociales. Además, reevaluaciones de emociones estaba relacionado positivamente con específicas formas de comportamientos prosociales. Había también evidencia que valores de la familia y reevaluaciones de emociones moderaron las asociaciones entre estrés de aculturación y específicas formas de comportamientos prosociales. La discusión se enfoca en la interacción de procesos culturales y regulación de emociones asociadas con los éxitos sociales positivos en adultos jóvenes Latino/as.

Keywords

acculturative stress; Latina/o families; emotion reappraisal; prosocial behaviors; familism

Stressful experiences can weaken coping mechanisms and lead to maladjustment (Conger et al., 1992; Lazarus & Folkman, 1984). However, stress is not always associated with negative outcomes. Conceptual models suggest that moderate-level stress experiences can be adaptive when the stressor does not overwhelm an individual's coping mechanisms (Lazarus & Folkman, 1984). Experiencing stressful events can ultimately influence the cognitive functioning and sociobehavioral outcomes of young adults (Lazarus & Folkman, 1984). Therefore, examining the processes by which perceived stress influences youths' personal characteristics and sociocognitive factors, such as cultural values and emotion regulation tendencies, is important for scholars to better understand how stressful experiences may influence the positive social development of adolescents and young adults.

Stressors Among Latino/a College Students

Although all college students face stressors, U.S. Latino/a college students can be at risk for unique forms of stress, including acculturative stress. *Acculturative stress* is defined as stress associated with the demands placed on the individual that can result from adapting to a new culture (Alegría & Woo, 2009). Compared with other settings, college may be a context that provides new stressors and challenges, with differing cultural expectations, for many Latino/a young adults (Hurtado & Carter, 1997). Given that Latino/as are the fastest growing ethnic minority population in the United States and that Latino/as have relatively low

enrollment and retention rates in college, it is important to examine predictors of Latino/a college students' positive social adjustment in order to foster positive adjustment among this population (Kohler & Lazarin, 2007).

Pressure to acculturate, one particular dimension of acculturative stress, may be particularly salient for U.S. Latino/a college students because of their immersion in the host society and their increasing autonomy as university students. Acculturative stress in Latino/a adolescents has been empirically linked to negative adjustment outcomes, including substance use, anxiety, and depression (Crockett et al., 2007; Zamboanga, Schwartz, Jarvis, & Van Tyne, 2009). Moreover, acculturative stress may also affect young adults' prosocial behaviors (i.e., actions that are intended to benefit others; see Carlo & Randall, 2002). These generally positive behaviors include actions such as helping others, comforting others when they are upset, volunteering, and donating time or resources (Carlo & Randall, 2002).

Additionally, research examining how stressors are associated with cultural orientations of Latino/a youth is limited in the current literature. The integrative model for studying developmental competencies in minority children (García Coll et al., 1996) suggests that considering cultural variables, such as acculturative stressors, is important in predicting developmental outcomes. Additionally, this model highlights the potentially important role of sociocognitive factors, such as cultural values and emotion regulation strategies, in predicting sociobehavioral outcomes (García Coll et al., 1996). The current study is an examination of components of this proposed model by considering the links among acculturative stress, familism values, emotion reappraisals, and prosocial behaviors of U.S. Latino/a young adults.

Multidimensionality of Prosocial Behaviors

Understanding positive social behaviors, such as prosocial behaviors, is important in order to understand factors that contribute to helpful, caring behaviors among young adults. Additionally, understanding positive behaviors in ethnic minority youth is crucial to combat deficit approaches of youth development and focus on strengths and developmental competencies of U.S. Latino/a youth. A recent development in the study of prosocial behaviors is the interest in examining different types of prosocial behaviors as opposed to examining prosocial behavior as a unidimensional construct. Carlo and Randall (2002) identified six common types of prosocial behaviors, including dire, emotional, compliant, anonymous, public, and altruistic. Dire prosocial behaviors include helping others in emergency situations. Emotional prosocial behaviors include comforting others when they are upset. Compliant prosocial behaviors include helping others when asked. Anonymous prosocial behaviors include helping others without public acknowledgment. Public prosocial behaviors include helping in front of others. Finally, altruistic prosocial behaviors include helping when there is no expected benefit to the self (Carlo, Hausmann, Christiansen, & Randall, 2003). Given the increasing interest in prosocial behaviors as a multidimensional construct, one aim of the current study was to examine how acculturative stress is associated with these six types of prosocial behaviors.

Links Between Acculturative Stress and Prosocial Behaviors

Acculturative stress may be negatively associated with prosocial behaviors because it is possible that individuals are attending more to their own emotions and less to the needs of others when experiencing stress. However, there is also evidence that acculturative stress may promote some forms of prosocial behaviors (e.g., helping others in emotional situations; e.g., McGinley et al., 2010). One possibility is that young adults engage in specific types of helping as a way of inducing positive affect for themselves and coping with their stress. Specifically, comforting behaviors may induce positive affect that allows individuals to cope with their own stressors (Manucia, Baumann, & Cialdini, 1984). Acculturative stress may promote sensitivity and empathic concern toward the needs of others, which in turn ultimately promotes helping behaviors (cf. Staub & Vollhardt, 2008). Therefore, acculturative stress may be an important predictor of young adults' prosocial behaviors. If so, it is important to consider how acculturative stress may be positively associated with specific types of prosocial behaviors and negatively associated with other forms, which was a goal of the current study.

Although some research has examined the links between acculturative stress and prosocial behaviors (e.g., McGinley et al., 2010), the evidence is sparse and mixed. In one relevant study among U.S. Mexican college students, acculturative stress was positively associated with emotional, dire, compliant, and anonymous prosocial behaviors but was negatively associated with altruistic prosocial behaviors (McGinley et al., 2010). A recent longitudinal study with young U.S. Mexican adolescents found that perceived discrimination (which may be a component of acculturative stress) was negatively associated with compliant, emotional, dire, and altruistic prosocial behaviors but was positively associated with public prosocial behaviors, across a 5-year span (Brittian et al., 2013). However, one study found no association between acculturative stress and a global measure of prosocial behaviors in Hispanic adolescents (Schwartz, Zamboanga, & Jarvis, 2007). In general, these studies suggest that acculturative stress may be more detrimental to altruistic forms of prosocial behaviors than to other forms. Moreover, the findings suggest that acculturative stress may also directly foster prosocial behaviors, such as emotional, compliant, or dire prosocial behaviors, that promote positive feelings and help serve as a coping mechanism during times of stress.

Despite the suggestive evidence on the associations between acculturative stress and prosocial behaviors, the extant research is characterized by several limitations. First, the underlying mechanisms that account for the associations between acculturative stress and prosocial behaviors are not well understood. Researchers have considered the mediating role of sympathy in the associations between acculturative stress and prosocial behaviors (McGinley et al., 2010), but other potentially important mediators have not yet been considered. Second, limited prior evidence demonstrates the need to examine the relations between acculturative stress and specific forms of prosocial behaviors. This is in line with other research that has shown differential relations between specific forms of prosocial behaviors and a variety of constructs among Hispanic youth (e.g., Armenta, Knight, Carlo, & Jacobson, 2011; Carlo, Knight, McGinley, & Hayes, 2011; Carlo, Mestre, Samper, Tur, & Armenta, 2011).

The present study addresses these limitations by examining the direct and indirect effects of young adults' familism values and emotion reappraisal in the relations between acculturative stress and prosocial behaviors. Based on the social ecological model of Latino youth development, prosocial behaviors are impacted by the broader context (including stressful events) as well as family processes and individual factors (Carlo & de Guzman, 2009). Therefore, the current study contributes to the research on Latino adolescents' prosocial behaviors by examining components of this model, including acculturative stress, familism values, emotion reappraisals, and prosocial behaviors. Furthermore, the current study examines the associations between acculturative stress and six distinct forms of prosocial behaviors in order to better understand how stressors are differentially associated with specific forms of helping behaviors. Because of gender differences in the associations between acculturative stress and prosocial behaviors in past research (McGinley et al., 2010), the current study also examines gender differences.

Links Between Acculturative Stress, Familism, and Emotion Reappraisal

The associations between stressors and sociocognitive outcomes, such as cultural values and emotion regulation, are important to consider, particularly among marginalized youth. One particularly salient cultural value among Latino adolescents and young adults is familism. *Familism* is defined as (a) having a sense of obligation toward the family, (b) incorporating the family as part of the self, and (c) supporting the family (Knight et al., 2010). Familism includes loyalty toward family members and considering family members' wants and needs when making decisions (Sabogal, Marín, Otero-Sabogal, Marín, & Perez-Stable, 1987). Because cultural values are usually internalized during adolescence (see Knight et al., 2010), young adults may develop a strong identification with their family during this developmental period.

Acculturative stress may be associated with young adults' familism values, although the specific direction of effects is unclear. Young adults who are experiencing pressure to acculturate to the host society might seek support and comfort from their identification with family members. Familism may be particularly important in times of increased social isolation and stress. Thus, the pressure to acculturate can foster familism values by promoting social support and connection among adolescents and other family members. In contrast, other researchers have argued that acculturative stress may be negatively associated with familism values (Gil, Wagner, & Vega, 2000). For example, it may be that acculturative stress deteriorates traditional cultural values over time and is associated with disruptions in family relationships, particularly between parents and adolescents. In other words, acculturative stress may cause tensions between young adults and other family members that can subsequently reduce young adults' endorsement of familism values. It may also be that adolescents who are experiencing acculturative stress, potentially from peer relationships, may attempt to distance themselves from their families in order to alleviate the stress and assimilate to the majority culture.

There is limited research on the associations between acculturative stress and familism values among Latino adolescents. One study conducted with male Latino adolescents found that acculturative stress (i.e., English-language difficulties, perceived discrimination, and

family conflict related to acculturation) was negatively associated with their endorsement of familism values (Gil et al., 2000). Another study found that acculturative stress was negatively related to familism values in a sample of Latino adolescents (Buchanan & Smokowski, 2009). Therefore, familism values are an important cultural value to examine when considering the role of stress on Latino/a youth prosocial behaviors. The current study further examines the association between acculturative stress and familism values by considering the mediating role of familism values in the associations between pressure to acculturate and prosocial behaviors of Latino/a young adults.

Pressure to acculturate may also be associated with young adults' emotion regulation, particularly emotion reappraisal. *Reappraisal* is defined as changing the way one thinks about a situation in order to reduce the stress experienced (Gross, 2002). Young adults who are experiencing acculturative stress may become overwhelmed and depleted of cognitive resources and, therefore, may be less effective at cognitively reappraising situations (Johns, Inzlicht, & Schmader, 2008). Stress and coping theories suggest that when individuals feel threatened by stress, they become emotionally aroused and then engage in emotion regulation strategies, such as emotion reappraisals (see Compas, Banez, Malcarne, & Worsham, 1991). Among diverse samples of adolescents, general stress has been negatively associated with emotion-regulation strategies (Buckner, Mezzacappa, & Beardslee, 2003; McLaughlin & Hatzenbuehler, 2009). However, this direct link between acculturative stress and emotion reappraisal is understudied. The current study contributes to the literature on acculturative stress and emotion reappraisal by examining the roles of emotion reappraisal and familism values in the associations between pressure to acculturate and prosocial behaviors among Latino/a young adults.

Relations Among Familism, Emotion Reappraisal, and Prosocial Behaviors

Both young adults' familism values and their emotion-reappraisal strategies may be important predictors of their prosocial tendencies. When youth identify strongly with their family, they may be socialized to consider the needs of others, which may, in turn, foster their perspective-taking skills (i.e., understanding the social situation of others) and ultimately behaviors aimed at helping others (Calderón-Tena, Knight, & Carlo, 2011). Emerging adults who strongly endorse familism may also have more opportunities to practice prosocial behaviors with their family members and may be more likely to engage in helping behaviors aimed at family members (see Calderón-Tena et al., 2011; Knight & Carlo, 2012). Given that familism emphasizes the needs of others in the family, familism may promote an orientation toward others and may ultimately promote prosocial behaviors (Carlo & de Guzman, 2009). Indeed, the endorsement of familism values has been positively linked to compliant, emotional, dire, and anonymous prosocial behaviors and negatively linked to altruistic prosocial behaviors in U.S. Mexican early adolescents (Armenta et al., 2011; Calderón-Tena et al., 2011).

Regarding emotion reappraisal, young adults who are able to modulate their emotional responses may be better able to help in emotionally arousing situations. Because prosocial situations can sometimes be emotionally evocative and distressing, good emotion-regulation skills are deemed an important precursor to responsiveness to the needs of others and

prosocial actions (Eisenberg, 2000). Consistently, researchers have demonstrated that emotion regulation in children is positively associated with prosocial behaviors and that negative emotionality (reactivity) is negatively associated with prosocial behaviors (Eisenberg et al., 1996; Fabes, Eisenberg, Karbon, Troyer, & Switzer, 1994; Rydell, Berlin, & Bohlin, 2003). A few studies have suggested that emotion regulation predicts prosocial behaviors in young adults as well; however, these studies are limited and have been conducted with predominantly European American samples (see Lopes, Salovey, Côté, Beers, & Petty, 2005).

Familism Values and Emotion Reappraisals as Mediators and/or Moderators

An additional aim of the study was to examine the potential mediating and/or moderating roles of familism values and emotion reappraisals in the associations between acculturative stress and prosocial behaviors. Although it is plausible that familism values and emotion reappraisals may mediate the associations between acculturative stress and prosocial behaviors, it is also plausible that these sociocognitive variables may moderate these associations. For example, previous research has demonstrated that familism directly predicts Latino youth outcomes for youth who are experiencing low levels of discrimination (Umaña-Taylor, Updegraff, & Gonzales-Backen, 2011), thus suggesting that familism moderates the relations between cultural stress and youth outcomes. Other researchers have demonstrated that active coping strategies (emotion-regulation strategy) buffer the positive links between acculturative stress and internalizing symptoms among Latino college students (Crockett et al., 2007). This latter research is consistent with the proposed moderating role of familism values and emotion appraisals in the relations between acculturative stress and prosocial behaviors. Therefore, to better understand how familism values and emotion reappraisals play a role in the associations between acculturative stress and prosocial behaviors, both mediation and moderation effects were explored.

Gender and Nativity as Moderators

Gender differences have been documented in responses to stress, emotion reappraisal, and prosocial behaviors. Boys and girls tend to respond differently to stressful situations (Taylor et al., 2000). Specifically, boys tend to either avoid a situation or become reactive against the stressor. Girls, alternatively, tend to seek emotional support and closeness with others (Taylor et al., 2000). Because of these documented differences, it is important to consider gender as a moderating variable in the associations between stress and social outcomes. There are also gender differences in emotion reappraisals. Specifically, girls are typically better regulators of emotion than are boys (see Morris, Silk, Steinberg, Myers, & Robinson, 2007). Girls may also be oriented toward social relationships as a means of regulating emotion, which may contribute to higher levels of specific forms of helping behaviors (see Morris et al., 2007). Boys, however, tend to regulate emotions using pragmatic techniques (see Morris et al., 2007). Gender differences have also been documented in prosocial behaviors. Specifically, in previous research, girls were more likely to report engaging in selfless and emotional forms of prosocial behaviors, whereas boys reported engaging in

more public forms of prosocial behaviors (Carlo et al., 2003). Because of the documented differences in responses to stress, emotion reappraisals, and prosocial behaviors, gender was examined as a moderator in the current study. Additionally, previous research with Latino adolescents has documented differences in familism values based on nativity (Gil et al., 2000). Therefore, nativity was examined as a moderating variable.

Study Goals and Hypotheses

The current study aimed to examine the associations among pressure to acculturate, familism, emotion reappraisal, and six forms of prosocial behaviors in Latino/a young adults. We hypothesized that pressure to acculturate would be differentially associated with prosocial behaviors. We expected that, consistent with previous research (McGinley et al., 2010), pressure to acculturate would be positively associated with dire and emotional prosocial behaviors. It may be that pressure to acculturate facilitates emotional sensitivity toward others and facilitates helping in situations that are particularly emotionally arousing. We also hypothesized that pressure to acculturate would be negatively associated with altruistic prosocial behaviors and positively associated with public prosocial behaviors. It may be that youth who are experiencing pressure to acculturate are focused on their own distress and are less likely to engage in prosocial behaviors that require a cost to the self. However, prosocial behaviors that are selfishly motivated (public prosocial behaviors) may provide adolescents with positive reinforcements from others and positive emotional reactions. Therefore, adolescents who are experiencing pressure to acculturate may be more likely to engage in public forms of helping as a means of coping with stress (see Penner, Dovidio, Piliavin, & Schroeder, 2005). In addition, we tested two alternative hypotheses regarding the roles of familism and emotion reappraisal. The mediation hypotheses assert that familism and emotion reappraisal would account for the relations between acculturative stress and dire, emotional, compliant, and anonymous prosocial behaviors. Alternatively, we also examined whether both familism values and emotion reappraisals moderate the associations between acculturative stress and prosocial behaviors. Gender differences and nativity differences (i.e., U.S.-born vs. born outside the United States) in these relations were also examined.

Method

Participants

Data were collected as part of the larger Multisite University Study of Identity and Culture (MUSIC) project (see Weisskirch et al., 2013). Faculty collaborators at each institution were responsible for coordinating recruitment in classrooms. Participants in the present study consisted of 1,527 Latino/a college students ($M_{\text{age}} = 20.35$ years, $SD = 3.88$; 75.2% women) from 30 public and private universities across 20 U.S. states. Sites were selected with the goal of representing the Latino college student population as adequately as possible. The sites were distributed across the country (six in the Northeast, seven in the Southeast, six in the Midwest, three in the Southwest, and eight in the West). The representation of Latino populations at the universities ranged from 1% to 60% ($M = 12\%$). Participants reported a variety of ethnicities (19% Mexican origin, 16% Cuban origin, 6% Colombian origin, and

4% Dominican origin), and over half were born in the United States. Twenty-eight percent of participants reported an annual income of below \$30,000.

Procedure

Students at each site were offered either extra credit or experiment credit for participating in the study. Students who agreed to participate were sent a link to the consent form and survey packet, which they completed online. All students who completed the survey were given the extra credit that was offered. The study was conducted in compliance with the appropriate internal review board (see Weisskirch et al., 2013).

Measures

Pressure to acculturate.—Given the specific aims of the study, we examined students' perceptions of acculturative stress reported on the seven-item pressure to acculturate subscale of the Multidimensional Acculturative Stress Inventory (Rodriguez, Myers, Mira, Flores, & Garcia-Hernandez, 2002; Cronbach's $\alpha = .92$). Items are measured on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The pressure to acculturate subscale assesses pressure from the European American culture to adapt to the majority culture. A sample item includes "It bothers me when people pressure me to assimilate to the American ways of doing things."

Familism.—Participants completed a measure of their endorsement of familism values using the 18-item Attitudinal Familism Scale; Lugo Steidel & Contreras, 2003; Cronbach's $\alpha = .88$). The familism scale assesses prioritization of family over the individual, family interconnectedness, and reciprocity within the family. This scale is assessed on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Sample items include "A person should live near his or her parents and spend time with them on a regular basis," "A person should rely on their family if the need arises," and "Children should live with their parents until they get married."

Emotion reappraisal.—Participants reported on their use of reappraisal as an emotion regulation strategy by completing the six-item reappraisal subscale from the Cognitive Emotion Regulation Questionnaire (Garnefski & Kraaij, 2007; Cronbach's $\alpha = .90$). This scale assesses the cognitive reappraisal strategies that participants tend to use in response to stressful experiences. Participants were asked to think about how they generally deal with emotional situations. These items are assessed on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). A sample item is "I think that the situation also has its positive sides."

Prosocial behaviors.—Participants also reported on their tendency to engage in six types of prosocial behaviors (dire, emotional, anonymous, public, altruistic, and compliant) using the Prosocial Tendencies Measure (PTM; Carlo & Randall, 2002). Due to errors in entering the PTM items, youth completed a modified version of the PTM. To shorten the survey packet and to increase clarity, the items were slightly reworded for the current study, and four items from the original scale were deleted. Dire prosocial behaviors (three items; Cronbach's $\alpha = .64$) include helping others in emergency situations (e.g., "I tend to help

people who are in real crisis or need”). Emotional prosocial behaviors (four items; Cronbach’s $\alpha = .75$) include helping behaviors in emotionally evocative situations (e.g., “It makes me feel good when I can comfort someone who is really upset”). Compliant behaviors (two items; Cronbach’s $\alpha = .77$) include helping when asked (e.g., “I never wait to help others when they ask for it”). Anonymous prosocial behaviors (five items; Cronbach’s $\alpha = .80$) include helping in secret (e.g., “I prefer to donate money without anyone knowing”). Public prosocial behaviors (four items; Cronbach’s $\alpha = .81$) include prosocial behaviors done in the presence of others (e.g., “When other people are around, it is easier for me to help others in need”). Altruistic prosocial behaviors (five items; Cronbach’s $\alpha = .75$) include helping others when there is no benefit to the self (e.g., “I believe I should receive more rewards for the time and energy I spend on volunteer service”; reverse-scored). All items were rated on a scale ranging from 0 (*Does not describe me at all*) to 4 (*Describes me greatly*). Prior research with the PTM has shown strong psychometric properties, and the present reliabilities were comparable to those in previous studies (Carlo, Knight, McGinley, Zamboanga, & Jarvis, 2010). Each of the measures has been previously validated with Latino populations (Carlo, Mestre, et al., 2011; Lugo Steidel & Contreras, 2003; Rodriguez et al., 2002). All scales were mean-scored for the subsequent analyses.

Results

Preliminary Analyses

Preliminary analyses are presented in order to understand the interrelations among the variables of interest prior to the main analyses. Means, standard deviations, and correlations for demographics and variables are presented in Table 1. The variables were normally distributed. The zero-order correlations indicated that pressure to acculturate was positively correlated with familism values. Pressure to acculturate was also positively correlated with two forms of prosocial behaviors. Familism values were correlated with other constructs in the expected direction. Emotion reappraisal was also positively correlated with emotional, dire, anonymous, and compliant prosocial behaviors. There were also interrelations among the prosocial behaviors, which can be seen in Table 1.

Main Analyses

Path analyses were conducted to assess the conceptual model (see Figure 1) using maximum likelihood estimation in SPSS Amos (Byrne, 2010). Missing data was handled using maximum likelihood estimation. The model included the direct (i.e., unmediated) relations (a) between pressure to acculturate and the six prosocial tendencies and (b) between pressure to acculturate and both familism values and emotion reappraisal. Direct paths between familism and the six prosocial tendencies, as well as between emotion reappraisal and the six prosocial tendencies, were included. The error variances of the prosocial tendencies were allowed to correlate with one another. Model fit is considered good in structural equation modeling if the comparative fit index (CFI) is .95 or greater (fit is adequate at .90 or greater) and the root-mean-square error of approximation (RMSEA) is less than or equal to .06 (fit is adequate at .08 or less; Byrne, 2010; Hu & Bentler, 1999). We also statistically controlled for school site, which was allowed to correlate with pressure to acculturate (not depicted in

Figure 1). Fit for the overall model (see Figure 1) was good, $\chi^2(7) = 38.36$, $p < .001$, CFI = .98, RMSEA = .05.

The results demonstrated that pressure to acculturate was positively associated with familism values. Pressure to acculturate was also directly and negatively associated with altruistic prosocial tendencies. However, pressure to acculturate was not significantly associated with emotion reappraisal. Familism values were positively associated with public, dire, compliant, anonymous, and emotional prosocial behaviors. Emotion reappraisal was positively associated with compliant and anonymous prosocial behaviors.

Familism and Emotion Reappraisal as Mediators

Bias-corrected bootstrap 95% confidence intervals were used to test the significance of the mediational effects (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). However, there were no significant indirect effects. To examine the adequacy of a reverse-order model, we conducted an additional path analysis. In this analysis, prosocial tendencies were the exogenous variables, and all other variables were endogenous. Results of this analysis showed that the model fit was adequate, $\chi^2(18) = 82.59$, $p < .001$, CFI = .95, RMSEA = .05. However, the fit is not as good as in the originally proposed model.

Familism and Emotion Reappraisal as Moderators

Next, we conducted additional analyses to examine whether familism values moderated the associations between acculturative stress and prosocial behaviors. This model also fit the data well, $\chi^2(7) = 41.55$, $p < .001$, CFI = .99, RMSEA = .06. The results demonstrated that the interaction between pressure to acculturate and familism values significantly predicted only one form of helping: emotional ($b = -.52$), $t(3) = -3.12$, $p = .03$. The interaction between pressure to acculturate and familism values also predicted a significant amount of variance in emotional prosocial behaviors ($R^2 = .07$), $F(3, 502) = 14.16$, $p = .002$. This interaction suggests that acculturative stress was positively associated with emotional prosocial behaviors for young adults who were low in familism values. For young adults who were high in familism values, pressure to acculturate was negatively associated with emotional prosocial behaviors.

We then conducted analyses to examine whether emotion reappraisals moderated the associations between acculturative stress and prosocial behaviors. This model also fit the data well, $\chi^2(9) = 51.15$, $p < .001$, CFI = .98, RMSEA = .06. The results demonstrated that the interaction between acculturative stress and emotion reappraisal significantly predicted anonymous ($b = -.40$), $t(3) = -2.43$, $p = .05$; emotional ($b = -.47$), $t(3) = -2.97$, $p = .02$; and compliant ($b = -.45$), $t(3) = -2.97$, $p = .03$, helping behaviors. For individuals with high levels of emotion reappraisal, acculturative stress was positively associated with anonymous prosocial behaviors ($R^2 = .05$), $F(3, 414) = 8.05$, $p < .001$, but fewer emotional prosocial behaviors ($R^2 = .03$), $F(3, 420) = 5.75$, $p = .001$. This association was not significant for individuals with low emotion reappraisals. Acculturative stress was positively associated with compliant prosocial behaviors for both groups (i.e., high and low levels of emotion reappraisals); however, this association was stronger for individuals with low levels of emotion reappraisals ($R^2 = .07$), $F(3, 502) = 14.16$, $p = .002$.

Gender and Nativity as Moderators

Multigroup analyses were then conducted to examine gender differences and differences based on young adults' nativity in the mediation path model. Chi-square difference tests were conducted to examine significant change in the chi-square statistic for the constrained model compared to the unconstrained model. Model fit was also examined for the constrained and unconstrained models. For the gender test, the unconstrained model, $\chi^2(3) = 15.09, p = .002, CFI = .98, RMSEA = .05$, and the constrained model, $\chi^2(23) = 42.71, p = .008, CFI = .97, RMSEA = .03$, were not significantly different, $\chi^2(20) = 27.62, p = .12$. Therefore, the results are reported for the whole sample. For the nativity test, the unconstrained model, $\chi^2(14) = 50.44, p < .001, CFI = .97, RMSEA = .04$, and the constrained model, $\chi^2(34) = 69.02, p < .001, CFI = .97, RMSEA = .03$, were not significantly different, $\chi^2(20) = 18.58, p = .55$. Therefore, the results did not differ depending on the nativity of the adolescents.

Discussion

The current study aimed to examine the associations among pressure to acculturate, familism, emotion reappraisal, and six forms of prosocial behaviors in Latino/a young adults. The findings suggest that among Latino/as in young adulthood, higher levels of acculturative stress (i.e., pressure to acculturate) are (a) both positively and negatively linked to specific forms of prosocial behaviors and (b) directly, negatively linked to selfless helping behaviors. Moreover, the results demonstrate the importance of considering the associations between acculturative stress, familism values, and prosocial behaviors. To our knowledge, this is the first study to demonstrate that acculturative stress is linked to Latino/a young adults' familism values, which are then associated with multiple forms of prosocial behaviors.

Prior research has shown mixed relations between acculturative stress and prosocial behaviors, and the present findings demonstrated further nuanced relations between acculturative stress and some forms of young adults' prosocial behaviors. Consistent with prior research (Brittian et al., 2013; McGinley et al., 2010), acculturative stress was directly and negatively associated with altruistic prosocial behaviors. These findings add to the growing evidence that acculturative stress may compromise selfless and costly forms of prosocial actions. The relations between acculturative stress and the other forms of prosocial behaviors (except for relations with public prosocial behaviors) were also generally in accord with those in Brittian et al.'s (2013) study, which suggests that acculturative stress is also associated with several other prosocial behaviors. However, whereas McGinley et al. (2010) found that the relations between acculturative stress differed across men and women, we did not find such differences. One possible explanation for the discrepant findings with the McGinley et al. study is the use of different measures of acculturative stress than were used in the present study, which could reflect that these commonly used acculturative stress measures assess distinct aspects of such stress. Future research is needed to directly examine the links between specific forms of acculturative stress and prosocial behaviors. Nonetheless, taken together, the present findings provide additional evidence that acculturative stress is significantly linked to specific forms of prosocial behaviors.

Contrary to previous research (Buchanan & Smokowski, 2009; Gil et al., 2000), the present findings showed that acculturative stress is positively associated with Latino/a young adults' endorsement of familism values. These different findings may be due to differences in the age of the samples. The prior studies were conducted with younger adolescents, in contrast to the sample of young adults in the present study. Other research has demonstrated that Latino/a college students experience significantly higher levels of stress than do European American college students (Quintana, Vogel, & Ybarra, 1991), so Latino/a college students who are experiencing pressure to acculturate to mainstream U.S. culture might rely heavily on their family as a source of comfort and support and recognize the importance of their family when navigating the financial and academic pressures of college. Although research has documented links between stressors and negative health outcomes, such as depressive symptoms (Crockett et al., 2007), stressors may simultaneously contribute to increased familism values because of young adults' reliance on family and use of family as a support system. Longitudinal research is needed to better understand the specific age-related mechanisms across adolescence and young adulthood that may account for the differential associations between acculturative stress and familism values.

Familism values were positively associated with emotional, dire, compliant, anonymous, and public forms of prosocial behaviors in Latino/a young adults. These findings partially replicate a prior study with younger Latino/a youth that found that familism values were associated with emotional, dire, anonymous, and compliant prosocial behaviors but were not associated with public or altruistic prosocial behaviors (Armenta et al., 2011; also see Calderón-Tena et al., 2011). Overall, these results support the conceptual argument that familism may promote a general concern for others, expressed in multiple forms of prosocial tendencies (e.g., dire, compliant, emotional) that are conceptually linked to Latino culture (see Knight & Carlo, 2012, for a review) and extend these findings to Latino/a young adults. However, unlike in other work with younger youth (Armenta et al., 2011), we found a positive relation between familism values and public prosocial behaviors. Similar to the discrepant findings regarding the relations between acculturative stress and familism, this latter discrepant finding may also be due to age-related differences between young adolescents and young adults in college and merits further investigation.

The present study demonstrated that familism values also play a moderating role in the associations between acculturative stress and emotional prosocial behaviors. The findings, contrary to our expectations, demonstrated that for young adults who are low in familism values, pressure to acculturate was positively associated with emotional prosocial behaviors. In contrast, for young adults who were high in familism values, pressure to acculturate was negatively associated with emotional prosocial behaviors. Although previous research has demonstrated that familism values can serve as a protective factor in the associations between acculturative stress and developmental outcomes (Umaña-Taylor et al., 2011), it may be that pressure to acculturate is in fact a specific stressor in which familism values may be a risk factor for young adults' tendencies to engage in emotional helping behaviors. Because pressure to acculturate often includes pressure from peers, it may be that young adults who are not as strongly interconnected with their family may be better able to attend to the needs of others. Young adults who are highly connected to their family and feel obligated toward their family, however, may become more easily overwhelmed by pressure

to acculturate and may have fewer emotional and cognitive resources available to attend to the needs of others.

It is interesting that emotion reappraisal was positively associated with anonymous and compliant prosocial behaviors (though acculturative stress was not significantly associated with emotion reappraisal). The former findings are consistent with prior theory and research that asserts that emotion regulation processes are important predictors of prosocial behaviors (Eisenberg et al., 1996; Lopes et al., 2005). The present findings extend existing literature by demonstrating that emotion reappraisal is associated with specific forms of prosocial behaviors in Latino/a college students. Emotion reappraisal may be associated with compliant prosocial behaviors specifically because one must be able to modulate one's own emotions and suppress one's own desires in order to engage in helping behaviors when asked (similar to inhibitory control). On the other hand, the relations between emotion reappraisal and anonymous prosocial behaviors may be because these actions may require somewhat higher level sociocognitive skills (e.g., planfulness, abstraction, forethought, hypothetical thinking) to ensure helping without recognition (see Carlo et al., 2003). Although the nonsignificant relation between pressure to acculturate and emotion reappraisal is somewhat puzzling, it is possible that emotion reappraisals are more relevant to specific-event stressors rather than general stress. Alternatively, pressure to acculturate may not be modified via emotion reappraisals because such pressures are often uncontrollable and do not easily lend themselves to cognitive reframing.

Emotion reappraisals also moderated the associations between acculturative stress and specific forms of prosocial behaviors in a complex manner. Reappraisals seem to buffer young adults from the negative impact of acculturative stress, but only for specific helping behaviors. Specifically, emotion reappraisals seem to facilitate anonymous prosocial behaviors for young adults experiencing acculturative stress. However, for other forms of helping, such as emotional helping, emotion reappraisals may actually serve as a risk factor for helping. It may be that individuals who are low in reappraisals are experiencing high levels of stress and may engage in emotional forms of helping as a means of promoting positive affect (Guéguen & De Gail, 2003). For individuals with high emotion reappraisal, this form of regulation may not be as necessary in order to maintain a positive mood. Although these results provide initial support for the role of emotion reappraisals in moderating the associations between acculturative stress and specific forms of prosocial behaviors, it is important to consider additional indices of emotion regulation to better understand the complicated relations between stress, regulation, and prosocial behaviors. These results further demonstrate the importance of considering how sociocognitive variables are differentially associated with specific forms of prosocial behaviors.

Limitations

There are several limitations that should be considered. First, the study design is cross-sectional (not longitudinal or experimental), so neither causation nor the direction of effects can be firmly established. However, a test of a reverse-order model demonstrated that this alternative model did not fit the data as well as the originally proposed model. It could be, however, that familism values predict subsequent perceptions of acculturative stress. Second,

all measures were self-report measures, so there could be shared method variance and self-presentational biases. Multiple reporters, behavioral tasks, and observations are important tools that should be used in future research on this topic. And third, although the sample was Latino/a college students from across the United States, the sample may still not adequately represent the diversity of U.S. Latino/a young adults (especially with regard to socioeconomic status, education, Latino/a subgroups, and acculturative status). Future research should also examine the source of the acculturative stress. If the family is the source of the pressure to acculturate, there might be differential associations with familism values. In addition, although acculturative stress was positively associated with familism values, future research should specifically examine family support in addition to global familism values.

Conclusions

Despite these limitations, the present study demonstrates the importance of considering Latino/a young adults' culture-related and emotion-regulation characteristics in predicting their prosocial behaviors. Furthermore, the study yielded evidence in young adulthood for significant links between acculturative stress and prosocial behaviors. Although there was no support for significant mediation effects, the current findings suggest that familism values and emotion reappraisals might serve important moderating roles in these associations. Specifically, these findings demonstrate that young adults' familism values might actually be negatively associated with helping others in emotional situations when experiencing acculturative stress. Emotion reappraisal, on the other hand, seems to buffer young adults from acculturative stress, at least for specific forms of helping behaviors. These novel findings suggest that familism values and emotion reappraisals play an important role in enhancing prosocial outcomes despite perceived exposure to acculturative stress. The fact that the relations were specific to certain forms of prosocial behaviors shows additional evidence of the multidimensionality of prosocial behaviors and suggests that stress and social cognitions have differential links to such actions. The findings suggest a need to develop strategies for supporting Latino youth who may be experiencing acculturative stress, and fostering emotion-regulation strategies may be one important consideration. Because the Latino/a population is the fastest growing ethnic minority population in the United States, and there is a growing population of Latino/as enrolled in U.S. colleges and universities, it is important to consider how cultural stress is associated with positive adjustment.

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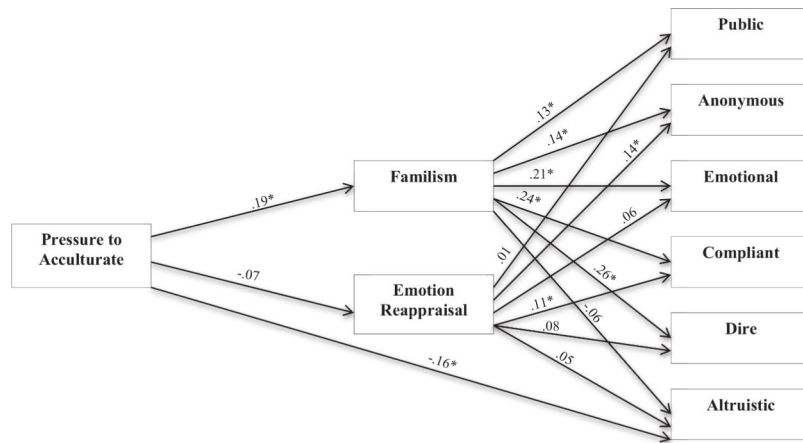


Figure 1. Significant standardized path estimates for the associations among pressure to acculturate, familism, emotion reappraisal, and prosocial behaviors. All significant paths are reported. The nonsignificant paths from acculturative stress to prosocial behaviors are not represented in the figure. * $p < .05$.

Table 1
 Descriptives and Correlation Matrix for Acculturative Stress, Familism, Emotion Reappraisal, and Prosocial Behaviors for Latino/a Young Adults

Variable	1	2	3	4	5	6	7	8	9
1. Acculturative stress	—								
2. Familism	.18**	—							
3. Emotion reappraisal	-.06	.21**	—						
4. Public	.12*	.14*	.01	—					
5. Emotional	.04	.24**	.12*	.27**	—				
6. Dire	.01	.29**	.15*	.21**	.62**	—			
7. Altruistic	-.20**	-.07	.07	-.64**	-.12*	-.02	—		
8. Compliant	-.02	.27**	.17**	.11**	.48**	.56**	.09*	—	
9. Anonymous	.08	.20**	.19**	.26**	.52**	.51**	-.12*	.46**	—
<i>M</i>	.32	3.68	5.02	2.34	3.53	3.68	4.03	3.89	2.92
<i>SD</i>	.13	.58	1.24	.98	1.00	.98	.83	1.08	1.09

* $p < .05$.

** $p < .001$.