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Caregiver Simpatía Predicts Latino Children's Prosocial Behavior

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Objectives: Research is needed to better characterize the cultural values that nurture children's prosocial behavior. We focused on simpatía, a Latino cultural value that prioritizes warm, positive engagement with others. We examined the relation between caregivers' simpatía and Latino children's prosocial behavior toward a stranger. **Method:** A preregistered, experimental field study was conducted in Los Angeles County. The test site was strategically chosen to be in an area of the United States in which Latinos are a supermajority of the population (95%). Families were recruited in a public park; the participants were 100 caregivers and their 100 young Latina/o children. Caregivers reported the degree to which they personally endorsed simpatía, based on the validated Simpatía Scale. Independently, their children participated in an experiment using a standardized assessment of childhood prosocial behavior. Children's behavior was videorecorded and subsequently scored by independent coders who were kept blind to the caregiver simpatía scores and study hypotheses. **Results:** There was a significant positive association between caregivers' valuing of simpatía and children's prosocial behavior on the experimental test. Children whose caregivers scored in the top quartile on simpatía showed especially high prosocial behavior. These positive associations held when controlling for preregistered covariates (child age, gender, family economic insecurity, etc.). **Conclusions:** These findings contribute to cultural and developmental theories about the roots of children's prosocial behavior and can inform future cross-cultural approaches to examine how children acquire simpatía and similar values both in Latino culture and in other cultural groups.

Public Significance Statement

There is public interest in understanding the roots of children's generosity toward others. Our research focused on Latino families. We found that young children (4–7-year-olds) with caregivers who hold strong values about kindness toward others (the Latino cultural value of simpatía) are, themselves, more likely to show generosity. These findings open new avenues for research on the socialization of positive values in childhood—building blocks for civility in society.

Keywords: culture, socialization, prosocial behavior, cultural values, Latinos

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Prosocial behavior—the tendency to show generosity, helpfulness, and empathy toward others—is a central concept in developmental and social psychology (Cortes Barragan & Meltzoff, 2025; Keltner et al., 2014; Tomasello, 2019). Prosociality can be

directed toward family members, friends, teachers, coworkers, and even strangers (Thompson, 2015). It can be observed early in human development (Dunfield et al., 2011; Killen & Smetana, 2014), with some children developing into adults who exhibit a remarkable level

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of prosocial behavior toward other people, even strangers (Walker & Frimer, 2007). There is long-standing interest in examining the social antecedents and roots of children's tendency to engage in such highly prosocial ways (Kohlberg & Hersh, 1977; Laible et al., 2019; Rochat et al., 2009). Yet, a crucial issue remains little understood: What are the specific cultural ingredients within family life that nurture children's generosity, kindness, and prosociality toward their fellow humans, including strangers?

Prosocial Cultural Values as Possible Roots of Children's Prosociality

The *values* held by caregivers may be a building block of prosocial behavior in their children (Cortes Barragan & Meltzoff, 2025; Lansford, 2022; Sagiv & Schwartz, 2022). For example, classic studies suggest that adults who showed prosociality toward Jews in Nazi-occupied Europe—often at considerable risk to themselves—tended to report having grown up with caregivers who showed more universalistic versus individualistic cultural values (Oliner, 2005). Many studies have examined the association between the prosocial values held by parents and their adolescent and adult children (e.g., Carlo, 2014; Fuligni et al., 1999; Gong et al., 2022; Knight et al., 2016; Stattin & Kim, 2018). However, at earlier ages—in preschool and the early elementary school years—the potential association between caregivers' values and children's own expressed behavior is understudied.

Most studies of the prosocial behavior in these early years tend to examine children's behavior in isolation from their caregivers. For example, in a classic, often-used experimental paradigm, termed “the prosocial game” (Fehr et al., 2008), children have the choice between giving another child the same reward as they give themselves versus giving the reward only to themselves, leaving the other child without a reward. This task, and others similar to it, have been widely used around the world in research on children's early prosocial behavior. This work has yielded important insights regarding the impact of a range of factors on young children's prosocial decision making in experimental tasks, including the role of age (House et al., 2012; Lu & Chang, 2016), expectations about the recipient (Moore, 2009; Sebastián-Enesco et al., 2013), and the context of momentary interactions (Cortes Barragan & Dweck, 2014; Rabinowitch & Meltzoff, 2017). In addition, researchers studying attachment relations have long argued that early interactions with caregivers can prepare children for lifelong prosocial behavior toward others (e.g., Bowlby, 1965; Kochanska & Thompson, 1997; Narvaez, 2014). Yet, we know of no empirical work that directly examines whether individual variation in caregivers' prosocial cultural *values* is associated with individual variation in young children's prosocial *behavior*.

What could underlie a connection between what caregivers value and what children do? Theories of early social learning suggest that caregivers exhibit prosociality in their interactions with others and that this behavior creates a visible context for young children to observe, learn, and reenact prosocial values (Bandura, 1977; Meltzoff, 2013; Rogoff, 2014). That is, when engaging prosocially (or nonprosocially), young children may be guided by their prior history of paying attention to others and learning from observing their caregivers' values as expressed through behavior (Cortes Barragan & Meltzoff, 2025; Rogoff & Mejía-Arauz, 2022). Despite this theoretical possibility, sociocognitive-developmental research has not actually focused on examining the connection between the cultural values held by caregivers and the social behaviors enacted

by young children. For example, the mainstream U.S. adult cultural value of “individualism” (Greenfield et al., 2003; Kitayama et al., 2009) could be tapped in parental self-reports, and this might predict “individualistic” behavior in young children; however, no empirical work has yet examined that possibility.

Recognizing this empirical gap in the literature, and as a first study focusing on young children, we examined Latino culture. We strategically chose this culture because it has already been reported that Latino adults consider socializing children to prominently express prosocial behavior as a critical goal of child rearing (Campos & Kim, 2017; Carlo & Partoví, 2025; Cortes Barragan & Meltzoff, 2025; Gibbons, 2024; Rogoff et al., 2017). Of course, future work should include comparison groups from additional cultures, but as a starting point for research, we chose to test our hypothesis that within Latino culture itself, the value of “*simpatía*” in caregivers may be associated with young children's prosocial behavior.

Simpatía: A Cultural Value of Importance to Latinos

Psychological research on the Latino cultural value of *simpatía* was pioneered by Triandis et al. (1984). Their findings showed that Latinos, compared to non-Latinos, practiced a “cultural script” (*simpatía*) that emphasized an expectation of amiability, social harmony, and likeability. Many Latinos show *simpatía* by engaging gregariously, demonstrating politeness, avoiding social conflict, and actively looking for opportunities to engage warmly with friends, family, and the broader community—seeking to engender joy in others (Acevedo et al., 2020; Ramírez-Esparza et al., 2012; Salvador et al., 2024).

At its core, *simpatía* promotes harmony by encouraging the exuberant expression of positive emotions both within and beyond one's social group (Díaz-Loving, 2019; Ramírez-Esparza et al., 2009; Senft et al., 2021). *Simpatía* is such a central quality in Latino culture that it is often referenced in daily conversation: A person, especially a child, who shows *simpatía* (noun form), such as by smiling toward others, is often noted as *simpática/o* (adjective form; Díaz-Loving, 2006; Holloway et al., 2009). Showing *simpatía* through behavior is regularly considered by members of Latino culture as evidence of a successful upbringing (Cortes Barragan & Meltzoff, 2025). Although Latino adults are renowned for exhibiting high levels of *simpatía* towards others, there are notable within-culture individual differences (Acevedo et al., 2020), and not all Latinos show high levels of *simpatía*. This variation is important to recognize both to avoid stereotyping whole groups of individuals in a homogenous way and because the individual variation that is exhibited is of empirical and theoretical interest in and of itself.

Simpatía in Latino Families

Within Latino families, different individuals show *simpatía* to varying extents, and this variation may inform children's development of the “proper way to be.” A study of Mexican families in the United States reported that Latina mothers steer social moments toward positivity by coaching children to voice (“*díle*”) positive messages to other family members (Eisenberg, 1986). Many different Latino family members can participate in the socialization of *simpatía*, including fathers who treat their young not only as children but as friends (Mogro-Wilson et al., 2016), older siblings who function as caregivers (Margolis et al., 2016), and most especially Latina grandmothers

(and aunts) who often are primary caregivers in children's lives (Cortes Barragan et al., 2024; Guilamo-Ramos et al., 2007). Empirical studies focused on Latina mothers of infants have reported ample variation in simpatía, suggesting that, from an early age, children in Latino culture have different degrees of opportunity to learn simpatía (Ramírez-Esparza et al., 2019; Rodríguez-Arauz et al., 2019). The variation in caregiver simpatía presents an opening to study the impact of caregiver simpatía on the behavior of young children.

Pilot Study

We conducted a substantial pilot study to explore these topics. The first goal of this pilot study was to find out whether caregivers in a public park were willing to complete our simpatía questionnaire. The second goal was to use the pilot data to conduct a power analysis about the required N in a study of this sort. We used the same general procedures as outlined below for our main study and found a positive association between the expressed values of the caregivers and the behavior of the children (see Appendix for full details). Based on the pilot, we proceeded to preregister our methods, procedures, hypothesis, and analytic plan (<https://aspredicted.org/fnyp-nf79.pdf>).

The Present Study

Although simpatía is not prosocial behavior per se, we theorized that caregiver simpatía may indeed relate to children's behavior (4–7-year-olds). We preregistered the hypothesis that we would find meaningful variability within a Latino sample such that caregivers' self-reported simpatía (Acevedo et al., 2020; Simpatía Scale) would be positively associated with variability in Latino children's prosocial behavior. We also preregistered that this association would remain significant after controlling for important specified covariates, namely child's age, gender, maternal education, family's economic insecurity, and caregiver's primary language. If this could be found in a preregistered confirmatory study, we felt that this would serve as an initial indication that simpatía undergirds prosociality in Latino children. This finding could then, after further refinement for other cultures, be used to spark generalization and specificity work to test whether similar links between caregiver values and child behavior would also be observed in other cultural groups.

Method

Participants and Context

One hundred Hispanic/Latino children between the preregistered ages of 4.00 and 7.99 years of age ($M = 5.93$, $SD = 1.05$, 48% girls) and 100 of their caregivers served as participants. None of the children or caregivers had participated in the pilot study. We focused on caregivers, and not just mothers or parents, because many Latino families choose to have their children cared for by a range of extended family members (e.g., Guilamo-Ramos et al., 2007; Margolis et al., 2016; Mogro-Wilson et al., 2016). In this study, the caregivers tested self-identified as mothers (67%), fathers (26%), grandmothers (3%), aunts (2%), uncles (1%), and an adult sister (1%).

An additional 15 children began the study but were excluded for the following reasons: interference from caregivers ($n = 5$), interference from other children/adults ($n = 4$), or difficulties with task

instruction/fussiness ($n = 6$). Excluding child participants for these reasons is standard for studies of this type (e.g., McAuliffe et al., 2020) and was part of the preregistration.

A power analysis based on our pilot work (using G*Power software) showed that a sample size of $N = 88$ would afford 80% power for detecting a medium-sized effect, assuming an α of .05, two-tailed. Following the recommendations for using sample sizes larger than those obtained by power analyses (Fraley & Vazire, 2014), we preregistered a sample size of $N = 100$.

We selected Los Angeles County for our study because it has the largest population of Latinos in the United States (U.S. Census Bureau, 2023). All data collection took place within a public park in a residential-industrial region to the southeast of Downtown Los Angeles ("Southeast Los Angeles County"). The residents of this region are primarily working-class Latino families with a recent history of immigration from Latin America. The U.S. Census Bureau characterizes the region as follows: Approximately 95% of the residents in the area are Hispanic/Latino (approximately 40% immigrated from Latin America), less than 15% have a bachelor's degree, the per capita annual income is less than \$25,000, and more than 80% of households speak a language other than English at home (mainly Spanish).

Procedure

An English-Spanish bilingual male experimenter conducted all study procedures. He began by introducing himself to caregivers watching their young children in the park by saying a customary English-Spanish greeting ("Good afternoon, Buenas tardes"), which allowed the caregiver to respond in their language of choice. The experimenter described himself as a university researcher conducting a child development psychology study by prominently gesturing to the university logo and name on the back of his clipboard. He explained that the study was specifically focused on families with 4–7-year-old children and involved children playing a "sticker game" after the caregiver completed a short questionnaire (about child/family demographics and their own cultural values).

Caregivers expressing an interest in participation were provided with a University of Washington Institutional Review Board-approved Documentation of Waiver of Consent form and encouraged to ask questions about the study. This waiver was sought because the pilot work had uncovered that families in this context were sometimes reluctant to provide a signature on a university form upon their first meeting with the experimenter in a public location. All caregivers were provided with a copy of the documentation at the end of the study, which provided contact information for the institutional review board and the experimenter. Following this consenting process, the experimenter provided participants with a questionnaire in Spanish or English according to their expressed language preference (56% chose Spanish).

Next, the caregiver invited the child to participate in the sticker game, and when children assented their choice to play the game, the experimenter began the test in the language suggested by the caregiver (24% asked for a test in Spanish). Once the test was complete, the experimenter debriefed the caregiver and gave them a gift card (\$10) to a local grocery store. All children had the option of retaining a sticker from the game. Testing usually lasted less than 10 min and occurred in the mid- to late afternoon from August to December 2024.

Mobile Data Collection Equipment

For behavioral testing of the child, we designed a mobile-lab setup. One component was a password-protected iPod touch (7th generation) to record testing sessions with its backside-facing camera. A second component was a gooseneck device holder that could be used to mount the iPod; the gooseneck also served as a handle to easily move the apparatus around the testing site. A third component was a platform for the gooseneck and camera that we constructed by adjoining two standard clipboards (32 cm × 23 cm) onto which the gooseneck could be clamped. Finally, we fastened a preprinted page showing the prosociality task (described below) to the platform, reducing the effect of wind in the outdoor community setting.

Measures

Caregiver Questionnaire

Simpatía Scale. We used the established *Simpatía* Scale (Acevedo et al., 2020) to assess this cultural value in children's caregivers. Respondents were asked to rate the extent to which each of 18 items applied to themselves using a 5-point Likert-type scale (1 = "strongly disagree" to 5 = "strongly agree").

The *Simpatía* Scale includes an overall scale score (18 items) and is composed of two subscales. Example items from the Warmth Expressivity subscale (12 items) include "When something good happens to someone you know, it is important to show enthusiasm and be happy for their good news" and "It is important to look for opportunities to smile and share laughter with family and friends." Examples from the Conflict Distancing subscale (six items) include "In social situations, one should not create conflict" and "When someone is being impolite or rude, it is best not to pay attention." The *Simpatía* Scale was originally published in English and based on Latino college student samples. For the present research, we worked with local community members to translate, back-translate, and validate our Spanish translation (see the "Data, Statistical Analyses, and Research Materials Transparency" section).

Child and Family Demographics. Caregivers were asked to report child and family demographics. Five demographics from the caregiver questionnaire that were preregistered as control variables were as follows: (a) child age, (b) child gender (boy, girl, or other/nonbinary), (c) maternal education with options listed as did not graduate from high school, graduated from high school or has General Educational Development credential, goes/went to college but has not graduated, and college graduate (including community college), (d) family economic insecurity (use of an Electronic Billing Transfer card, i.e., participation in the Supplemental Nutrition Assistance Program; California Electronic Benefit Transfer Project Office, 2026) with options of yes, no, or do not know, and (e) whether caregiver completed the questionnaire in English or Spanish. Two exploratory control variables from the caregiver questionnaire were as follows: (a) whether the child had any extended family members (grandmother, grandfather, aunt, or uncle) living with them in the same home (with response options of yes or no) and (b) whether the child had older siblings (questionnaire requested ages of siblings).

Children's Prosocial Choice Task and Measures

The experimental protocol used to assess the children's prosocial choice was adapted from a well-validated, two-alternative forced-choice task called the "Prosocial Game" (Fehr et al., 2008). Because there is no cost to the child from engaging prosocially, it is not considered a test of "altruism." The task was administered by showing the child a preprinted sheet of paper that displayed the two options. The sheet of paper was divided into two sides by a vertical line separating the options. Children could choose between (a) one sticker for themselves and one sticker for another child represented by a silhouette (1:1, "prosocial" choice) or (b) one sticker for themselves and none for the other child (1:0, "nonprosocial" choice). The two options were described to children using a standardized script (verbatim script below). The left-right placement of the 1:1 and 1:0 options was a design variable randomized across participants.

The script was

Alright. Look! This is the sticker game. On one side there's one sticker and it's pointing to you, and one sticker pointing to the child. And then on this side there's one sticker pointing to you, and no sticker pointing to the child. So, I have a question for you. Do you want to pick the side where you get one sticker and the child gets one sticker, or do you want to pick the side where you get one sticker and the child doesn't get a sticker? Which side do you want to pick?

The experimenter gestured toward each option as he mentioned the option during the script. A preliminary statistical check of the results showed that there was no significant correlation between side placement and the children's 1:1 versus 1:0 behavioral choice, $p = .50$.

Data Coding

Caregiver Questionnaire

Simpatía Scale. To derive the overall *Simpatía* Scale scores, we created a mean of the 18 items for each caregiver respondent (ranging from 1.00 to 5.00). This overall scale had excellent internal consistency (Cronbach's $\alpha = .92$). Consistent with the preregistration, this distribution was left-skewed (skewness = -1.66) and leptokurtic (kurtosis = 5.71). To reduce the influence of the observed skewness while retaining information regarding the underlying distribution of scores, we constructed both a median split and a quartile split. The first, second, and third quartiles were scores below the 25th, 50th, and 75th percentiles, with the fourth quartile being scores greater than or equal to the 75th percentile. The cutoffs for the overall *Simpatía* Scale 25th, 50th, and 75th percentiles were 3.94, 4.33, and 4.61, respectively (equivalent cutoffs for the Warmth Expressivity subscale [Cronbach's $\alpha = .91$]: 4.08, 4.50, and 4.83; Conflict Distancing subscale [Cronbach's $\alpha = .78$]: 3.50, 4.00, and 4.50).

Child and Family Demographics. Child age (continuous variable) was z scored. The other child and family demographic variables were treated as categorical variables and dummy coded: (a) child gender (1 = girl), (b) maternal education (1 = completed high school/General Educational Development or beyond), (c) family economic insecurity (1 = family uses Electronic Billing Transfer card), (d) caregiver response language (1 = Spanish), (e) extended family (1 = a grandmother, grandfather, aunt, or uncle lives in the same home as the child), and (f) whether the child had older siblings (1 = yes).

Children's Prosocial Choice Task and Measures

The dependent measure (whether or not the child made the “prosocial choice”) was determined by whether they used their hand to retrieve their sticker from the 1:1 side. A coder, who was kept blind both to the caregiver's questionnaire results and to the hypotheses, scored children's behavioral choices offline from the video recording. The coder scored the 100 test sessions in a random order. This original coder and a second coder scored 25% of the videos (random sample), testing both intra- and interobserver agreement. There were no disagreements: Cohen's $\kappa = 1.00$ in both cases. The “prosocial choice” was dummy coded as 1 for analytic purposes.

Data, Statistical Analyses, and Research Materials Transparency

Data were analyzed using standard techniques: binomial test, point-biserial correlation, chi-square test, and logistic regression (Howell, 2010). All statistics reported use two-tailed tests. The data, materials, and analysis code are available via the Open Science Framework (<https://doi.org/10.17605/OSF.IO/Q9PZC>).

Results

Table 1 displays full demographic information about participating families and children.

Caregiver Simpatía and Children's Prosocial Choice

The mean of the 5-point Likert-type Simpatía Scale in our sample was 4.24 ($SD = 0.56$). On the children's prosocial task, children significantly more often than chance (0.50) selected the prosocial

choice (73 of the 100 [73/100]), binomial test exact $p < .0001$. More importantly, replicating the pilot data results (see Appendix), caregiver simpatía was positively associated with children's prosocial choice, $r_{pb} = .28$, $p = .005$, 95% confidence interval [0.09, 0.45].

As planned in our preregistration, we also examined the data with a median split. The results showed that 82.69% (43/52) of the children whose caregivers scored above the median on simpatía selected the prosocial choice, and only 62.50% (30/48) of the children whose caregivers scored below the median on simpatía did so, $\chi^2(1, N = 100) = 5.16$, $p = .023$, $\phi = .23$, 95% CI [0.02, 0.42].

As a test of robustness, we also explored whether children with caregivers with the highest simpatía scores (i.e., the fourth quartile) had the highest likelihood of making the prosocial choice. This approach leverages the fact that simpatía had a negative (left) skew. Transforming the data into quartiles reduced this skew while retaining more variability than the median split. As expected, this analysis showed that child prosocial choice significantly varied as a function of caregiver simpatía: first quartile (52.00% selected the prosocial option [13/25 participants]), second quartile (73.91% [17/23]), third quartile (69.23% [18/26]), and fourth quartile (96.15% [25/26]), $\chi^2(3, N = 100) = 12.86$, $p = .005$, Cramer's $V = 0.36$, bootstrapped 95% CI [0.23, 0.54] (Figure 1, left panel).

Further, and to provide more insight into the finer-grain nature of simpatía, we explored the patterns for the two subscales of the Simpatía Scale. Results for the Warmth Expressivity subscale were as follows: first quartile (52.17% [12/23]), second quartile (77.78% [14/18]), third quartile (70.59% [24/34]), and fourth quartile [92.00% (23/25)], $\chi^2(3, N = 100) = 9.50$, $p = .019$, Cramer's $V = 0.32$, bootstrapped 95% CI [0.18, 0.51] (Figure 1, middle panel). Results for the Conflict Distancing subscale were as follows: first quartile (63.64% [14/22]), second quartile (60.00% [15/25]), third

Table 1
Descriptive Statistics for Study Sample of Children and Families

Variable	<i>M (SD)</i>	%	Range (min–max)	Cronbach's α
Child characteristic				
Age	5.93 (1.05)		4.15–7.72	
Gender				
Boys		52		
Girls		48		
Caregiver simpatía				
Simpatía (overall scale)	4.24 (0.56)		1.44–5.00	.92
Simpatía (quartiles for overall scale)	1.53 (1.13)		0–3.00	
Simpatía (Warmth Expressivity subscale)	4.40 (0.56)		1.42–5.00	.91
Simpatía (warmth expressivity quartiles)	1.61 (1.10)		0–3.00	
Simpatía (Conflict Distancing subscale)	3.90 (0.72)		1.50–5.00	.78
Simpatía (conflict distancing quartiles)	1.56 (1.09)		0–3.00	
Family characteristic				
Caregiver language				
English		44		
Spanish		56		
Maternal education				
Not a high school graduate		29		
High school graduate or GED		34		
Some college		21		
College graduate		16		
Economic insecurity		27		
Extended family structure		40		
Child has older siblings		62		

Note. min = minimum; max = maximum; GED = General Education Development.

quartile (75.00% [21/28]), and fourth quartile (92.00% [23/25]), $\chi^2(3, N = 100) = 7.76, p = .051$, Cramer's $V = 0.28$, bootstrapped 95% CI [0.16, 0.48] (Figure 1, right panel).

Sensitivity Analyses

In the preregistration, we hypothesized that the effect of *simpatía* would remain significant while controlling for specific relevant covariates: child age, child gender, maternal education, family economic insecurity, and caregiver language. As predicted, the data showed a significant effect when controlling for these variables: *Simpatía* Scale (overall score) quartiles, $b = 0.57, SE = 0.25, z = 2.30, p = .022, OR = 1.76, 95\% CI [1.09, 2.86]$ (Table 2, Model 1). Another way to meaningfully describe this finding is to convert the logit values to model-based predicted probabilities: Prosocial choice was higher for children whose caregivers were in the fourth quartile, that is, the highest quartile of *simpatía* (68% predicted probability) than for children whose caregivers were in the first quartile, that is, the lowest quartile of *simpatía* (28% predicted probability; Figure 2, Model 1). Child characteristics also had an effect: Age was positively associated with prosocial choice, $b = 0.73, SE = 0.29, z = 2.50, p = .013, OR = 2.07, 95\% CI [1.17, 3.65]$, and girls had higher prosocial choice than boys, $b = 1.19, SE = 0.55, z = 2.17, p = .030, OR = 3.29, 95\% CI [1.12, 9.64]$ (Table 2, Model 1).

As a second sensitivity analysis, we checked the effect of *simpatía* while simultaneously controlling for both the preregistered covariates and the additional exploratory covariates: side of sticker placement (a design variable) and living with extended family and having an older sibling (from the caregiver questionnaire). The predicted effect remained significant: *Simpatía* Scale (overall score) quartiles, $b = 0.54, SE = 0.25, z = 2.19, p = .028, OR = 1.72, 95\% CI [1.06, 2.79]$. Figure 2 (Model 2) displays the model-based probabilities. Child characteristics also had an effect: Age was

positively associated with prosocial choice, $b = 0.74, SE = 0.30, z = 2.48, p = .013, OR = 2.09, 95\% CI [1.17, 3.75]$, and girls had higher prosocial choice than boys, $b = 1.13, SE = 0.56, z = 2.02, p = .043, OR = 3.08, 95\% CI [1.04, 9.17]$ (Table 2, Model 2). Additional analyses are included in the Supplemental Materials.

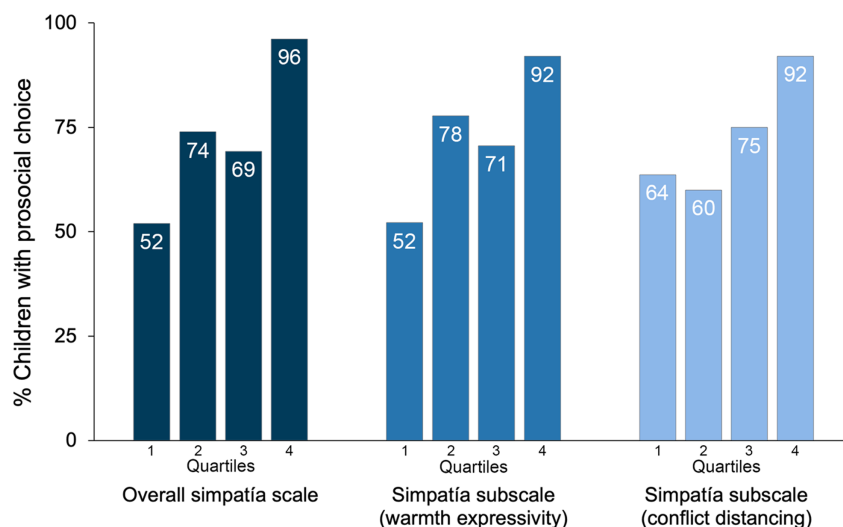
Discussion

We examined the degree to which a specific prosocial cultural value held by Latino caregivers was positively associated with the prosocial behavior of their young children. We tested this question with a preregistered experimental field study using a regression model to examine the contribution of this cultural value to childhood prosocial behavior while controlling for covariates. The findings showed that children whose caregivers scored in the highest quartile of *simpatía* showed *extremely* high rates of prosociality—hyper-prosociality—with almost all children (96%) behaving prosocially in the experimental task. On the other end of the distribution, children whose caregivers scored in the lowest quartile of *simpatía* made the prosocial choice at the lowest rate of the four quartiles (52%). Thus, within this specific culture, individual differences in caregivers' values are linked to children's actual behavior.

Theoretical Implications

There is a history of experimental studies in which parents and other adults demonstrate social behavior to children, and then children imitate the behavior (e.g., Bandura, 1977; Meltzoff, 2013). However, the present study is novel and goes beyond this: We measured an abstract value that adults in a specific culture expressed through self-report and then tested young children in an experiment to assess the preregistered hypothesis that the children's behavior aligns with the value reported by their caregiver. We found evidence for this association.

Figure 1
Caregiver Simpatía and Children's Prosocial Choice



Note. This figure shows the percent of children making a prosocial behavioral choice as a function of caregiver *simpatía* quartile scores. Overall scale results (left panel), results for Warm Expressivity subscale (middle panel), and results for Conflict Distancing subscale (right panel). See the online article for the color version of this figure.

Table 2*Logistic Regression Results Using Simpatía (Overall Scale Quartiles) and Covariates Predicting Children's Prosocial Choice*

Predictor variable	Model 1 (Nagelkerke $R^2 = 0.30$)						Model 2 (Nagelkerke $R^2 = 0.32$)					
	<i>b</i>	<i>SE</i>	<i>z</i>	<i>p</i>	<i>OR</i>	95% CI	<i>b</i>	<i>SE</i>	<i>z</i>	<i>p</i>	<i>OR</i>	95% CI
Simpatía (overall scale quartiles)	0.57	0.25	2.30	.022	1.76	[1.09, 2.86]	0.54	0.25	2.19	.028	1.72	[1.06, 2.79]
Child age (<i>z</i>)	0.73	0.29	2.50	.013	2.07	[1.17, 3.65]	0.74	0.30	2.48	.013	2.09	[1.17, 3.75]
Child gender (girl = 1)	1.19	0.55	2.17	.030	3.29	[1.12, 9.64]	1.13	0.56	2.02	.043	3.08	[1.04, 9.17]
Maternal education (HS graduate = 1)	0.49	0.63	0.78	.44	1.63	[0.47, 5.61]	0.35	0.66	0.53	.60	1.42	[0.39, 5.16]
Economic insecurity (yes = 1)	0.66	0.67	0.99	.32	1.93	[0.52, 7.11]	0.73	0.68	1.07	.28	2.07	[0.55, 7.78]
Caregiver language (Spanish = 1)	0.58	0.54	1.06	.29	1.78	[0.61, 5.15]	0.64	0.57	1.12	.26	1.90	[0.62, 5.84]
Extended family structure (yes = 1)							0.32	0.55	0.58	.56	1.38	[0.46, 4.08]
Child has older siblings (yes = 1)							−0.53	0.58	−0.92	.36	0.59	[0.19, 1.82]
Sticker place. (prosocial, left side = 1)							0.24	0.54	0.46	.65	1.28	[0.45, 3.65]
Intercept	−0.96	0.73	−1.31	.19	0.38		−0.75	0.92	−0.82	.41	0.47	

Note. *SE* = standard error; *CI* = confidence interval; *HS* = high school; *place.* = placement.

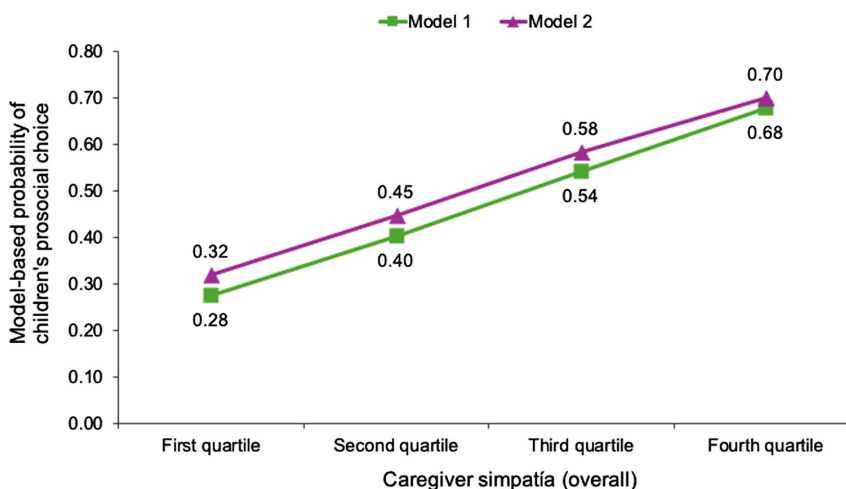
The pattern of results raises a critical developmental question: Through what mechanism might caregiver simpatía influence a child's propensity to act in a prosocial manner on the behavioral test? One possibility is that caregivers explicitly teach prosocial values through linguistic instruction and/or reward and punishment, as traditionally argued (e.g., Kohlberg & Hersh, 1977). Such processes may play a role, but we suggest that more implicit learning may also be at play: The child may "catch" their caregivers' values from observing the caregiver's interactions with others (Meltzoff & Gilliam, 2024), rather than being explicitly taught (the two views are not mutually exclusive). Such an implicit learning process based on observational social learning and modeling has been documented for other childhood behaviors in laboratory studies that preclude learning of the explicit type (Skinner et al., 2020).

We also note that none of the items on the Simpatía Scale provided to caregivers specifically asked about caregiver–child interaction. Rather, the questions capture realistic aspects of daily living, which the child

may observe as a normative "way of life" even though the warmth and positivity are not specifically, or only, directed at them in an explicit fashion. For example, a caregiver who strongly agrees with the simpatía Warmth Expressivity subscale item "When spending time with friends, laughter and humor are important so everyone has a good time" may exhibit such behavior when friends visit the family or, as is common in Latino contexts, when the community organizes a large social gathering (*fiesta*). Similarly, another item, from the simpatía Conflict Distancing subscale, is "In social situations, one should not create conflict." We speculate that the child implicitly learns what is the way to act by observing the interactions of the adults around them. That is, a child exposed to a caregiver who chronically shows both of these components of simpatía—warmth expressivity and conflict distancing—may be more ready to engage prosocially with another person by giving a resource to a new person in a new situation, as was demonstrated in our prosociality experimental task. Such effects of children's learning through "eavesdropping" on the interactions of others, even when the

Figure 2

Model-Based Predicted Probabilities of Caregiver Simpatía and Children's Prosocial Choice



Note. Caregiver simpatía (quartiles for overall scale) predicts children's prosocial choice with preregistered controls (Model 1, green), adding exploratory controls to Model 1 (Model 2, purple). See the online article for the color version of this figure.

child is not a direct participant, are a powerful pathway for young children's social learning, starting in infancy (e.g., Meltzoff & Marshall, 2018; Repacholi & Meltzoff, 2007).

At a more general level that goes beyond the specific findings of this study, the patterns observed are relevant for developmental theories about culture and prosociality (e.g., Cowell et al., 2017; Dahl & Brownell, 2019; Gopnik, 2023; Tomasello, 2019). We posit that *simpatía* is a caregiver tendency that helps children to become "other-minded" and attuned to the psychological needs and wants of others (Correa-Chávez & Rogoff, 2009; Cortes Barragan & Meltzoff, 2025). For example, automated audio recordings of the language mothers use in the presence of toddlers reveal that Latino children—more so than non-Latino White children—have significantly more opportunities to hear their mothers engage in *simpatía* when they are mentioning other people (Rodríguez-Arauz et al., 2019). These conversations among Latina mothers also regularly include other aspects of *simpatía*, for example, social laughter (Ramírez-Esparza et al., 2019). Given such contexts, many Latino children (not all) have ample opportunities to perceive, learn, and practice engaging in positive social interactions, which may be building blocks for children being more ready to show prosocial behavior toward a new person.

Limitations, Constraints on Generality, and Directions for Future Research

There are several limitations of the present study that constrain generality and which simultaneously outline new paths for further work.

First, these findings show that caregiver-level variation in *simpatía* is associated with children's prosocial behavior, but this was only within a Latino sample. There was no comparison group, without which the study cannot directly address whether *simpatía* is a uniquely Latino cultural mechanism or whether similar caregiver-child associations would be observed in other cultural contexts.

Second, the observed association is not evidence of causality; experimentally inducing *simpatía* (e.g., among caregivers low in *simpatía*) would be a desirable next step based on the associations demonstrated here.

Third, although the current sample of $N = 100$ caregiver-child dyads in a single culture exceeds the samples typically found in other experimental behavioral studies of young child-caregiver dyads (e.g., Callaghan et al., 2011; Corbit et al., 2020; Cortes Barragan & Meltzoff, 2025; Torrens & Kärtner, 2017), it is important to replicate the study using a larger sample size at multiple sites. We only tested families in one park in one region of one U.S. city, and larger numbers of participants in other contexts should be tested in follow-up research.

Fourth, we note that we also found that prosociality increased with age, which replicates work with other populations of children (e.g., Fehr et al., 2008), and that Latina girls showed more prosociality than Latino boys, but gender is an inconsistent predictor of early childhood prosociality in other cultures (House et al., 2023), so a replication of this finding is warranted.

Fifth, in order to conduct a rigorous yet brief test session in a community setting, we were not able to collect more extensive measures, such as child temperament measures, caregiver personality measures, etc. Future field studies in the community could seek to collect more measures from caregivers and children. For example,

we used only the prosociality game (Fehr et al., 2008), but caregiver *simpatía* may (or may not) be associated with other prosocial tasks, such as the dictator game (Benenson et al., 2007; Capraro & Rand, 2018), which would address issues of generalizability and specificity.

Sixth, because our work focused on 4–7-year-olds, we cannot address the possibility of even earlier concordances between caregiver *simpatía* and children's behavior. Thus, longitudinal work from infancy to early childhood is needed.

Seventh, it is possible that children high in *simpatía*-related socialization may be motivated to follow social norms to comply or be pleasant or socially appropriate and that this is how they interpreted the experimental task. Although researchers have examined the relation between children's social propriety, compliance, and prosocial behavior (e.g., Schmidt & Tomasello, 2012), such work has not been conducted in Latino children or in the context of *simpatía*. It would be valuable to design work disentangling the effects of caregiver *simpatía* from the effects of children's attention to social norms and propriety.

Finally, this work focused on children's family members as agents for the socialization of *simpatía*, yet other segments of the social community, such as teachers and school, may also play a role (Spinrad & Eisenberg, 2009). Work is needed to examine how schools (and designed intervention programs) may be able to promote *simpatía* and prosocial behavior through dedicated campaigns and efforts actualizing that "every little action counts" (e.g., Lee et al., 2021).

Broader Implications and Conclusion

We combined an approach from cultural-social psychology (using a validated instrument of adult Latino cultural values) with an experimental procedure from developmental cognitive science (an experimental test of children's prosociality using blind scoring from videorecords). We found that there exists individual variation in Latino caregivers' *simpatía*, and this variation is a significant predictor of children's independently assessed prosocial behavior. These results emerged from an intentional research focus on Latinos, a rapidly growing, often marginalized community. This line of research underscores the value of constructing more generalizable theories of human psychology by investigating and bringing to bear the "hidden strengths" of multiple cultures.

Future studies of the social-cultural learning contexts of U.S. Latinos and Latin Americans (Calzada et al., 2013; Cauce & Domenech-Rodríguez, 2002; Cortes Barragan & Meltzoff, 2025; Gallo et al., 2009; Pérez, 2021), including those in Indigenous communities (Gibbons, 2024; Rogoff et al., 2017), can inform efforts to understand the development and expression of prosocial behavior and to promote it in other populations beyond the one studied here. For example, many cultures that are low on *simpatía* toward strangers (Levine et al., 2001; Ramírez-Esparza et al., 2012) may benefit from interventions to promote *simpatía*-like tendencies in parents and children. Engaging in such ways may prepare children to become adults who are more strongly identified with "all humanity" rather than only friends, family, nations, or other circumscribed in-groups (Cortes Barragan & Meltzoff, 2023). That is, a deeper study of the interesting case of Latino prosociality (and hyperprosociality) can (a) advance our understanding of the origins, expression, and diversity of human sociality, (b) contribute to discussions of virtue, civics, and morality toward those outside of one's in-group, and (c) identify and

promote cultural ingredients that can nurture intercultural dialogue, understanding, and cooperation.

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Appendix

Pilot Study: Caregiver Simpatía and Child Prosocial Behavior

Method

Participants, Procedure, and Coding

The pilot study was conducted in the same public park as the current research. The same questionnaires and coding were used. All children in this pilot study were Latino and between 4 and 7 years old ($N = 50$, $M_{\text{age}} = 5.95$, 52% girls). None of these children participated in the main study. This pilot was conducted from August to October 2023.

Results

Individual variation in caregivers' simpatía was significantly associated with children's behavioral prosociality, $r_{\text{pb}} = 0.32$, $p = .024$, 95% confidence interval [0.04, 0.55]. Caregivers' simpatía data were left-skewed (skewness = -2.12) as well as leptokurtic (kurtosis = 4.71). For this reason, we examined the data using a median split. These results showed that 84.00% (21/25) of the children whose caregivers scored above the median on simpatía selected the prosocial (1:1) choice, and only 32.00% (8/25) of the children whose caregivers scored

below the median on simpatía did so, $\chi^2(1, N = 50) = 13.88$, $p = .0002$, $\phi = .53$, 95% confidence interval [0.29, 0.76]. Logistic regression analyses indicated that these patterns remained significant while controlling for child age, gender, maternal education, family economic insecurity, and caregiver language, $b = 1.40$, $SE = 0.44$, $z = 3.21$, $p = .0013$, $OR = 4.04$, 95% confidence interval [1.72, 9.46].

Discussion

The patterns observed in this pilot study provided us with the information needed to conduct the power analysis used in the preregistration. The findings across both the pilot and preregistered studies are consistent with our theoretical arguments about simpatía (see main text).

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