

Perceived social support networks and prosocial outcomes among Latino/a youth in the United States

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Abstract

This study examines Latino/a adolescents' perceived sources and types of social support, and links between social support and prosocial tendencies. Latino/a adolescents (N=126) in Midwestern United States participated in the study. Respondents of higher generational status reported broader social support networks and a higher amount of overall social support compared to peers of lower generational status. Youth perceived the highest amount of social support from immediate family, followed by extended family, and lastly from non-kin individuals. Path analysis indicated that overall social support was directly and positively associated with altruistic prosocial tendencies, and directly and negatively associated with public prosocial tendencies. Social support was indirectly related to altruistic, public, direct and emotional prosocial tendencies variably mediated by empathy, perspective taking and self-efficacy.

Keywords: social support, prosocial behavior, Latinos/as

La percepción de las redes de apoyo social y resultados prosociales entre Latino / a jóvenes en los Estados Unidos de América

Resumen

Este estudio examinó las fuentes y tipos de apoyo social entre adolescentes Latinos/Latinas en los Estados Unidos, y la relación entre apoyo social y tendencias prosociales. Los adolescentes Latinos (N=126) participaron en el estudio. Los encuestados de un estado generacional más alto reportaron redes de apoyo social que eran más extensas y más apoyo social en general que sus compañeros de un estado generacional más bajo. Adolescentes percibieron lo más apoyo social de la familia inmediata, seguido por la familia extendida, y por último de las personas que no eran de la familia. Un análisis de ruta demostró que apoyo social en general se asoció directamente y positivamente con las tendencias altruistas de conductas prosociales, y se asoció directamente y negativamente con tendencias prosociales en pública. Apoyo social se asoció indirectamente con tendencias prosociales de altruismo, pública, tendencias horribles, y emoción y son mediados por empatía, toma de perspectiva, y auto-eficacia.

Palabras clave: apoyo social, conducta prosocial, los Latinos/as

In recent years, there has been a dramatic shift in the demography of the United States, particularly with regards to the Latino/a population. Latinos/as now represent the largest ethnic minority group in the country at 16.7% (50.5 million) of the population. With more than a 40% increase in the last decade, Latinos/as accounted for more than half of US population growth in that period (US Census Bureau, 2011). These changes have particular implications for service-providers and educators working with youth as approximately one

third of Latinos/as in the United States is below the age of 18; and by 2050, it is projected that 1 of every 3 teens and children will be Latino/a (US Census Bureau, 2005). In response to these trends, scholars have increasingly recognized the need for information on the experiences and developmental pathways of Latino/a youth, particularly on the processes underlying positive outcomes. Nonetheless much of current research still focuses on problem-behaviors (Carlo & de Guzman, 2009; McCloy, 1998; Montero-Sieburth & Villaruel, 2000). For educators, policy-makers, and service providers to better respond to the increasingly heterogeneous youth populations in their communities, it is imperative that we advance current understanding on the experiences of diverse youth, and examine

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the processes and pathways that lead to successful outcomes.

The goal of the present study is two-fold. First, the study examines the structure of the social support systems of Latino/a adolescents from their own perspective. Social support is an integral component of youth well being and this study aims to shed light on the degree to which Latino/a youth perceive social support from various members of their social networks, and the types of support they receive. Second, the study aims to examine the links between social support and prosocial tendencies. Prosocial behaviors are acts primarily intended to benefit others and include volunteering, civic engagement, and other helping behaviors (Eisenberg, 1986). These behaviors and their correlates have been linked to various measures of well being, including physical, mental, and behavioral health (Piliavin, 2001; Stott & Jackson, 2005; for review, Eisenberg, Fabes, & Spinrad, 2006); as well as lower aggressive tendencies, more positive associations with peers and parents, self-esteem, subjective well-being and fewer risky behaviors (Laible, Carlo, & Roesch, 2004; McGinley & Carlo, 2007). Thus, prosocial behaviors in various forms are linked to numerous measures of health and well being in youth, however, few studies have specifically examined these issues among Latino/a youth.

This study examines both the direct links of social support to prosocial tendencies, as well as indirect links through sociocognitive competencies.

Social Support

Researchers have identified several factors that differentiate the path between resilience and risk for youth (for review, Compas, 2004), among which, social support is emerging as particularly integral. Social support is a valuable resource that adolescents draw from – buffering the effects of stress and promoting successful outcomes (Seidman, Lambert, Allen, & Aber, 2003; Way & Robinson, 2003). These supportive relationships have been linked to numerous well-being indicators including academic success and achievement (Levitt, Guacci-Franco, & Levitt, 1994), physical health (Hamburg, Nightingale, & Mortimer 1991; Uchino, Cacioppo, & Kiecolt-Glaser, 1996), psychosocial adjustment (Kovacev & Shute, 2004) and various social and cognitive competencies (Rohrle & Sommer, 1994), and has emerged as a protective factor against both normative and non-normative life stressors (Dubow, Tisak, Causey, Hryshko, & Reid, 1991; Lagana, 2004).

Despite the preponderance of evidence regarding the importance of social support, several deficits exist in the current body of work. First, social support research has focused primarily on adult populations,

and much less is known about the social support networks of youth (Levitt et al., 1994). Second, the limited work that does look at youth has mostly neglected to examine how or why social support leads to particular outcomes. In other words, it is clear that social support is important, but why or how it contributes to positive development is less understood. Finally, little work has been done to examine the socialization experiences and the social support systems of minority youth, reflecting the scarcity of information on the experiences and development of ethnic minority youth in general (Carlo & de Guzman, 2009). The current study was designed to help fill these gaps by examining the types and sources of social support Latino/a youth perceive, as well as the degree to which social support directly predicts different types of prosocial outcomes, and indirectly as mediated by links between social support and socio-cognitive competencies.

Social Support in Context

The ecological view of development emphasizes the evolving interaction between individuals and the immediate and broader contexts that they occupy throughout the lifespan (Bronfenbrenner 1977; Bronfenbrenner & Morris, 1998). Social support networks are necessarily embedded in those environments; and the meanings, function, and nature of relationships are intertwined with both the terrain of the immediate environment and the more distal cultural meaning systems of the societies to which one might belong (Tietjen, 1989, 1994).

There is a growing body of work that supports the idea that cultural and ecological factors impact the configuration and functions of social networks. For instance, ethnic group differences can be found in the amounts of time children spend with specific members of their social networks (Larson & Verma, 1999). Youth also vary in the degree to which they seek various types of social support from different social relationships, often in ways reflecting predominant cultural values and other aspects of their social ecology. For instance, immigrant youth have been found to differentiate between family and teachers when seeking academic (e.g., teachers) versus emotional support (e.g., family), while their non-immigrant peers seek both types of support from family members (e.g., Vedder, Boekaerts, & Seegers, 2005). Latino/a immigrant youth in the United States have been found to show different support-seeking patterns from their native-born peers -- tending to seek support from family members when faced with family-related issues, while native-born peers tend to go to non-family relations (e.g., Morrison, Laughlin, Miguel, Smith, & Widaman, 1997).

Given the unique experiences that immigrant and ethnic minority populations face (Harrison, Wilson,

Pine, Chan, & Buriel, 1990), as well as specific social and cultural values espoused (e.g., Carter, Yeh, & Mazzula, 2008), unique patterns might emerge in the social support networks of Latino/a adolescents. For instance, scholars highlight the higher degree to which Latinos/as emphasize family relations compared to the majority youth, a value also known as familismo (Knight, Bernal, & Carlo, 1995; Suárez-Orozco, Todorova, & Louie, 2002). This includes relying on family members in ways unique from mainstream American culture, such as flexible assignment of roles and reliance on extended family for support even during adolescence (Garcia Coll, Meyer, & Brillion, 2002; Julian, McKenry, & McKelvey 1994; Padilla, 2002). Note that this might run in contrast to research that suggests, for instance, an increase in the intensity (Laursen, Coy, & Collins, 1998) and frequency (Shanahan, McHale, Osgood, & Crouter, 2007) of parent-child conflicts, as well as a renegotiation of relationships and an increasing salience of peer relations during the period of adolescence among majority youth in the United States (Hill, Bromell, Tyson & Flint, 2007). Such unique characteristics of Latino/a youth's social ecology and cultural background might in fact be reflected in the configurations of their social support systems and the types or amounts of support they seek and/or receive from various sources.

Social Support and Positive Youth Outcomes: Links to Prosocial Behaviors

Research suggests that positive and supportive social relationships are linked to increased levels of prosocial behaviors among youth. For instance, having close and warm family relationships (de Guzman & Carlo, 2004; Eberly & Montemayor, 1998) and being positively viewed by peers (Greener, 2000; Pakaslahti, Karjalainen, & Keltikangas-Jarvinen, 2002) are linked to increased levels of prosocial behaviors. In contrast, a lack of supportive relationships and the experience of social exclusion have been linked to a decrease in prosocial responding (Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007).

There are at least two possible reasons for the link between social support and prosocial outcomes. First, positive social relationships can serve as a context in which prosocial behaviors are more likely. Positive relationships represent a venue through which reciprocal positive social behaviors are expressed, which often may include prosocial behaviors (Eberly & Montemayor, 1998). Second, social support can foster socio-emotional and cognitive competencies that underlie prosocial tendencies. For instance, empathy (Eisenberg, 2004; McMahan, Wernsman, & Parnes, 2006), perspective-taking (Carlo, Hausmann, Christiansen, &

Randall, 2003), and self-efficacy (Bandura, Caprara, Barbaranelli, Gerbino, & Pastorelli, 2003; Caprara & Steca, 2007) are all competencies that have been linked to prosocial responding. Because these competencies are associated with various aspects of positive social relationships such as parental attachment (e.g., de Guzman & Carlo, 2004), it is possible that links between social support and prosocial outcomes can be explicated by the mediating role of socio-cognitive competencies. In other words, positive social relationships might promote prosocial behaviors because individuals are more likely to be prosocial to those with whom they have good relations, but also because supportive relationships foster the development of socio-cognitive skills (e.g., empathy, perspective taking, self-efficacy), which in turn might promote prosocial outcomes.

The Present Study: Social Support and Prosocial Outcomes of Latino/a Youth

Carlo and colleagues (Carlo & Randall, 2002; Carlo et al., 2003) have identified six types of prosocial behaviors that differ in their underlying motivations or the contexts in which they are performed. They argue that there is divergence in what best predicts each behavior and they argue for the importance of differentiating specific predictors for each outcome. For instance, prosocial behaviors that are displayed in emotionally evocative situations might best be predicted by emotional competencies like empathy. In contrast, prosocial responding in emergency situations might necessitate competencies of a more cognitive nature because of the need to assess the situation, as well as the ability to act quickly. This study investigates the direct links between social support and those different types of prosocial outcomes, as well as the roles of empathy, perspective taking and self-efficacy in mediating those links. Examining these issues is expected to further current understanding of the social support networks of minority youth, and the direct and indirect role it plays in promoting positive outcomes.

Method

Participants and Procedures

Participants of this study were 126 (51 girls, 75 boys) self-identified Latino/a adolescents from two Midwestern communities in the United States (*M age* = 13.12, *SD* = 1.48, range = 11 to 18 years). Participants were recruited through schools and afterschool programs specifically targeting Latino/a youth. Most respondents were born in the U.S. (88%), while the rest were born in Mexico (9.5%) and Colombia (2.5%). Among the 108 youth who were born in the U.S., 34 had both parents who were born in the country, 35 had at least one par-

ent born outside the U.S., and 39 had both parents who were born outside the country. Participants reported having between zero to nine siblings ($M = 2.68$, $SD = 1.63$), and 92% reported that they lived with either or both parents. Others (6.8%) reported living with one or more members of the extended family (i.e., family members other than parents and siblings).

The study was conducted in two small cities of approximately 14,000 and 40,000 residents, with 26% and 14% Latino/a populations, respectively. Both communities have experienced generally declining rates of growth but steadily growing Latino/a populations. Preliminary analyses indicated no significant community differences in the demographics or variables of interest, so data from the sites were combined.

Measures

Participants completed paper and pencil measures through small group administration (i.e., groups of 5 to 8). The survey generally took 15 to 25 minutes to complete and was available in Spanish and English. Participants were compensated with \$5 for completing the survey. The measures included were as follows:

The Social Convoy Measure (Kahn & Antonucci, 1980). Originally developed for adults (Antonucci, 1986) and later adapted for use with children and adolescents (Levitt, Guacci-Franco, & Levitt, 1993), this measure is a mapping procedure designed to identify an individual's sources of social support and the types of support available. This measure has been used with diverse youth populations in the United States including European American, African American, and Latino/a children and youth (e.g., Levitt et al., 1993; Levitt et al., 2005) and recent South American and Caribbean immigrants (Levitt, 2003). The mapping diagram is composed of three concentric circles within which the respondent identifies and writes in the people who are "closest and most important" to them and who they "really love" the most (inner circle), those who are "not quite as close but who are still important" (middle circle), and finally, those people who the respondent might still "really love or like, but not quite as much" as the others (outer circle). After a diagram of the respondent's network has been created, a series of questions is asked in order to record the sources of three types of social support functions, namely, instrumental/direct aid, affective support, and affirmative support.

The measure was adapted for small group administration in this study by providing participants with the mapping diagram and a set of instructions mirroring those in the original. Data derived from this measure include, a) size of support network (i.e., number of people identified); b) total support provided (i.e., total number of people identified in response to the six ques-

tions above); c) total support from each category (e.g., amount of support from parents); and d) total affective, affirmative and instrumental support received. Pilot testing of group administration indicated participants' ease in following the instructions and no difficulties in completing the measure.

The Davis Interpersonal Reactivity Instrument (Davis, 1983). This measure consists of two subscales – Empathic Concern, which measures the ability to perceive and understand the emotions of others; and Perspective Taking, which measures the ability to take the point of view of other people. Each subscale consists of seven items, to which participants respond using a five-point Likert Scale with 1 = Does not describe me; 3 = Sort of describes me; and 5 = Describes me very well. Sufficient reliability indices were obtained for both empathic concern (Cronbach's alpha = .55) and perspective taking (Cronbach's alpha = .65). This scale has been used extensively with a range of populations (e.g., adolescents, adults), including Latino youth in the Midwestern region of the United States. Carlo and colleagues (e.g., Carlo, McGinley, Hayes, & Martinez, 2011) used this scale with Latino/a college students but combined the two subscales into one overall measure of empathy and reported a reliability of Cronbach=.81.

Self-Efficacy Scale (Bosscher & Smit, 1998; Sherer, Maddux et al., 1982). This scale is comprised of 12 items generally measuring the belief in one's own ability to carry out actions and plans in three areas, namely, effort, initiative, and persistence. The scale has been validated in various adult and older adolescent samples within the United States and other countries (e.g., Alinia, Borjali, Jomehri, & Sohrabi, 2008; Bosscher & Smit, 1998). In one study that used this measure with immigrant and ethnic minority adolescents, Seegan and colleagues (Seegan, Welsh, Plunkett, Merten, & Sands, 2012), reliability was reported at Cronbach=.81, but did not break down reliability by ethnic group (e.g., Asians, Latinos). The overall reliability coefficient of this scale in this study was .63.

Prosocial Tendencies Measure (Carlo & Randall, 2002). This scale is a self-report measure intended to assess the individual's tendency to perform six types of prosocial behaviors. These prosocial behaviors are: 1) altruistic, or the tendency to perform acts for the benefit of others; 2) emotional, or the tendency to perform acts when the situation is emotionally evocative; 3) dire, or the tendency to perform prosocial acts in emergency situations; 4) public, or the tendency to perform prosocial acts to be recognized by others; and 5) compliant, or the tendency to perform prosocial acts when requested or demanded; and 6) anonymous, or

the tendency to perform prosocial acts without anyone knowing. The scale utilizes a five-point Likert scale where 1 = Does not describe me at all; 5 = Describes me greatly. Sufficient indices of reliability were obtained for the subscales measuring altruistic (Cronbach's alpha = .73), public (Cronbach's alpha = .70), anonymous (Cronbach's alpha = .73), dire (Cronbach's alpha = .70), and emotional (Cronbach's alpha = .75) prosocial tendencies, but not for compliant prosocial behaviors, which was excluded from analyses. This measure has been previously validated with a wide range of samples, including Latino/a adolescents and youth in the United States (e.g., Calderón-Tena, Knight, & Carlo, 2011; McGinley, Crockett, Raffaelli, Torres-Stone, & Iturbide, 2009). Calderón-Tena and colleagues (2011) reported Cronbach alpha reliabilities ranging from .51 to .76 in their study with Mexican Americans of similar age in a more urban area of southwestern United States; while McGinley and colleagues (2009) reported a higher range of reliability, from .71 to .86 for the subscales, in their study with Mexican American college students in the Midwestern United States.

Results

Structure of Participants' Social Convoys

A within-groups ANOVA was conducted looking at gender (2 levels) x age (2 levels: 11- to 13-year old or young adolescents; and 14- to 16-year olds or older adolescents) x generational status (2 levels: first/second generation and 3rd and higher generational status)

x social convoy placement (3 levels: inner, middle, outer) x relationship (3 levels: immediate, extended family, non-family) differences in convoy size. As no gender or age main or interaction effects were found, these were excluded from further analyses. Results revealed main effects for placement, $F(2, 232) = 65.65$, $MSe = 1.64$, $p < .01$, and generational status, $F(1, 116) = 9.32$, $MSe = 3.87$, $p < .01$. Mean comparisons (Fischer's LSD, $p < .05$) revealed that higher generational status participants named more people than those of lower generational status.

Additionally, there was also a placement x relationship interaction, $F(4, 464) = 27.19$, $MSe = 80.76$, $p < .01$. Follow-up analyses were conducted separately by placement. There were simple effects for each of the levels of the convoy structure. For the inner circle, $F(2, 240) = 28.13$, $MSe = 3.74$, $p < .01$, mean comparisons (Fischer's LSD, $p < .05$) revealed that immediate family members were named significantly more often than extended and non-family members, and that extended family were named more significantly more often than non-family members. For the middle circle, $F(2, 248) = 9.29$, $MSe = 3.32$, $p < .01$, extended and non-family members were named more often than immediate family members. Finally, for the outer circle, $F(2, 246) = 19.28$, $MSe = 1.68$, $p < .01$, non-family were named significantly more than all others, and extended family were named more than immediate family members. Descriptive statistics and mean comparisons are summarized in Table 1.

Table 1

Descriptive statistics (means/standard deviations) for structures of social convoys.

	Inner circle (closest)	Middle circle (next closest)	Outer circle (least close)
First generation ($n = 58$)			
Immediate family	2.70(2.05)	.38(.96)	.07(.32)
Extended family	1.07(1.61)	1.21(1.59)	.46(1.14)
Non-family	.55(1.48)	.71(1.51)	.68(1.06)
Second generation ($n = 62$)			
Immediate family	2.73(1.89)	.55(1.83)	.10(.39)
Extended family	1.74(2.15)	1.56(2.35)	.58(1.39)
Non-family	1.15(1.76)	1.24(2.00)	1.52(2.33)
Total combined ($n = 120$)			
Immediate family	2.71(1.96) ^a	.47(1.48) ^b	.08(.36) ^b
Extended family	1.42(1.93) ^b	1.40(2.03) ^a	.53(1.27) ^b
Non-family	.86(1.65) ^b	.99(1.80) ^a	1.12(1.88) ^a

^{a-b} Numbers with the same superscripts are not significantly different based on mean comparisons (LSD, $p < .05$) across immediate, extended and non-family members within each of the levels of the social convoy.

Functions of the Social Networks.

Repeated measures ANOVA was conducted to examine age (2 levels) x gender (2 levels) x generational status (2 levels) x type of support (3 levels: affective, affirmative, instrumental) x relationship (3 levels) difference. Again, no main or interaction effects were found for gender or age, thus, these variables were excluded from further analyses. Results revealed main effects for type of support function $F(2, 242) = 18.78$, $MSe = 4.01$, $p < .01$, and generational status, $F(1, 121) = 10.35$, $MSe = 46.64$, $p < .01$. These main effects were subsumed by a type x relationship interaction, $F(4, 484) = 3.14$, $MSe = 2.33$, $p < .01$, and type x relationship x generational status interaction, $F(4, 484) = 3.76$, $MSe = 2.33$, $p < .05$.

Follow-up analysis of the three-way interaction was conducted separately by relationship type. For immediate family, there was a simple effects of type of support $F(2, 242) = 6.35$, $MSe = 1.71$, $p < .01$, and generational status, $F(1, 121) = 3.84$, $MSe = 14.57$, $p < .01$. Mean comparisons (Fischer's LSD, $p < .05$) revealed that participants of higher generational status reported more social support than those of lower generational status; and that instrumental support was lower than both affective and affirmative support.

For extended family, there was a simple effects of type of support $F(2, 242) = 8.29$, $MSe = 2.88$, $p < .01$, and generational status, $F(1, 121) = 5.73$, $MSe = 25.13$, $p < .05$. Mean comparisons (Fischer's LSD, $p < .05$) revealed that participants of higher generational status reported more social support than those of lower generational status; and that affirmative support was higher than both affective and instrumental support.

Finally, for non-family members, there were simple effects of type of support $F(2, 242) = 13.54$, $MSe = 4.08$, $p < .01$, and generational status, $F(1, 121) = 9.98$, $MSe = 34.57$, $p < .01$. These effects were subsumed by a generational status x type of support interaction, $F(2, 242) = 3.80$, $MSe = 4.08$, $p < .05$. Follow-up analyses of this interaction, conducted separately by type of support, showed significant mean differences for affective support, $F(1, 121) = 7.42$, $MSe = 17.13$, $p < .01$, instrumental support, $F(1, 121) = 5.52$, $MSe = 7.74$, $p < .05$, and affirmative support, $F(1, 121) = 11.54$, $MSe = 17.86$, $p < .01$. For each of these types of support, higher generational status participants reported higher support than lower generational status. Descriptive statistics and mean comparisons are summarized in Table 2.

Table 2
Descriptive statistics (means/standard deviations) for functions of social convoys.

	Affective Support	Instrumental Support	Affirmative Support
First generation ($n = 58$)			
Immediate family	1.71(2.20)	1.03(1.56)	1.83(2.64)
Extended family	1.45(2.67)	0.98(1.91)	1.71(3.08)
Non-family	1.52(2.80) ^d	1.03(1.99) ^d	1.64(2.42) ^d
Second generation ($n = 62$)			
Immediate family	2.40(2.75)	2.11(2.41)	2.40(2.81)
Extended family	2.28(3.40)	2.32(3.12)	3.29(4.36)
Non-family	3.55(5.04) ^c	2.22(3.33) ^c	4.23(5.34) ^c
Total combined ($n = 120$)			
Immediate family	2.07(2.52) ^a	1.60(2.11) ^b	2.13(2.74) ^a
Extended family	1.89(3.09) ^b	1.69(2.70) ^b	2.54(3.88) ^a
Non-family	2.59(4.25)	1.66(2.83)	3.01(4.40)

^{a-b} Numbers with the same superscript indicate no significant mean differences (LSD, $p < .05$) across types of social support functions within family relationship.

^{c-d} Numbers with the same superscripts indicated no significant mean differences (LSD, $p < .05$) between higher and lower generational status within types of social support functions for non-family members.

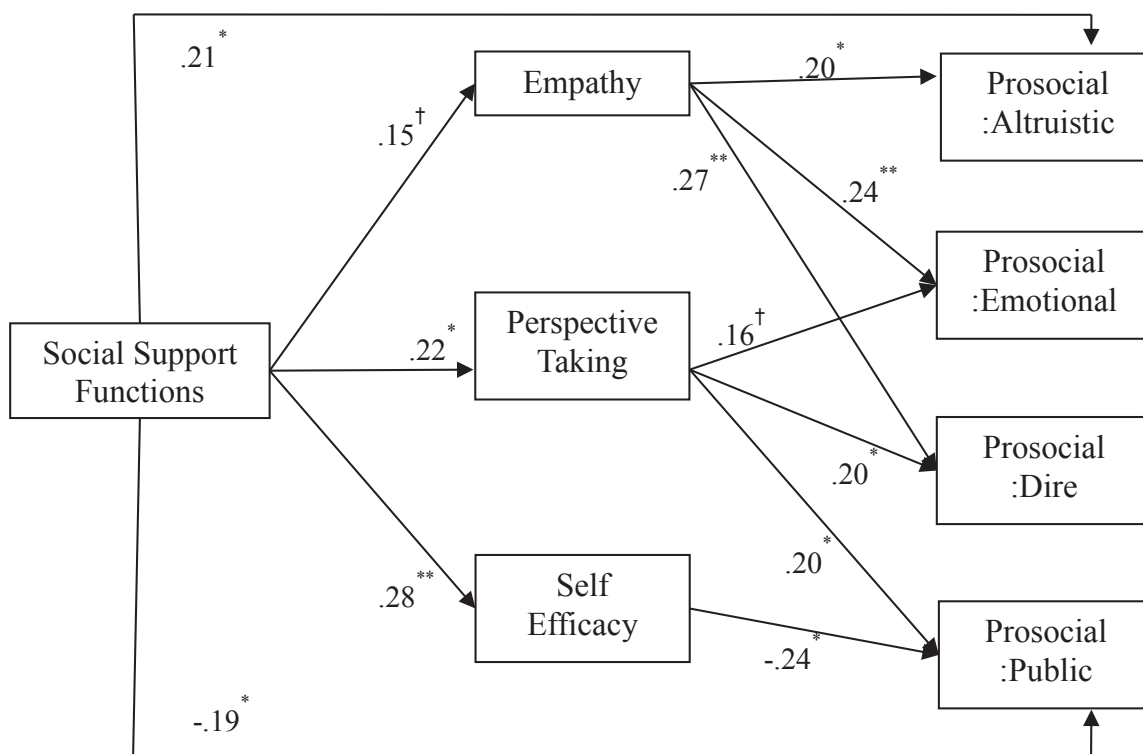
Relations between Social Support Functions and Prosocial Tendencies

In order to examine direct and indirect relations between social support functions and prosocial behaviors, bivariate correlations were conducted among social support functions, empathy, perspective taking, self-efficacy, and five types of prosocial tendencies. Altruistic prosocial behavior was significantly related to social support ($r = .26$), empathy ($r = .25$), and self-efficacy ($r = .23$). Emotional prosocial behavior was significantly related to empathy ($r = .30$), perspective taking ($r = .25$), and self-efficacy ($r = .22$). Also, there were significant relations between prosocial-dire and empathy ($r = .33$), and perspective taking ($r = .29$) and self-efficacy ($r = .23$). Negative relations were found between public prosocial behavior and social support ($r = -.22$) and self-efficacy ($r = -.22$). Anonymous prosocial behavior was not significantly related to any of the variables.

Path analysis. Path analyses using structural equation modeling was conducted to test the direct and indirect effects of social support functions and prosocial tendencies through empathy, perspective taking, and

self-efficacy. Mplus version 5.0 was used to estimate a full saturated model assessing all possible direct and indirect pathways. The resulting standardized path loading (β) for significant pathways are represented in Figure 1. Paths from social support to prosocial-altruistic ($\beta = .21, z = 2.36, p < .05$) and prosocial-public ($\beta = -.21, z = -2.13, p < .05$) were significant. Paths from social support to empathy ($\beta = .15, z = 1.73, p < .10$), to perspective taking ($\beta = .22, z = 2.50, p < .05$) and to self-efficacy ($\beta = .28, z = 3.34, p < .001$) were significant. Paths from empathy to prosocial-altruistic ($\beta = .20, z = 2.28, p < .05$) to prosocial-emotional ($\beta = .24, z = 2.72, p < .001$), and to prosocial-dire ($\beta = .27, z = 3.20, p < .001$) were significant. Paths from perspective taking to prosocial-emotional ($\beta = .16, z = 1.17, p < .10$), prosocial-dire ($\beta = .20, z = 2.11, p < .05$), and prosocial-public, ($\beta = .20, z = 2.12, p < .05$), were significant. Paths from self efficacy to prosocial-public ($\beta = -.24, z = -2.54, p < .05$) was significant. Paths to prosocial anonymous from empathy ($\beta = .05, z = .48, p > .10$), perspective taking ($\beta = .11, z = 1.12, p > .10$), and self efficacy ($\beta = .06, z = .57, p > .10$) were not significant.

Figure 1.
Path diagram predicting four types of prosocial behaviors from social support



Note: Non-significant pathways ($p > .10$) are not displayed.
 $^\dagger p < .10$; $* p < .05$; $** p < .01$.

Statistical significance of direct and indirect effects on paths was estimated. Social support had significant direct effects only on prosocial-altruistic ($\beta = .21, z = 2.39, p < .05$) and prosocial-public behaviors ($\beta = -.19, z = -2.13, p < .05$) which was also its total effects (prosocial-altruistic: $\beta = .27, z = 3.18, p < .001$, prosocial-public: $\beta = -.22, z = -2.57, p < .01$, respectively), while indirect effects through empathy, perspective taking and self-efficacy were not significant. There were significant indirect effects from social support functions to prosocial-emotional ($\beta = .10, z = 2.39, p < .01$) and prosocial-dire ($\beta = .11, z = 2.45, p < .01$) through empathy and perspective taking. The standardized direct and total effects from the social functions to prosocial-emotional and prosocial-dire were not statistically significant. Direct, indirect, and total effects from support functions to prosocial-anonymous were not significant. According to Kline (2005) and Shrout and Bolger (2002), an indirect effect that is significant with a non-significant direct effect makes a strong argument for having a mediator effect. In Figure 1 the indirect effect from social support function to prosocial-emotional and prosocial-dire was significant but the direct effect was not significant. This would imply that empathy and perspective taking mediate the indirect effect from social support function to prosocial-emotional and prosocial-dire.

Discussion

The present study was designed to explore the structure of the social support systems of Latino/a adolescents and the degree to which social support is directly and indirectly related to different types of prosocial behaviors through various socio-cognitive competencies. A number of interesting findings emerged from the analyses.

Social Support Networks: Sources and Types of Support

First, participants generally named immediate family as the primary source of social support and as comprising the broadest part of their closest social support networks. Following the immediate family was the extended family, and lastly were the non-kin relations. No differences emerged in this pattern between younger and older adolescents. These results reflect earlier researchers' assertions regarding the importance of family relations in the lives of Latino/a youth and families, including the value of *familismo* in Latino/a culture (e.g., Garcia Coll et al., 2002), as well as the need among families to maintain close relations due sometimes to added stresses of the immigrant or ethnic minority experience (Harrison et al., 1990). Results

here suggest that even during adolescence - a period when social networks expand and non-kin relations gain salience (Hill et al., 2007), Latino/a youth in this sample reported high significance of families as sources of support in their lives.

Another interesting finding is that youth of higher generational status reported broader social support networks, and perceived a higher amount of social support than peers of lower generational status. Given the paucity of previous research in this area, it is difficult to ascertain an explanation for this link. Nonetheless, this finding is somewhat consistent with related literature that suggests that youth who are more acculturated feel more integrated into the community and more socially connected (e.g., Yoon, Lee, & Goh, 2008), and thus might perceive a higher degree of social support. Alternatively, it is possible that youth of higher generational status simply have more family members who have been in their communities longer and thus broader networks from which to draw support. Further research is needed to explicate this pattern.

Links to Prosocial Outcomes

Social support was directly and positively related to altruistic behaviors, and negatively related to public prosocial behaviors. Indirect links were also found between social support and altruistic, emotional, and dire prosocial behaviors through empathy; indirectly related to emotional, dire and public behaviors through perspective taking; and finally to public behaviors through self-efficacy. The findings of direct and indirect links suggest multiple ways by which social support can foster positive outcomes in youth. The direct links between social support and altruistic prosocial behaviors are consistent with earlier researchers' suggestions that positive social relationships provide a context in which prosocial behaviors can be practiced and developed, and as such foster prosocial outcomes (Eberly & Montemayor, 1998); and that supportive relationships help promote various competencies (Tietjen, 1994), which in turn promote behavioral outcomes (Eberly & Montemayor, 1998).

The divergent pattern of relations between socio-cognitive competencies and various types of prosocial outcomes illustrate the importance of considering specific underlying motivations for different types of prosocial behaviors. While research has traditionally treated prosocial behaviors as a unitary concept, scholars have recently argued for a need to differentiate different types of prosocial behaviors and its predictors (Carlo et al., 2003; Carlo & Randall, 2002). In the present study, the links between social support and different types of prosocial outcomes were variably mediated by varying socio-cognitive variables. For

instance, emotional prosocial behaviors, which are those that are performed in the context of emotionally evocative situations, were linked to empathy. This link is logical given that empathy likely contributes to helping in situations where emotions are the most salient signal of need. In contrast, dire prosocial behavior (i.e., prosocial acts done in emergency situations), was linked to both empathy and perspective taking. Acting in these situations is arguably made more likely if the actor experiences an emotional connection to the person in need, and is able to assess need by taking the perspective of the potential benefactor.

Interestingly, in this sample, altruistic prosocial behavior was linked to social support directly, but was also indirectly linked through empathy. Several researchers have argued that emotions play an important role in prosocial responding (for review, Eisenberg et al., 2009). This finding suggests the role of emotions in helping others in such situations where the motivation is to truly help another person (altruism). In contrast, public prosocial behaviors, which are selfishly motivated, was not linked to empathy, and was in fact negatively linked to perspective taking and self-efficacy, and directly and negatively linked to social support. Thus, youth who have higher skills in being able to take other people's points-of-view, and who have the belief that they are capable of accomplishing things, are less likely to perform prosocial behaviors simply to receive public recognition. Together, these findings suggest that different prosocial behaviors may have divergent motivations and are variably linked to different socio-cognitive competencies.

Limitations, Implications and Future Directions

Several limitations of the study should be noted. First, characteristics of the sample and recruiting procedures may limit the generalizability of the results. Purposive rather than random sampling was utilized to recruit participants, and thus self-selection and related issues are necessarily embedded in the findings. Furthermore, the sample was relatively small and males and females were not represented equally. Future studies recruiting more broadly (e.g., random sampling through schools) and utilizing larger samples can potentially address these issues.

A second possible limitation can be found in the use and choice of measures. In particular, while the Empathic Concern Scale (Davis, 1983) showed moderate reliability ($\alpha=.55$), other researchers have reported higher rates of internal reliability, including with Latino/a adolescents (e.g., Carlo et al., 2011). It is unclear why this measure showed somewhat lower reliability here. Additionally, one measure (i.e., Social Convoy Measure) was adapted in this study so that

it could be administered in small groups rather than individually. While pilot testing indicated no issues and results provided an adequate range of responses (e.g., in sizes of networks), direct testing, for example, the comparison of individual versus group-administration results, needs to be conducted to more closely examine the appropriateness of this adaptation.

Notwithstanding those limitations, the present study contributes to existing literature in three ways. First, findings highlight the potentially unique configuration and function of social support networks among Latino/a youth and support cultural and ecological researchers' suggestions that the form and function of social networks reflect the broader ecological and cultural context (e.g., Tietjen, 1994). Second, this study sheds light on the different ways by which social support can lead to healthy outcomes in Latino/a youth. In this study, social support was directly linked to prosocial outcomes – with supportive relationships likely providing a context through which positive behaviors can be fostered and practiced. Interestingly, social support was also indirectly linked to prosocial outcomes through socio-cognitive competencies, suggesting that social support might promote positive behavioral outcomes through its promotion of socio-cognitive competencies, which in turn underlie positive behaviors. And third, this study supports earlier researchers' assertions regarding the importance of differentiating between prosocial behaviors that diverge in their motivations and the situations in which they are performed. Here, different types of prosocial behaviors were linked to different socio-cognitive competencies. Likely, different skills sets are involved in performing varying types of prosocial behaviors (e.g., emotional versus dire). As Carlo and colleagues suggest (Carlo et al., 2003), researchers need to move beyond unitary concepts of the prosocial development and consider the various types and contexts of this complex behavior.

This study does not utilize an experimental design and thus firm causal relations cannot be drawn, nonetheless, present findings have important implications for educators and service providers working with youth. For example, professionals might consider the importance of family support in developing strategies to help Latino/a adolescents develop positive behavioral outcomes. Findings here are consistent with several other studies (see Eisenberg et al., 2006 for review) that highlight the importance of social support in promoting and providing a context for positive social behaviors. Social support is particularly important in promoting positive outcomes in youth because of their direct links to positive behaviors, as well as their role in promoting skills and competencies underlying those behaviors. Service providers might need to pay special

attention to youth who do not have sufficient support from family members, and somehow help those youth either seek those positive relations or supplement with other supporting figures.

Furthermore, youth serving programs are often designed to help youth develop positive other-oriented behaviors (e.g., as emphasized in service learning programs). Beyond targeting those desired outcomes, it might be helpful to also consider the extent to which programs are promoting underlying competencies, such as sociocognitive skills, that in turn promote positive behaviors. Program developers need to take a holistic approach in fostering the development of positive outcomes in youth, including targeting underlying skills, addressing adequacy of their supportive relations, and considering their cultural values and potentially unique cultural experiences that might impact upon their well being.

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