

CULTURAL VALUES MEDIATE THE EFFECT OF PARENTING STYLES ON MEXICAN  
AMERICAN ADOLESCENTS' PROSOCIAL BEHAVIORS

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A Thesis presented to the faculty of the Graduate School  
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By

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The undersigned, as appointed by the Dean of the Graduate School, have examined the Thesis entitled

CULTURAL VALUES MEDIATE THE EFFECT OF PARENTING STYLES ON  
MEXICAN AMERICAN ADOLESCENTS' PROSOCIAL BEHAVIORS

Presented by Alexandra N. Davis

A candidate for the degree of Master of Science

And hereby certify that in their opinion it is worthy of acceptance.

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**Abstract**

The aim of this study was to examine the relations between supportive and strict parenting, traditional Mexican American culture values (respect and traditional gender roles), and prosocial tendencies in Mexican American adolescents. Participants (n=207) completed questionnaires regarding their parents' support and strictness, their endorsement of the cultural values respect and traditional gender roles, and their tendencies to engage in six types of prosocial behaviors.

Structural equation modeling was conducted. The model was not significantly different for boys and girls. Results indicated that supportive and strict parenting both positively predicted respect values. Strict parenting was negatively associated with traditional gender roles, and support was not associated with traditional gender roles. Respect positively predicted direct, compliant, emotional, and anonymous prosocial tendencies, and traditional gender roles positively predicted anonymous and public prosocial tendencies and negatively predicted altruistic prosocial tendencies. Discussion will focus on the significance of parenting and cultural values for Mexican American adolescent prosocial behaviors and the differential relations between these values and different types of prosocial tendencies.

## Ch. 1 Introduction

Parents engage in a number of practices that shape their children's social behaviors. Supportiveness and strictness are two dimensions that have been used to describe different types of parenting (Baumrind, 1971). Supportive parenting is parenting that is typically characterized by high levels of warmth, positive affect, and a child-centered orientation (Biringen & Robinson, 1991). Supportive parents meet their children's needs appropriately and are actively involved in their lives (Maccoby & Martin, 1983). Supportive parents also tend to use positive discipline techniques such as induction, which is explaining the impact of the child's behaviors on other people (Hoffman, 2000). Strict parenting, on the other hand, is characterized by high parental expectations for their children and repercussions when children do not meet the required standards (Maccoby & Martin, 1983). Strict parents are highly involved in their children's lives and monitor their behaviors. Authoritative parents are those who rely on support and strictness in combination (Baumrind, 1971). Authoritative parenting is typically thought to be the best parenting style because parents are highly involved in their children's lives and provide them with warmth and structure (Maccoby & Martin, 1983). Indeed, authoritative parenting (both support and strictness) is positively associated with positive social behaviors in children and adolescents (Carlo, McGinley, Hayes, Batenhorst, & Wilkinson, 2007; Hoffman, 2000; See Eisenberg & Murphy, 1995).

One specific behavioral outcome linked to supportive and strict parenting is prosocial behavior. Prosocial behaviors are defined as positive actions that are intended to benefit others (Carlo & Randall, 2002). These positive behaviors include actions such

as helping others, comforting others when they are upset, volunteering, and donating time or resources (Carlo & Randall, 2002). Supportive parenting is thought to facilitate prosocial behaviors because warm parenting tends to foster emotional sensitivity and perspective taking and ultimately, behaviors aimed at helping others (Barnett, 1987). Indeed, supportive parenting has been positively linked to social competencies and prosocial behaviors (DeGuzman & Carlo, 2004; See Carlo, 2006). In contrast, punitive parenting is thought to negatively impact prosocial behaviors of adolescents.

Strict parenting is also thought to facilitate prosocial behaviors because these parents may hold high expectations for positive behaviors and foster responsibility in their children. It is important to note that strict parenting is not synonymous with punitive parenting. Punitive parents use harsh and strict punishment, which may foster negative affect and contribute to self-focused thoughts in children (Rollins & Thomas, 1979). Punitive parenting and high levels of control have been negatively linked to prosocial behaviors (Knafo & Plomin, 2006; For reviews see Carlo, Fabes, Laible, & Kupanoff, 1999). Control can be maintained in a caring and supportive manner, which is thought to be positive for adolescents (Maccoby & Martin, 1983). This type of strictness and behavioral control, such as parental monitoring, has been positively linked to prosocial behaviors in adolescents (Kerr, Beck, Shattuck, Katar, & Uriburu, 2003; Carlo, Knight, McGinlry, Zamboanga, & Jarvis, 2010). Research suggests that monitoring as a means of behavioral control may promote prosocial behaviors, while more extreme forms of behavioral control, such as punitive punishment, are negatively associated with prosocial behaviors.

Despite research establishing a link between supportive and strict parenting with children's prosocial behaviors, there are three main limitations in this research. First, the majority of the current research has been conducted with European or European American samples (e.g. Janssens & Dekovic, 1997, Laible, Carlo, Torquati, & Ontai, 2004). Research with ethnic minority groups, including Latino adolescents, is lacking. The lack of research on positive social outcomes such as prosocial behaviors may contribute to deficit approaches and pathologically focused theories of Latino youth development (Coll, 1996). Conducting research on prosocial development in Latino adolescents could inform traditional theories of prosocial development by providing information about the predictors of positive social outcomes. A second limitation is the lack of research examining cultural values as mediators in the relation between supportive and strict parenting and prosocial behaviors. In the published research, the potential mediators between parenting and prosocial behaviors examined have been sociocognitive variables, such as moral reasoning and sympathy (Carlo, Knight, McGinley, & Hayes, 2011b). While these are important factors for prosocial behaviors, culture-specific values might also be important mediators to examine. Finally, previous research has also considered prosocial behaviors as a unidimensional construct rather than a multidimensional construct composed of different types of prosocial behaviors. It is important to examine the different types of prosocial behaviors and how parenting and cultural values differentially impact these specific behaviors (Carlo et al., 2007). It is possible that supportive and strict parenting impact specific types of helping in different ways. Supportive and strict parenting may predict helping face-to-face in emotional and risky situations. These types of situations elicit sympathetic responses from the bystander

and may therefore be related to warm, nurturing parenting. Examining helping as a unidimensional construct limits understanding of the impact of parenting on prosocial behaviors because the complexity of the relations cannot be examined. These limitations will be addressed in the current study.

### **Parenting and Prosocial Behaviors Among Latino Youth**

Two studies have suggested that parental support and control impacts the prosocial tendencies of Hispanic and Latino youth. In one study, the relations between parental warmth and control and youth prosocial behaviors were examined longitudinally in adolescents from Spain (Carlo, Mestre, Samper, Tur, & Armenta, 2011a). Results demonstrated that parental warmth, parental sympathy, and parental prosocial moral reasoning predicted youth prosocial behaviors (Carlo et. al., 2011a). Strict control was negatively associated with prosocial behaviors concurrently, but it did not predict lower levels of prosocial behaviors 3 years later (Carlo et. al, 2011a). This study showed that parental warmth facilitates prosocial behaviors in youth, whereas strict control may either debilitate prosocial behaviors or not be related to the development of such behaviors.

Another study was conducted with Mexican American adolescents examining parenting and prosocial behaviors (Carlo, Knight, McGinley, & Hayes, 2011b). This study examined parental inductions, sympathy, prosocial moral reasoning, and prosocial behaviors among Mexican American and European American adolescents (Carlo et al., 2011b). Inductive discipline is a component of supportive parenting during discipline. The results demonstrated that parental inductions were positively associated with sympathy, which was positively associated with specific types of prosocial behaviors. This study suggests that parental inductive discipline does facilitate prosocial behaviors

in Mexican American adolescents. This study is the only one to have examined the underlying mechanisms in the relations between supportive and punitive parenting and adolescent prosocial behaviors in Mexican American adolescents. Examining specific cultural values as mediators may contribute to current understanding of relevant mediators.

### **Mediating Role of Cultural Values**

A potential mechanism impacting Mexican American adolescents' prosocial behaviors is specific cultural values. Traditional developmental theories, such as social cognitive, cognitive, and sociocultural theories, support the notion that parenting impacts children's development of cultural values (Bandura, 1986; Piaget, 1960; Vygotsky, 1978). These traditional theories all discuss children's learning through interactions and observations in their environments. According to cultural socialization theories in particular (Knight, Bernal, & Carlo, 1995; Raffaelli, Carlo, Carranza, Gonzales-Kruger, 2005), cultural and social experiences impact individual sociocognitive variables, such as personal beliefs and values in adolescents, which then impact their behaviors.

Despite the theoretical importance of examining cultural values as mediators in the relation between supportive and punitive parenting and prosocial behaviors, there is little research examining their role. Research has examined sociocognitive mediators, such as empathy and moral reasoning (Carlo, Knight, McGinley, & Hayes, 2011b). Cultural values might also be important when considering these relations in Mexican American adolescents. Latino families traditionally endorse specific cultural values that may account for the relations between parenting and prosocial behaviors and lead to different developmental outcomes. Research suggests that cultural values, such as

familism (obligation to family, family as a source of social support, and family as a reference for decision-making; Knight et al., 2010) promote prosocial behaviors of Latino adolescents (Armenta, Knight, Carlo, & Jacobson, 2010; Calderon-Tena, Knight, & Carlo, 2011), but there are other important cultural values that have not been examined, such as respect and traditional gender roles. In the current study, the mediating role of respect and traditional gender roles in the relations between parenting and prosocial behaviors will be examined.

**Respect.** Researchers have demonstrated that respect may be an important value for many Latino families. Children who endorse respect typically take cues from their parents before acting and allow parents to make important decisions for them (Knight et al., 2010). Knight and colleagues (2010) conducted focus groups with Mexican American adolescents and their parents. During the focus groups, families discussed important values, and respect was one value that was important to many of the families (Knight et al., 2010). Calzada and colleagues (2010) also conducted six focus groups with Dominican and Mexican mothers. In the focus groups, the mothers were asked about the main values that they emphasized in their parenting. Respect was again one of the most important values identified. The mothers described the behaviors associated with respect as obeying instructions from an authority figure, courtesy and reverence towards elders, polite behaviors in public, and manners and courtesy towards parents and family members (Calzada, Fernandez, & Cortes, 2010).

Parenting may influence adolescent endorsement of respect if respect is an important cultural value for the family. Mexican American mothers may expect their children to behave respectfully towards elders and to respect parental decisions more so

than European American mothers. Adolescents who endorse respect may in turn be socialized to behave prosocially towards family members and older individuals. They may be more likely to help another person when asked as well. Despite the conceptual link between respect and prosocial behaviors, no studies exist on this relation.

**Traditional Gender Roles.** Research has indicated that Latino families tend to endorse traditional gender roles (Knight et al., 2010). Traditional gender roles can be defined as valuing different roles for men and women and believing these roles benefit the family unit (Knight et al., 2010). The concepts of *Marianismo* and *Machismo* are traditional gender role conceptions in Latino culture. *Marianismo* in girls and women is characterized by values such as acting as a source of emotional strength for the family, maintaining harmony in the family, remaining subordinate to authority, and remaining virtuous (Castillo, Perez, Castillo, & Ghosheh, 2010). *Machismo* is the stereotypic male role characterized by demand for respect and engagement in aggressive and dominant behaviors (Falicov, 2010). These gender constructions are oversimplifications of the Latino male and female gender roles, and they have been questioned in research recently because of the limitations they place on Latinos. They remain, however, consistent stereotypes and should be considered when discussing the value of traditional gender roles in many Latino families.

Carlo and colleagues (1996) examined the relation between gender role orientation (i.e. masculine and feminine) and prosocial behaviors in adolescents. Participants were fifth through tenth graders from Brazil and the United States. Interestingly, the patterns of gender differences were similar between the US and the Brazilian adolescents. There were differences between masculine orientation and

feminine orientation in moral reasoning. Feminine orientation was related to internalized moral reasoning, moral reasoning involving core principles. Internalized moral reasoning, in turn, was related to more prosocial behaviors. Masculine orientation was associated with higher levels of approval-based reasoning, attempting to gain the approval of others, which was associated with less prosocial behaviors (Carlo, Koller, Eisenberg, DaSilva, & Frohlich, 1996). These results indicate that reasoning about moral dilemmas differs depending on the gender roles the individual identifies with. If adolescents are socialized towards traditional gender roles, gender differences in moral reasoning may be more pronounced than if they are socialized in more androgynous or undifferentiated manners. Specifically, girls tend to engage in more nurturing and comforting types of prosocial behaviors, often with family members (Eagly, 2009). Those women who endorse traditional gender roles will be more likely to engage in these traditional prosocial behaviors than women who do not endorse traditional gender roles. For men, endorsement of gender roles will potentially be positively associated with instrumental and risky types of prosocial behaviors (Eagly, 2009). Currently, the Carlo and colleagues (1996) study is the only study to examine the associations between masculinity and femininity and differences in prosocial behaviors. This study used peer reports of prosocial behaviors, so differential relations between gender orientation and prosocial behaviors were not examined.

### **Multidimensionality of Prosocial Behaviors**

Recent research suggests that prosocial behaviors are complex and multidimensional and should not be examined as a unidimensional construct. Carlo and Randall (2002) identified types of prosocial tendencies in adolescents. These different

types of prosocial behaviors were used to create a questionnaire measure. The prosocial tendencies measure was developed based on theory and prior research and was administered to a sample of college students (Carlo & Randall, 2002). The results yielded six subscales of different prosocial behaviors that occur in different situations: altruistic, public, anonymous, emotional, dire, and compliant prosocial behaviors. Altruistic behaviors are actions that benefit others with no expected gain to the self. Because of the nature of altruistic behaviors, this subscale assesses motivation for helping. Public prosocial behaviors include helping behaviors done in the presence of others. Anonymous behaviors include actions conducted without the knowledge of others. Emotional prosocial behaviors are expressed in emotionally evocative situations, such as comforting another. Dire prosocial behaviors refer to helping in crisis situations. Finally, compliant prosocial behaviors include helping when directed, such as helping the family when asked (Carlo & Randall, 2002). These categories represent different helping tendencies that people may be likely to engage in, depending on the situation and motivation. Therefore, an additional purpose of the present study was to examine whether parenting styles and cultural values are related to specific forms of prosocial tendencies. Research has demonstrated that in fact the six factor structure consistently is the most reliable, and that the measure is valid for Mexican American adolescent boys and girls (Carlo et al., 2010; Carlo, Hausmann, Christiansen, & Randall, 2003)

Other research with Latinos has demonstrated that prosocial behaviors are indeed a multidimensional construct. In the Carlo, Knight, McGinley, & Hayes (2011) study, sympathy positively predicted dire, compliant, emotional, anonymous, and public prosocial behaviors and negatively predicted altruistic prosocial behaviors. Prosocial

moral reasoning positively predicted altruism and negatively predicted anonymous and public prosocial behaviors. These differential relations support the multidimensionality of Latino prosocial behaviors (For other examples see Carlo, Knight, McGinley, Zamboanga, & Jarvis, 2010; Armenta, Knight, Carlo, & Jacobson, 2010). The research on parenting and the multidimensionality of prosocial behaviors in Latinos is limited. The Carlo et al. (2011) study is the only study that has examined the underlying mechanisms, sociocognitive variables, in the relations between parenting and prosocial behaviors in Latino adolescents. More research is needed to further examine relevant mediators in the relations between supportive and punitive parenting and adolescent prosocial behaviors.

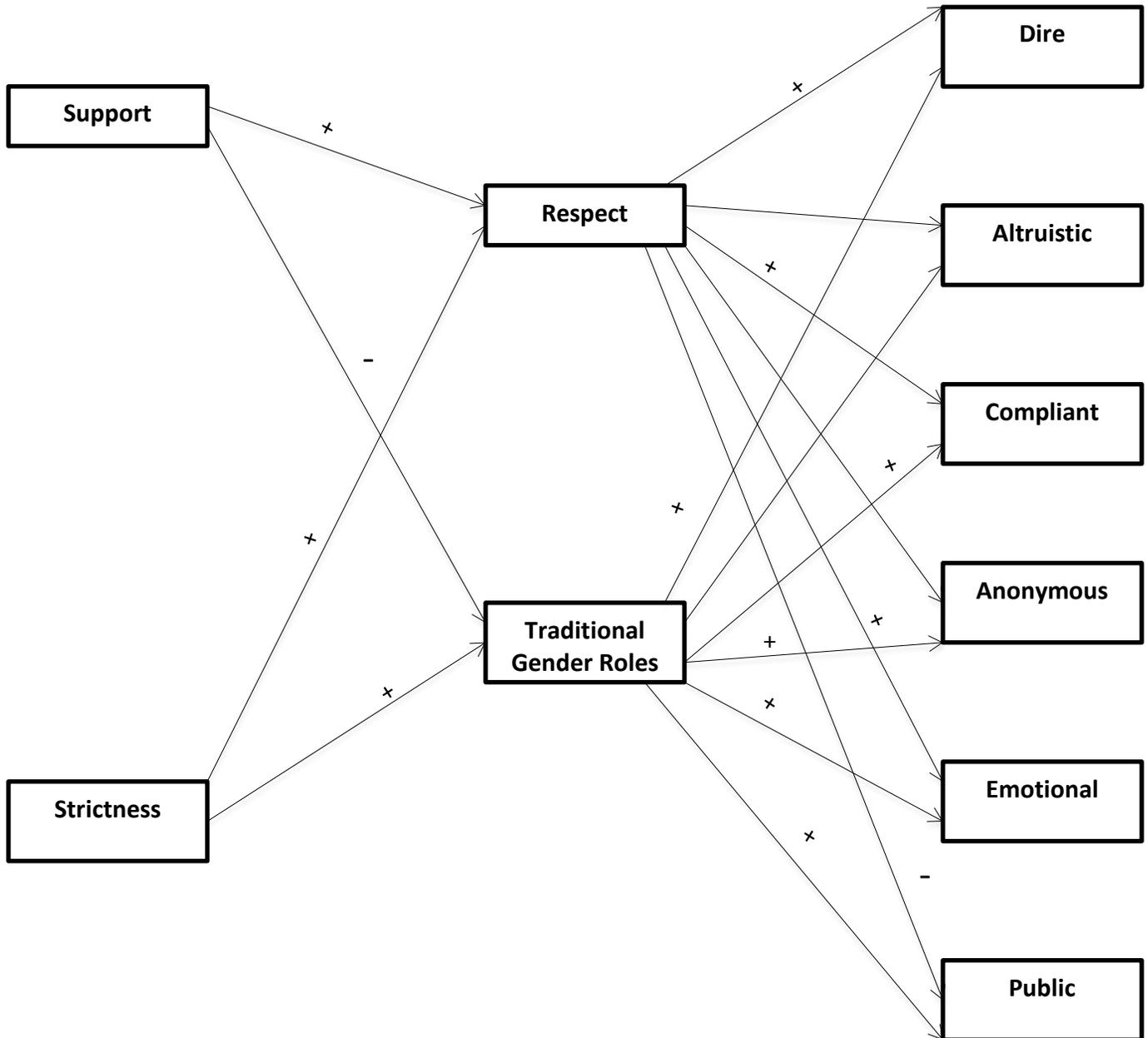
According to gender socialization theories, women who endorse traditional gender roles may be more likely to engage in prosocial behaviors that involve care and nurturing and are consistent with the traditional feminine gender role, such as emotional and compliant prosocial behaviors. Men, in turn, may be more likely to engage in risky and instrumental prosocial behaviors that are more consistent with the male gender role, such as dire prosocial behaviors (Bussey & Bandura, 1999; Bem, 1981; For review see Martin, Ruble, & Szkrybalo, 2002). Respect, however, may not be as gender specific. Respect reflects consideration for others, and therefore may be related to all other-oriented prosocial behaviors for both men and women.

### **Hypotheses**

The current study addressed the gaps in the literature by examining the mediating roles of respect and traditional gender roles on the relation between parental support and strictness and prosocial tendencies in Mexican American adolescents (See Figure 1 on page 12 for the conceptual model). The following hypotheses were examined:

1. Supportive and strict parenting will be positively associated with dire, emotional, and compliant prosocial tendencies directly.
2. Supportive and strict parenting will be positively associated with respect.
3. Supportive parenting will be negatively associated with traditional gender roles. Strict parenting will be positively associated or non-significant with traditional gender roles.
4. Respect will be positively related to dire, emotional, and compliant prosocial tendencies. Respect will be negatively associated with public prosocial tendencies.
5. The relation between traditional gender roles and prosocial behaviors will be moderated by gender. For women, traditional gender roles will be positively related to emotional, compliant, and anonymous prosocial tendencies. For men, traditional gender roles will be positively associated with dire and public prosocial tendencies.

Figure 1: Conceptual model



*Note:* Direct paths between supportive and strict parenting and prosocial tendencies are not depicted, but are also included in the analysis.

## Ch. 2 Method

### Participants

The current study is a secondary analysis project using data from the NSF funded Arizona Family CARE project [to Gustavo Carlo (BNS 0132302) and George Knight (BNS 0132409)]. The participants were 207 Mexican American adolescents ranging from 9-13 years of age ( $M$  age = 10.9 years,  $SD$  = .83; 50% girls) from public schools in the Southwest region of the United States. The parents' average number of years of education was 11 for fathers and 10.5 for mothers (range=1-15 years). Acculturation was measured with two subscales [immersion in dominant society (mean=2.85) and immersion in ethnic society (mean = 2.93)] on a 1-4 scale (Stephenson, 2000). The sample was moderately acculturated. See Appendix 1 for copies of the measures.

### Measures

**Parenting Styles.** Participants completed measures of support and strictness (Darling & Toyokawa, 1997). The original subscales assessed responsive and demanding parenting (5 items each). The alphas for these 2 subscales were not adequate, however (alpha for responsiveness = .40; alpha for demandingness = .50). Exploratory factor analysis was conducted to create a parental support subscale and a strictness subscale from the existing items. The parental support subscale (5 items; alpha = .63) consists of items assessing the child's perception that the parent is available when needed, spends time with the adolescent, and has positive expectations for the adolescent. An example is, "I can count on my mother to help me out if I have a problem." The strictness subscale (3

items;  $\alpha = .67$ ) assesses parental use of punishment and behavioral control. An example of one of the items is, “When I do something wrong, my mother punishes me.”

### **Cultural Values.**

Participants completed a measure of their respect values (8 items,  $\alpha = .67$ ). An example of an item from the respect scale is, “Children should respect adult relatives as if they were parents.”

Adolescents also completed a measure of their endorsement of traditional gender roles (Mexican American Cultural Values Scale; Knight et. al, 2010, 5 items,  $\alpha = .84$ ). A sample item is, “Men should earn most of the money for the family so women can stay home and take care of the children and the home.”

**Prosocial Tendencies.** Students also reported on their tendency to engage in six types of prosocial behaviors (dire, emotional, anonymous, public, altruistic and compliant; Carlo et al., 2003). Dire prosocial tendencies ( $\alpha = .69$ ; 3 items) include helping others in emergency situations. An example of an item assessing dire prosocial tendencies is, “I tend to help people who are in real crisis or need.” Emotional prosocial tendencies ( $\alpha = .76$ ; 5 items) include any helping behaviors in emotionally evocative situations. An example of an emotional item is, “It makes me feel good when I can comfort someone who is really upset.” Compliant tendencies ( $\alpha = .52$ ; 2 items) include obeying orders and following directions. An example of a compliant item is, “I never wait to help others when they ask for it.” Anonymous prosocial tendencies ( $\alpha = .75$ ; 4 items) include helping in secret. An example of an anonymous item is, “I prefer to donate money without anyone knowing.” Public prosocial tendencies ( $\alpha = .78$ ; 4 items) include prosocial behaviors that are done in the presence of others. An example of

a public item is, “When other people are around, it is easier for me to help others in need.” Altruistic prosocial tendencies ( $\alpha = .57$ ; 3 items) include helping others when there is no benefit to the self. A sample (reverse-scored) altruistic item is, “I believe I should receive more rewards for the time and energy I spend on volunteer service.”

### **Ch. 3 Results**

**Preliminary Analysis.** Descriptive statistics and correlations between the main variables were conducted using SPSS (See Table 1 for descriptives and correlations for mother’s education, age, supportive parenting, strict parenting, respect, traditional gender roles, public, emotional, dire, altruistic, compliant, and anonymous prosocial tendencies). The correlations demonstrated that supportive parenting was positively associated with endorsement of respect. Supportive parenting was also positively associated with emotional, dire, and compliant prosocial tendencies. Strict parenting was positively associated with respect and negatively associated with traditional gender roles. Strict parenting was also positively associated with emotional, dire, and compliant prosocial tendencies. Endorsement of respect and traditional gender roles were positively correlated with one another. Traditional gender roles were positively associated with public and anonymous prosocial tendencies and negatively associated with altruistic prosocial tendencies. The prosocial tendencies outcomes were also correlated with one another. Public prosocial tendencies were positively associated with emotional, dire, and anonymous prosocial tendencies and negatively associated with altruistic prosocial

tendencies. Emotional prosocial tendencies were also positively associated with direct and anonymous and negatively associated with altruistic prosocial tendencies. Direct prosocial tendencies were positively associated with compliant and anonymous prosocial tendencies. Altruistic prosocial tendencies were negatively associated with anonymous prosocial tendencies. Compliant and anonymous prosocial tendencies were also positively associated.

**Main Analysis.** Structural equation modeling (SEM) was conducted to assess the conceptual model, using maximum likelihood estimation in SPSS AMOS (Byrne, 2010). The model fit in SEM is considered good 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). Model fit was good (CFI=.999; RMSEA=.030; SRMR=.015). In the model, supportive and strict parenting variables were the exogenous variables. These two exogenous variables were set to covary with one another. The endogenous variables in the model were the mediators, respect and traditional gender roles, and the outcome variables, the six types of prosocial tendencies, which were also set to covary with one another. Direct paths between supportive and strict parenting and the prosocial tendencies outcome variables were also examined. The model was controlled for mother's education as a proxy for socioeconomic status, age, and the interaction between supportive and strict parenting. The interaction between supportive and strict parenting and the prosocial behaviors was not significant, so it is not reported.

The models were conducted for boys and girls separately, and differences in the overall models were examined. Direct paths were constrained with a non-numeric value

(e.g. a) one at a time. A chi-square difference test was conducted to examine significant change in the chi-square statistic for each constrained model. If the chi-square of the constrained path model was significantly different from the unconstrained model, then the paths were significantly different for men and women. None of the chi-square values significantly changed, which suggests that there are no significant differences in the paths for men and women. Therefore, the standardized estimates are reported for the whole sample.

See Figure 2 for path estimates. The results demonstrated that supportive parenting was positively associated with respect values. Supportive parenting was not significantly associated with traditional gender roles. Strict parenting was positively associated with respect values and negatively associated with traditional gender roles. Respect values were positively associated with emotional, dire, compliant, and anonymous prosocial tendencies. Traditional gender roles were positively associated with public and anonymous prosocial tendencies and negatively associate with altruistic prosocial tendencies. There were no significant direct paths between supportive and strict parenting and prosocial tendencies, which suggests that the model is a mediation model.

#### **Ch. 4 Discussion**

Hypothesis 1 stated that supportive and strict parenting would be positively associated with dire, emotional, and compliant prosocial tendencies directly. This hypothesis was not supported. There were no direct relations between supportive or strict parenting and prosocial tendencies. The results suggested that respect and traditional

gender roles mediated the relations between supportive and strict parenting and prosocial tendencies.

Hypothesis 2 stated that supportive and strict parenting would be positively associated with respect. This hypothesis was supported. Both supportive and punitive parenting positively predicted respect values. It seems that strict parents have high expectations for their adolescents. The adolescents may perceive the strict parenting as the way their parents show them that they have high expectations for them and love them. The average score for strict parenting was fairly high (mean=3.79 on a 5 point scale), suggesting that this type of controlling parenting may be somewhat normative (Ruiz, Roosa, & Gonzales, 2002). If this type of parenting is normative, it may indeed foster respect as a cultural value.

Hypothesis 3 stated that supportive parenting would be negatively associated with traditional gender roles, and strict parenting would be positively associated or non-significant with traditional gender roles. This hypothesis was not supported. Supportive parenting did not predict traditional gender roles, and strict parenting was negatively associated with traditional gender roles. Since strict parenting is more normative for Mexican Americans than for European Americans, control may not reflect traditional families and in turn may not foster traditional gender roles (cite). This is consistent with the research that demonstrated that authoritarian (punitive) parenting may be more normative for Latino parents, and may not consistently predict negative outcomes for Latino youth in the way that it does for European American youth. (Ruiz, Roosa, & Gonzales, 2002; For review see Halgunseth, Ispa, & Rudy, 2006). Another potential factor may be that the adolescents reported on only their mothers' parenting, not their

fathers. Since the items deal with punishment, and traditionally fathers are the disciplinarians, those who scored high on the strictness subscale may actually be less traditional, gender conforming families. This initial difference may also be influencing the results.

Hypothesis 4 stated that respect would be positively related to dire, emotional, and compliant prosocial tendencies, and negatively associated with public prosocial tendencies. This hypothesis was partially supported. Respect did indeed positively predict emotional, dire, and compliant prosocial tendencies, but it also positively predicted anonymous prosocial tendencies. Respect did not predict public prosocial tendencies. Emotional, dire, and compliant are the most common types of prosocial behaviors within the family (Calderon-Tena, Knight, & Carlo, 2011). Research has demonstrated that familism values predict higher levels of emotional, dire, and compliant prosocial behaviors (Calderon-Tena et al., 2011). Familism and respect values seem to work similarly within the family. Respect also predicted anonymous prosocial tendencies, however. This may be because respect is not limited to family members and may lead to more generalized helping behaviors.

Hypothesis 5 stated that the relation between traditional gender roles and prosocial tendencies would be moderated by gender. Specifically, for women, traditional gender roles would be positively related to emotional, compliant, and anonymous prosocial tendencies. For men, traditional gender roles would be positively associated with dire and public prosocial tendencies. This hypothesis was not supported. There were no gender differences in the relations between traditional gender roles and prosocial tendencies. This may be because traditional gender roles only predicted three types of

prosocial tendencies, none of which were highly gender specific. Traditional gender roles positively predicted anonymous and public prosocial tendencies and negatively predicted altruistic prosocial tendencies. Adolescents who endorse traditional gender roles may view helping when there is a cost to themselves as less desirable than helping when they receive some benefit. Adolescents who endorse traditional gender roles may be more prone to helping in public as a means to gain others' approval. It is unclear why traditional gender roles were positively associated with anonymous prosocial tendencies. More research is needed to clarify these results.

Although the results suggest links between supportive and strict parenting, respect and traditional gender role values, and prosocial tendencies, there are limitations to the current study that should be considered. The study is not longitudinal, so neither causation nor the direction of effects cannot be established. The model is based on theory and is plausible, but it could be that more prosocial adolescents endorse respect more or endorse traditional gender roles less. Future research should examine these processes with longitudinal designs. Another limitation is that adolescents completed all of the measures, so there could be shared method variance. This shared method variance could potentially lead to exaggerated correlations that are not due to the constructs of interest. Future research should examine data from the parent and the adolescent, as well as observation and experimental studies. The perception of the adolescent is important, however, when examining parenting. The extent to which the adolescent perceives his or her parent as supportive or punitive will be important for their outcomes, which justifies using adolescent reports. The use of self-report measures is a limitation, however, because of the potential influence of social desirability. It is important to include multiple

measures to examine the constructs to help eliminate inflated responses. This study was also conducted with Mexican American adolescents. It is important to note that the results cannot be generalized to other Latino groups.

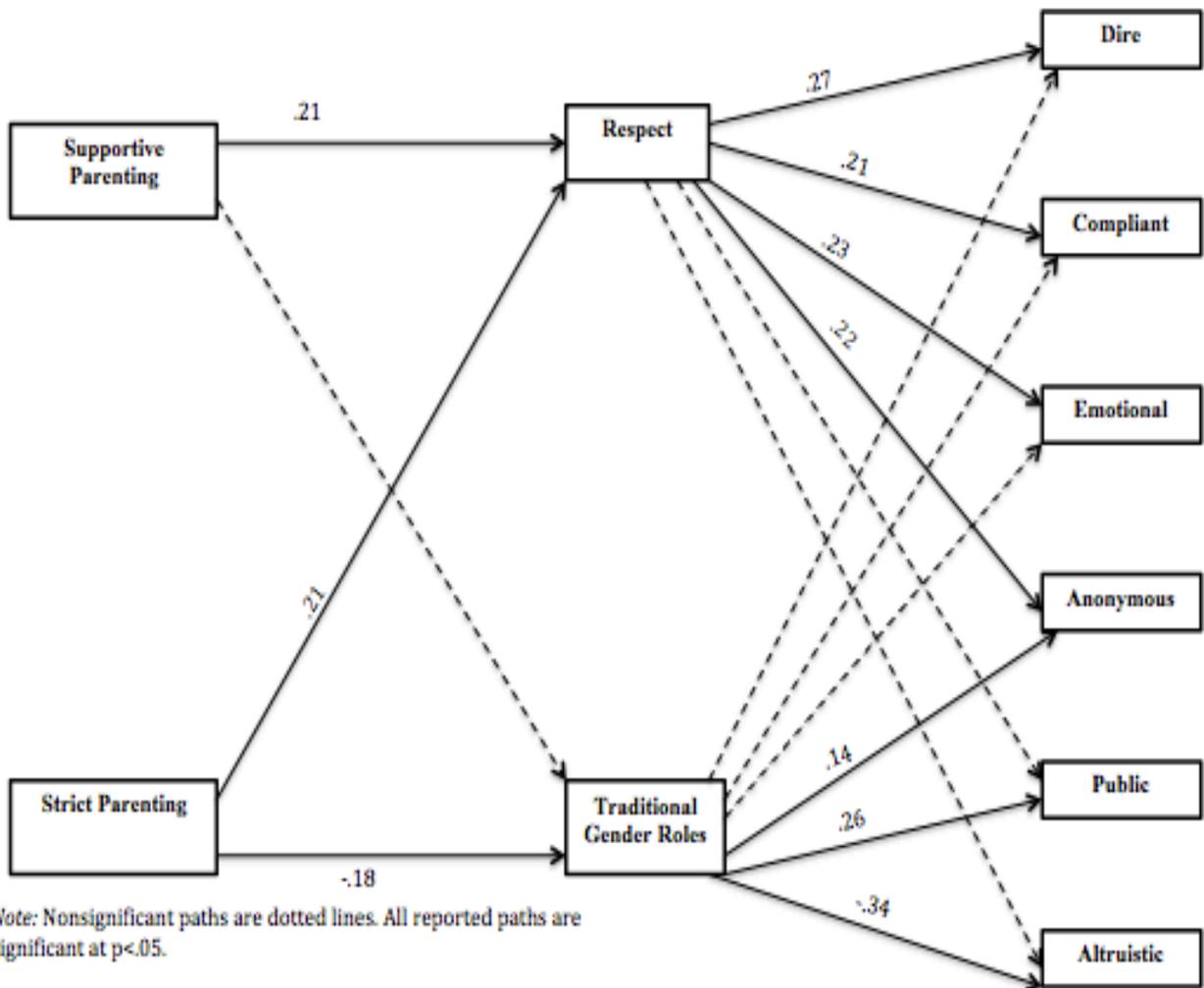
This is the first study to demonstrate that the cultural values respect and traditional gender roles are associated with prosocial tendencies. These cultural values mediated the relations between supportive and strict parenting and prosocial tendencies. These findings support cultural socialization theories and add useful information about underlying mechanisms that explain the impact of supportive and strict parenting on adolescent prosocial tendencies. This study also adds to the growing evidence of the multidimensionality of prosocial tendencies. Respect and traditional gender roles were associated differentially with the different types of prosocial tendencies, suggesting that these behaviors are not unidimensional and represent different ways of helping others. Future research should further examine the differential relations between cultural values and prosocial tendencies. For example, respect did not predict altruistic prosocial tendencies. Maybe Mexican American individuals are more likely to engage in helping that benefits the group in some way because of their collectivistic orientation. It could be that helping with no benefit is not as common, but other types of helping others in the group are more likely. Future research should continue to examine how specific cultural values impact relations between parenting and adolescent social outcomes.

Table 1: Descriptives and Correlation Matrix for Demographics, Parenting, Cultural Values, and Prosocial Behaviors

	1	2	3	4	5	6	7	8	9	10	11	12
1. Mother Ed												
2. Age	-.06											
3. Support	.08	.09										
4. Strict	.03	.05	-.09									
5. Resp	.04	.12	.19*	.19*								
6. Trad GR	.08	-.01	.06	-.18*	.17*							
7. Public	-.05	-.03	.03	.02	.15*	.27**						
8. Emo	-.09	-.15*	.19*	.26**	.30**	-.02	.39**					
9. Dire	-.02	.12	.19*	.17*	.30**	-.01	.31**	.67**				
10. Alt	.02	-.03	-.03	.02	-.08	-.33**	-.61**	-.16*	-.13			
11. Comp	-.08	.15*	.15*	.22*	.29**	.05	.13	.47**	.48**	.06		
12. Anon	-.11	.10	.07	.06	.27**	.17*	.43**	.45**	.41**	-.24**	.37**	
Mean	4.30	10.91	3.70	3.79	4.29	3.00	3.20	3.83	3.98	3.21	3.69	2.90
SD	2.35	.84	.53	.76	.48	.81	.96	.76	.85	.78	1.02	.87

Note: p<.05\*, p<.001\*\*.

Figure 2: Significant path estimates for parenting, cultural values, and prosocial behaviors



## References

- Armenta, B. E., Knight, G. P., Carlo, G., & Jacobson, J. P. (2010). The relation between ethnic group attachment and prosocial tendencies: The mediating role of cultural values. *European Journal of Social Psychology, 41*, 107-115.
- Bandura, A., (1986). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Bamett, M. A. (1987). Empathy and related responses in children. In N. Eisenberg & J. Strayer (Eds.), *Empathy and its development* (pp. 146-162). New York: Cambridge University Press.
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology Monographs, 4*(1, Part 2).
- Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review, 88*, 354-364.
- Biringen, Z., & Robinson, J. L. (1991). Emotional availability: A reconceptualization for research. *American Journal of Orthopsychiatry, 61*, 258-271.
- Bussey, K., & Bandura, A. (1999). Social-cognitive theory of gender development and differentiation. *Psychological Review, 106*, 676-713.
- Calderon-Tena, C. O., Knight, G. P., & Carlo, G. (2011). The socialization of prosocial behavior tendencies among Mexican American adolescents: The role of familism values. *Cultural Diversity and Ethnic Minority Psychology, 17*, 98-106.
- Calzada, E. J., Fernandez, Y., & Cortes, D. E. (2010). Incorporating the cultural value of *respeto* into a framework of Latino parenting. *Cultural diversity and ethnic minority psychology, 16*(1), 77-86.

- Carlo, G. (2006). Care-based and altruistically-based morality. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 551–579). Mahwah, NJ: Erlbaum.
- Carlo, G., Fabes, R. A., Laible, D., & Kupanoff, K. (1999). Early adolescents and prosocial/moral behavior II: The role of social and contextual influences. *Journal of Early Adolescents, 19*(2), 133-147.
- Carlo, G., Hausmann, A., Christiansen, S. & Randall, B. A. (2003). Sociocognitive and behavioral correlates of a measure of prosocial tendencies for adolescents. *Journal of Early Adolescence, 23*, 107-134.
- Carlo, G., Knight, G. P., McGinley, M., & Hayes, R. (2011). The roles of parental inductions, moral emotions, and moral cognitions in prosocial tendencies among Mexican American and European American early adolescents. *The Journal of Early Adolescence, 31*, 757-781.
- Carlo, G., Knight, G. P., McGinley, M., Zamboanga, B. L., & Jarvis, L. H. (2010). The multidimensionality of prosocial behaviors and evidence of measurement equivalence in Mexican American and European American early adolescents. *Journal of Research on Adolescents, 20*, 334-358.
- Carlo, G., Koller, S. H., Eisenberg, N., Da Silva, M. S., & Frohlich, C. B. (1996). A cross-national study on the relations among prosocial moral reasoning, gender role orientations, and prosocial behaviors. *Developmental Psychology, 32*, 231-240.

- Carlo, G., McGinley, M., Hayes, R., Batenhorst, C., & Wilkinson, J. (2007). Parenting styles or practices? Parenting, sympathy, and prosocial behaviors among adolescents. *The Journal of Genetic Psychology, 168*(2), 147-176.
- Carlo, G., Mestre, M. V., Samper, V., Tur, A., & Armenta, B. E., (2011). The longitudinal relations among dimensions of parenting styles, sympathy, prosocial moral reasoning, and prosocial behaviors. *International Journal of Behavioral Development, 35*(2), 116-124.
- Carlo, G., & Randall, B. A. (2002). The development of a measure of prosocial behaviors for late adolescents. *Journal of Youth and Adolescence, 31*(1), 31-44.
- Castillo, L. G., Perez, F. V., Castillo, R., & Ghosheh, M. R. (2010). Construction and initial validation of the Marianismo beliefs scale. *Counseling Psychology Quarterly, 23*(2), 163- 175.
- Coll, C., Crnic, K., Lamberty, G., & Wasik, B. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development, 67*, 1891-1914.
- Darling, N. & Toyokawa, T. Construction and validation of the Parenting Style Inventory II (PSI-II). *Unpublished manuscript*.
- DeGuzman, M. R. T., & Carlo, G. (2004). Family, peer, and acculturative correlates of prosocial development among Latinos. *Great Plains Research, 14*, 185-202.
- Eagley, A. H. (2009). The his and hers of prosocial behavior: The examination of the social psychology of gender. *American Psychologist, 64*, 644-658.

- Eisenberg, N., & Murphy, B. (1995). Parenting and children's moral development. In M. H. Bornstein (Ed.), *Handbook of parenting* (Vol. 4, pp. 227-257). Mahwah, NJ: Lawrence Erlbaum.
- Falicov, C. J. (2010). Changing construction of Machismo for Latino men in therapy: "The devil never sleeps". *Family Process*, 49(3), 309-329.
- Halgunseth, L. C., Ispa, J. M., & Rudy, D. (2006). Parental control in Latino families: An integrated review of the literature. *Child Development*, 77, 1282-1297.
- Hoffman, M.L. (2000). *Empathy and moral development: Implications for caring and justice*. New York: Cambridge University Press.
- Janssens, J., & Dekovic, M. (1997). Child rearing, prosocial moral reasoning, and prosocial behavior. *International Journal of Behavioral Development*, 20, 509-527.
- Kerr, M. H., Beck, K., Shattuck, T. D., & Kattar, C. (2003). Family involvement, problem and prosocial behavior outcomes of Latino youth. *American Journal of Health Behavior*, 27, 55-65.
- Knafo, A., & Plomin, R. (2006). Prosocial behavior from early to middle childhood: Genetic and environmental influences on stability and change. *Developmental Psychology*, 42, 771-786.
- Knight, G. P., Bernal, M. E., Carlo, C. (1995). Socialization and the development of cooperative, competitive, and individualistic behaviors among Mexican American children. In E. E. Carcia & B. McLaughlin (Eds.). *Meeting the challenge of linguistic and cultural diversity in early childhood education* (pp. 85-102).
- Knight, G. P., Gonzales, N. A., Saenz, D. S., Bonds, D. D., German, M., Deardorff, J.,

- Roose, M. W., & Updegraff, K. A. (2010). The Mexican American cultural values scales for adolescents and adults. *Journal of Early Adolescents, 30*(3), 444-481.
- Laible, D., Carlo, G., Torquati, J., & Ontai, L. (2004). Children's perceptions of family relationships as assessed in a doll story completion task: Links to parenting, social competence, and externalizing behavior. *Social Development, 13*(4), 551-569.
- Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In P. H. Mussen (ed.) & E. M. Hetherington (vol. ed.). *Handbook of Child Psychology, Vol. 4. Socialization, personality, and social development*. (4<sup>th</sup> ed., p.1-101).
- Martin, C. L., Ruble, D. N., & Szkrybalo, J. (2002). Cognitive theories of early gender development. *Psychological Bulletin, 128*, 903-933.
- Piaget, J. (1960). *The Child's Conception of the World*. New Jersey: Littlefield, Adams.
- Raffaelli, M., Carlo, G., Carranza, M. A., & Gonzales-Kruger, G. E. (2005). Understanding Latino children and adolescents in the mainstream: Placing culture at the center of developmental models. *New Directions for Child and Adolescent Development, 109*, 23-32.
- Rollins, B., & Thomas, D. (1979). Parental support, power, and control techniques in the socialization of children. In W. Burr, R. Hill, F. Nye, & I. Reiss (Eds.), *Contemporary Theories About the Family: Research-based Theories, 1*, 317-364. New York: Free Press.
- Ruiz, S. Y., Roosa, M. W., & Gonzales, N. A. (2002). Predictors of self-esteem for Mexican-American and European American youth: A reexamination of the influence of parenting. *Journal of Family Psychology, 16*, 70-80.

Stephenson, M. (2000). Development and validation of the Stephenson Multigroup Acculturation Scale (SMAS). *Psychological Assessment, 12*, 77-88.

Vygotsky, L. S. (1978). *Mind in society. The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

## **Appendix 1: Measures used in the study**

### **Parenting Styles Inventory**

#### **Strictness Subscale**

1. “If I don’t behave myself, my mother will punish me.”
2. “When I do something wrong, my mother does not punish me.”-reversed
3. “My mother really lets me get away with things.”-reversed

#### **Supportive Subscale**

1. “I can count on my mother to help me out if I have a problem.”
2. “My mother spends time just talking to me.”
3. “My mother respects my privacy.”
4. “My mother points out ways I could do better.”
5. “My mother and I do things that are fun together.”

## **Mexican American Cultural Values Scale**

### **Respect**

1. “No matter what, children should always treat their parents with respect.”
2. “Children should respect adult relatives as if they were parents.”
3. “Children should never question their parents’ decisions.”
4. “Children should be on their best behavior when visiting the homes of friends or relatives.”
5. “Children should always honor their parents and never say bad things about them.”
6. “Children should follow their parents’ rules, even if they think the rules are unfair.”
7. “It is important for children to understand that their parents should have the final say when decisions are made in the family.”
8. “Children should always be polite when speaking to any adult.”

### **Traditional Gender Roles**

1. “Men should earn most of the money for the family so women can stay home and take care of the children and the home.”
2. “Families need to watch over and protect teenage girls more than teenage boys.”
3. “It is important for the man to have more power in the family than the woman.”
4. “Mothers are the main people responsible for raising children.”
5. “A wife should always support her husband’s decisions, even if she does not agree with him.”

## **Prosocial Tendencies**

### **Dire**

1. "I tend to help people who are in a real crisis or need."
2. "I tend to help people who are hurt badly."
3. "It is easy for me to help others when they are in a bad situation."

### **Emotional**

1. "It makes me feel good when I can comfort someone who is very upset."
2. "I tend to help others especially when they are really emotional."
3. "I respond to helping others best when the situation is highly emotional."
4. "Emotional situations make me want to help others in need."
5. "I usually help others when they are very upset."

### **Compliant**

1. "When people ask me to help them, I don't hesitate."
2. "I never wait to help others when they ask for it."

### **Anonymous**

1. "I prefer to donate money without anyone knowing."
2. "I tend to help others in need when they do not know who helped them."
3. "Most of the time, I help others when they do not know who helped them."
4. "I think that helping others without them knowing is the best type of situation."

### **Public**

1. "I can help others best when people are watching me."
2. "When other people are around, it is easier for me to help others in need."
3. "I get the most out of helping others when it is done in front of other people."

4. "Helping others when I am being watched is when I work best."

**Altruistic**

1. "I think that one of the best things about helping others is that it makes me look good."- reversed
2. "I believe that donating goods or money works best when I get some benefit."-reversed
3. "I believe I should receive more rewards for the time and energy I spend on volunteer service."-reversed
4. "One of the best things about doing charity work is that it looks good on my resume."-reversed
5. "I feel that if I help someone, they should help me in the future."-reversed
6. "I often help even if I don't think I will get anything out of helping."

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