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The undersigned, appointed by the dean of the Graduate School, have examined the thesis entitled

TESTING A U.S. MEXICAN CULTURAL VALUE TRANSMISSION MODEL OF MATERNAL SOCIALIZATION OF YOUTH CIVIC RESPONSIBILITY VALUES AND PROSOCIAL BEHAVIORS

presented by Sarah L. Pierotti,

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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DEDICATIONS

I would like to recognize my parents, who have provided me unwavering support throughout my life. Their encouragement for all of my projects, ideas, and dreams—no matter how big—has made such a difference. I would also like to acknowledge my extended family for always being there for me. Finally, I would like to recognize the amazing support that I have received from my friends throughout this process. I am so lucky to have each of you in my life.
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Testing a U.S. Mexican Cultural Value Transmission Model of Maternal Socialization of Youth Civic Responsibility Values and Prosocial Behaviors

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ABSTRACT

Youth are taught the values that their culture considers important through socialization and cultural values, such as civic responsibility, that can serve as a guide for future social behaviors. One set of social behaviors relevant to such values are prosocial behaviors, or actions intended to benefit others. However, there is little research on the cultural value-related parenting practices that link such values and prosocial behaviors, especially in U.S. Mexican-heritage early adolescents. The goal of this project was to test a cultural value transmission model of prosocial behaviors using the traditional Mexican cultural value of civic responsibility. The mediating relations between this cultural value and prosocial behaviors were investigated. This study used questionnaire measures completed by 204 U.S. Mexican mothers and their children (M age = 10.9 years; 51% girls) from Arizona. Results from path analysis partially supported the cultural value transmission model for the civic responsibility value. Implications of research in this area include the central role of cultural values in theories of prosocial development and the inclusion of such values in developing more effective positive youth development programs and public policies that affect U.S. Mexican youth.

Keywords: socialization, value transmission, prosocial behavior
CHAPTER 1: INTRODUCTION

Prosocial behaviors, or actions intended to benefit others (Eisenberg, Fabes, & Spinrad, 2006), are an important marker of positive youth development and well being. Prosocial behaviors include helping, comforting, or sharing with another person (Eisenberg et al., 2006). Prosocial behaviors are important for the potential benefits to both the actor and the recipient. For the recipient in need, it is the way in which he or she receives help. For the actor, prosocial behaviors are linked to positive outcomes including peer acceptance, academic success, decreased delinquency and substance use, higher self-esteem, and benefits to physical health (Carlo, Knight, Basilio, & Davis, 2014). Thus, identifying the mechanisms that encourage prosocial behaviors could contribute to better understanding multiple areas of positive youth development.

There are 33.7 million U.S. Mexicans living in the United States as of 2012, and this is the fastest growing immigrant group in the country (Gonzalez-Barrera & Lopez, 2013). U.S. Mexicans comprise 64% of the Latino population of the United States, which is equivalent to 11% of the country’s total population (Gonzalez-Barrera & Lopez, 2013). This is a large and growing group, yet previous research on Latinos and other ethnic minorities has mostly focused on pathology and delinquent behavior (see García-Coll et al., 1996; MacPhee, Kreutzer, & Fritz, 1994). However, several scholars have noted the importance of understanding the predictors of positive social development, such as prosocial behaviors, to provide insight into the positive characteristics of this growing population (see Garcia-Coll et al., 1996; Quintana et al., 2006; Raffaelli, Carlo, Carranza, & Gonzales-Kruger, 2005). Knowledge of the ways in which prosocial behaviors are fostered can, in turn, lead to theories and research that are asset- and strengths-based, as well as intervention efforts that could foster positive social adjustment and
well being in this population. The focal mechanism of the present paper is a cultural value transmission model in the mother-child relationship of U.S. Mexican mothers and their youth, which is expected to predict subsequent youth prosocial behaviors.
CHAPTER 2: LITERATURE REVIEW

Broad Socialization Theories Relevant to the Proposed Study

Socialization is the mechanism by which cultural values are transmitted to the next generation, and it refers to the process of shared values, ideas, and customs being passed to others in order to teach them how to become a member of the shared social group (Bugental & Goodnow, 1998). Socialization experiences teach children how to become successful members of their social groups, and they are viewed as an important part of moral development (Grusec, Chaparro, Johnston, & Sherman, 2014). Within the socialization literature, there are many perspectives on how socialization takes place within the parent-child relationship. This paper will focus on the views most relevant to the proposed model. The organizational guiding perspectives of focus in this paper will be: social cognitive theory, the guided learning domain of socialization, and the child’s perception of the socialization experience.

Social cognitive theory, previously referred to as social learning theory, takes into account how children learn through their observations of the people, or models, around them (Bandura, 1986). By observation of other people, referred to as observational learning, or through novel experiences children adopt and demonstrate new behaviors. In this learning process, children imitate the behaviors and messages that they observe in other people. Children do not always need to be directly instructed; instead, they can also learn through incidental learning. In this case, children can learn vicariously through observing other people and may demonstrate the behavior later. It is through the observation and imitation of culturally experienced models that the behaviors and values esteemed by a culture can be repeatedly taught (Bandura, 1986). In the case of parenting practices used as part of value transmission, children observe the actions that their parents use that reflect or promote their values. Children may later
demonstrate these actions themselves and endorse the same values after having learned them from the models around them.

Another socialization perspective considers more specifically the different domains of influence that children learn and are taught within. Several domains of influence are included in the socialization literature, and the parent-child relationship, which is the focal relationship of this project, is part of the guided learning domain (Grusec et al., 2014). In the guided learning domain, the parent-child relationship is seen as that of a teacher (the parent) and student (the child), meaning that the parent offers the child opportunities and instructional lessons for the child to grow, or more specifically to grow as a moral person in this case. Through these learning experiences, children can begin to internalize the messages that their parents provide, meaning that they start to incorporate the values they are exposed to into their ways of thinking and acting. Internalizing the messages makes it possible for children to later use the information as a guide when encountering situations independently (Grusec et al., 2014). The guided learning domain focuses on the socialization experience that the parent provides for the child, whereas other perspectives place additional emphasis on the child’s point of view in the experience.

The part of socialization that emphasizes the child’s view, including their perception, acceptance, and meaning making of a socialization experience, is complimentary to the guided learning domain perspective. The work in this area of socialization emphasizes that in order for the message to be effective, the child must accurately interpret and accept it (Grusec & Goodnow, 1994). Accurately interpreting the message refers to the child clearly understanding what the parent is trying to convey, while accepting the message involves whether the child sees the message as fitting (Grusec et al., 2014). In this view, a child who both perceives the message
accurately and sees it as reasonable is the most likely to embrace the message and to act in accordance. Further, the meaning that the child places on the message is seen as a key result of the interaction, as it is this meaning that is remembered and used in the future (Grusec et al., 2014). Thus, socialization provides the context in which children learn about the world via the guidance of others, and considering the meaning that the child gives to the socialization experience is an important result of the socialization exchange. In conjunction, these socialization perspectives highlight some of the ways in which socialization occurs in the parent-child relationship.

Cultural Socialization Theories

Socialization takes place in every social group, and according to cultural and sociocultural psychology, it is imperative to consider the culture in which a behavior occurs in order to have a better understanding of human action (Markus & Hamedani, 2007). Work on cultural socialization has discussed cultural differences in behavior as being partly due to the available contexts and opportunities, similar to the developmental affordances discussed later in this section, that exist within the culture (de Guzman, Carlo, & Edwards, 2008; de Guzman, Edwards, & Carlo, 2005). Various scholars have referred to these opportunities in different ways, but all have discussed daily interactions as an important part of socialization (e.g., Farver, 1999; Super & Harkness, 1986; Weisner, 2002; Whiting, 1980).

For example, Super and Harkness (1986) referred to the daily interactions and contexts that children exist within as the developmental niche. The developmental niche is a theoretical framework that is helpful for studying how culture impacts the immediate environment that the child grows up within, and it is framed from the child’s perspective. The developmental niche includes three connected parts: the settings that the child lives within (both physical and social),
the culture-based practices used to raise the child, and the child’s caregivers’ psychology. This framework can be used to account for the characteristics of a person’s culture when studying how children are raised and develop (Super & Harkness, 1986).

Other researchers have also emphasized the importance of children’s environmental settings. Similar to Super and Harkness’ developmental niche, the Whitings refer to this cultural setting in which children grow up in as the learning environment (Whiting, 1980). The Whitings’ theory of the development of social behavior across cultures emphasizes the weight of the environmental settings, or learning environments, that a person develops within and the characteristics of the people with whom they interact. The people with whom the child frequently interacts have the ability to greatly shape the child’s environment, because they interact with the child and simultaneously teach them the social behavior of the culture (Whiting, 1980).

According to this perspective, one of the strongest ways that adults shape a child’s socialization experience is through the settings that they provide for the child and encourage the child to participate in (Whiting, 1980). In the seminal Children of Six Cultures Study, the Whitings identified and observed six types of social behaviors (Whiting, 1980). In this study, children from subsistence-based economies were more likely to display prosocial behaviors, one type of social behavior that they observed, than children from industrialized economies (Whiting & Whiting, 1975). One explanation for this observed difference is that the chances to participate in certain settings or activities vary by culture (de Guzman et al., 2008; de Guzman et al., 2005). Thus, the cultural context that children grow up within can be an important contributor to the social behaviors that they exhibit. Culture is also important in determining the values that are
socialized, and these values often contain social actions that benefit others (Whiting, Whiting, & Longabaugh, 1975).

Acknowledging the important role that culture can play in the future values and behavior, some existing research has been done in an attempt to understand the ways in which cultures vary based on the values that they typically endorse. In a large-scale study of participants from 40 countries, cultures were found to differ based on four major factors, including power distance, uncertainty avoidance, individualism, and masculinity (Hofstede, 1984). Power distance refers to what extent people with little power accept unequal power distributions in society. Uncertainty avoidance describes how well a society accepts ambiguity and vagueness about the future. Individualism is defined by emphasizing the desires of the independent individual over the needs of the collective group. Masculinity signifies a traditional sex role division in which men are taught to be assertive and strong whereas women are raised to be nurturers (Hofstede, 1984).

Research by Schwartz (1992) has contributed to the study of ways in which cultures differ by identifying 56 values by which cultures may vary. These values can then be gathered into the factors of collective and individual to describe a culture’s orientation towards interdependence versus focusing on the individual (Schwartz & Bilsky, 1987). Schwartz and Bilsky (1987) defined collective, commonly referred to as collectivism, as putting the interests of the group first, while individual, or individualism, refers to prioritizing a person’s individual interests rather than the needs of the group.

In order to understand how the cultural characteristics of collectivism and individualism relate to aspects of positive development, these constructs have been used in research on prosocial behaviors. In general, results from studies on prosocial behaviors have tended to
suggest that children from collectivist societies display more prosocial behaviors than children from individualist cultures (e.g., Madsen & Shapira, 1977; Munroe & Munroe, 1977; Knight & Kagan, 1977). While a culture’s description as collectivist or individualist has been linked to levels of prosocial behaviors, this does not yet describe the mechanism by which these broad cultural characteristics work to influence behavior at the individual level. In order to understand how cultural differences in prosocial behaviors emerge, one way to do so will be to examine socialization of such behaviors within one culture. In the present study, Latino-specific cultural socialization theories of prosocial behaviors will be examined.

One specific socialization framework that is related to understanding prosocial behaviors is the cultural value transmission model. Many parents see value transmission as an important goal and responsibility, and parents are considered to have an important role in children’s acquisition of values (see reviews by Baumrind, 1993; Hoffman, 1991). Thus, it is important to identify the socialization mechanisms through which value transmission occurs in the parent-child relationship.

When thinking about the actual practices that occur for children to adopt values, the idea of developmental affordances, or opportunities to practice the behaviors being taught via socialization, can be helpful. Developmental affordances facilitate children’s internalization of the socialization message, meaning that with time and experience they begin to adopt the behavior or value as part of who they are rather than relying on directives from others (Calderón-Tena et al., 2011). With increased experience from value-related developmental affordances, children may begin to create a cognitive set of rules about what is expected of them (Knight, Berkel, Carlo, & Basilio, 2011). That set of cognitive rules, which is a reflection of the cultural values being passed on to the child, can then be used as a guide for their behavior and an
adoption of their own values (Knight et al., 2011). In this paper, a unidirectional model of value transmission is presented, yet the author does not discount potential and valuable bidirectional influences from the child that are beyond the scope of the current project. In the field of prosocial behavior, some existing models of the development of prosocial behaviors include elements of socialization processes. However, there is a gap in the socialization literature that can be filled with models of culture-specific socialization processes and models for culture-specific values (Carlo et al., 2014).

**Latino Cultural Socialization Theories of Prosocial Behavior**

Prosocial behaviors are foundational to individuals in a well-functioning society (Eisenberg et al., 2006). Forms of prosocial behaviors can include: helping, sharing, comforting, and other related behaviors meant to alleviate the situation of another individual (Eisenberg et al., 2006). These actions are tangible ways in which people can come to each others’ aid and contribute to the well being of others (Eisenberg et al., 2006). From instrumental assistance, such as driving homebound parents to their medical appointments, to the emotional aid of soothing a neighborhood child who fell off their bicycle, people who display prosocial behaviors help others overcome difficulties. If it were not for the people who act prosocially, those in need would go without help. Prosocial behaviors are also correlated with positive outcomes for the actor, such as academic achievement and peer acceptance (see Eisenberg et al., 2006 for a discussion of correlates of prosocial behaviors). For these reasons, the study of predictors and correlates of prosocial behaviors is a valuable endeavor in order to determine how people learn to be prosocial, which could ultimately lead to promoting prosocial behaviors.
A Latino Cultural Value Transmission Model Emphasizes the Role of Ethnic Identity

Culture is important to consider when thinking about the development of prosocial behaviors because cultural values can impact the ways parents socialize prosocial behaviors for their children. In one model of Latino youth prosocial development, socialization processes and ethnic identity are seen as antecedents of prosocial behaviors (Knight, Bernal, & Carlo, 1995). This model takes into account the ability of culture to influence socialization agents’ own values, which in turn has an effect on the values that they teach the next generation. These values that children internalize are then expected to impact the child’s ethnic identity and value-based behaviors, such as prosocial behaviors. Thus, culture is important to consider in models of prosocial development because many antecedents of prosocial behaviors, such as ethnic identity, do not develop spontaneously. Instead, such predictors of prosocial behaviors can have roots in the broader cultural context, suggesting that culture is an important variable to take into account (Knight et al., 1995).

This socialization model is a mediational model with four components that predict the child’s social behavior: family background/structure/social ecology, socialization (from within and outside the family), ethnic identity (including the cultural values that they endorse), and sociocognitive development (Knight et al., 1995). The family background affects the values that are socialized, and the extent to which the child accepts these values contributes to his or her ethnic identity. The child’s ethnic identity is then expected to predict the child’s social behavior. Thus, the socialization process mediates the relation between family background and the child’s ethnic identity. In addition, the child’s ethnic identity is a mediator in the relation between the socialization process and the child’s social behavior. In this model, providing experiences to
promote cultural values is viewed as an important influence in whether the child adopts those values (Knight et al., 1995).

**Ecological-Stress Based Model of Latino Prosocial Development**

While the model previously described by Knight and colleagues (1995) emphasizes the role of the child’s ethnic identity, an ecological-stress based model of Latino cultural value transmission (Carlo & de Guzman, 2009) highlights the roles of the broader community and family contexts, as well as stress-related processes. In this model, receiving community and school contexts, characteristics of the family and the child, and life events are seen to be predictors of youth sociocognitive and socioemotive processes (Carlo & de Guzman, 2009). For example, receiving communities that have a large presence of Latinos may facilitate Latino youth retaining their culture of origin, including the cultural values that predict prosocial development. Also, having a supportive family, social support at school, and high levels of school connectedness are expected to foster prosocial development. Youth sociocognitive and socioemotive processes, including empathy, ethnic identity, moral reasoning, and stress appraisals, are expected to predict youth’s acculturative stress. Acculturative stress is included as a predictor of prosocial development. While acculturative stress is often considered a risk factor for negative outcomes, it could also positively predict some types of prosocial behaviors if prosocial behaviors are used to cope in response to stress. Though this model is depicted as unidirectional, the authors acknowledge possible bidirectional effects of acculturative stress and prosocial development (Carlo & de Guzman, 2009).

In sum, theories of Latino cultural value transmission that include cultural values, socialization processes and contexts, and prosocial behaviors are a good beginning to a more comprehensive understanding of cultural value transmission, yet the need for more research in
the developmental literature that includes cultural values, socialization processes and contexts, and prosocial behaviors specific to Latino culture exists. Cultural value transmission models, such as the models by Knight and colleagues (1995) and Carlo and de Guzman (2009) discussed in this section, provide a guide for future studies on how cultural values and socialization experiences could influence youth behavior.

**Proposed Model of Latino Parental Socialization of Civic Responsibility Values and Youth Prosocial Behaviors**

Considering prior research on cultural socialization of prosocial behaviors, as well as research on Latino cultural values and parenting practices, a model of Latino parental socialization of one traditional Latino cultural value, civic responsibility, is proposed to help explain Latino youth prosocial development. The model is depicted below in Figure 1. After the model is presented, prior findings are presented in support of the model.

The model begins with the mother’s cultural value endorsement predicting her value-related parenting practices. If a value is central to a person, it is expected that his or her behaviors, such as the ways he or she parents, would typically reflect the value. Next, the mother’s report of her value-related parenting practices is expected to predict her child’s perception of those parenting practices. If the mother reports that she parents her child in a certain way, the child would be likely to notice these behaviors taking place and to report them as well. The relation between the mother’s cultural value and the child’s perception of her parenting practices is expected to occur indirectly via the mother’s value-related parenting practices. This is because the child’s perception of the value-based parenting practices is predicted to be explained by the mother’s value, such that the influence of the mother’s value works through her value-based parenting practices.
In turn, the child’s perception of parenting practices is expected to predict his or her own value endorsement. If the child is being provided the opportunities and settings to learn about a value through the parenting practices that he or she observes, the child should be more likely to adopt the same value. The child’s value endorsement is seen as a predictor of prosocial behaviors, because the value of civic responsibility emphasizes helping other people. Thus, if a child reports that he or she holds these values, the child should be more likely to demonstrate the value through prosocial actions. Lastly, the child’s value endorsement is also included as a mediator in the relation between the child’s perception of parenting practices and prosocial behaviors. Thus, the child’s perception of value-based parenting practices is expected to predict prosocial behaviors via his or her own adoption of the value. In sum, the proposed model considers the cultural values that are part of the family background, the specific practices that occur to transmit these values as part of the socialization process, the child’s value endorsement, and the child’s prosocial behaviors.

![Diagram](image_url)

Figure 1. Proposed conceptual model of cultural value socialization predicting prosocial behaviors.
Common Latino Cultural Values Related to Prosocial Parenting

It is first important to consider which cultural values are typically endorsed in U.S. Mexican culture in order to understand how those values may affect value-based behaviors. In general, U.S. Mexican cultural values typically include a sense of obligation to family, an orientation toward the needs of the group, and traditional gender roles (Knight et al., 2010). In order to further investigate and develop a measure of the values associated with prosocial behaviors in Latino families, researchers conducted focus groups with Latino parents and a review of the literature to identify values that are commonly held by Latino parents (Carlo, Knight, McGinley, Hayes, & Shen, 2009). The measure that resulted from this project, the Prosocial Values Measure (PVM; Carlo et al., 2009) will be further discussed in the Methods section.

Cultural values endorsed by U.S. Mexican families that are commonly found in the literature include respect, religiosity, civic responsibility, and moral person (see Carlo et al., 2009; Knight et al., 2010). Familism refers to placing high importance on the needs of the family, helping family members, and maintaining close relationships within the family (Knight et al., 2010). Respect includes holding parents or elders in high esteem and acting towards them in a reverential manner (Knight et al., 2010). Religiosity, meaning a sense of spirituality, faith, and belief in a higher being, is also traditionally valued in U.S. Mexican culture (Knight et al., 2010). Traditional gender roles refer to men as heads of the household who work to support their family, while women fulfill the role of the caregiver and nurturer of the family (Knight et al., 2010). Civic responsibility reflects a sense of obligation to engage in charitable community activities, to act as a good neighbor, and to consider the well being of the social groups to which
the person belongs (Carlo et al., 2009). The moral person value refers to the beliefs and principles regarding such concepts as being good, honest, and kind (Carlo et al., 2009).

These values are commonly noted in the literature on U.S. Mexican culture, but one of these values, civic responsibility, may be especially relevant in the study of prosocial behavior because of its emphasis on being good citizens as part of the greater community and being helpful to others. The civic responsibility value will be the focus of the proposed project, and it is expected that a person who strongly endorses this principle should be likely to display this value via prosocial actions.

Civic responsibility is one cultural value that is included in the existing literature on Latino cultural values (Carlo et al., 2009). This value extends beyond a person’s duties within the family to include his or her role as a contributing citizen in the community. This sense of obligation to the broader community also coincides with the traditional U.S. Mexican cultural value of collectivism. Endorsement of this value is likely to encourage prosocial behavior. If this value is held as a principle that is important to the person, it is likely that they would act in accordance with their principle, such that people who value being a good neighbor or helping their community would be more likely to be attuned to the needs of others and to take those needs into account in decisions of how to act. A person who endorses civic responsibility would feel that it is important for them to help in their community, to be kind to their neighbors, and to act in accordance to the needs of their community. Thus, it is likely that a person who sees these as valuable traits would act in a helpful, prosocial manner.

Although civic responsibility is considered an important cultural value, the existing literature on the value of civic responsibility, especially with U.S. Mexican samples, remains underdeveloped. However, prior research on civic engagement, meaning volunteering, taking
part in community activism, and helping others in the community, highlights U.S. Mexican adolescents’ high rates of civic engagement (Perez, Espinoza, Ramos, Coronado, & Cortes, 2010). For example, results from a study of undocumented Latino high school seniors and college students demonstrated that 90% had been civically engaged in the past year (Perez et al., 2010). Another study also highlighted the large number of U.S. Mexican college freshmen who participated in civic activities in the prior year: 80% of first generation immigrants, 90% of 1.5 generation immigrants, and 89% of second generation immigrants (Stepick, Stepick, & Labissiere, 2008). Thus, although the research on the value of civic responsibility in U.S. Mexican samples is lacking, the actions that many U.S. Mexican adolescents report are in accordance with the value of civic responsibility.

**Latino Parenting Practices Related to Civic Responsibility Values**

Parents who endorse civic responsibility values may transmit them to their children through the value-related parenting practices that they display. Value-related parenting practices refer to actions that parents demonstrate and the ways that they instruct their children as part of the socialization process, and these practices are in accordance with the specific value. For example, if a parent sees civic responsibility as an important value, one way that they can teach their children about civic responsibility and encourage their children to adopt this value is by fostering participation in civic activities. A parent who values civic responsibility may encourage his or her child to enroll in charitable community activities, such as volunteering at a local food bank. Therefore, value-related parenting practices are the ways in which parents actively encourage their children to behave in correspondence with a specific cultural value.

Researchers note that in order to encourage children to display prosocial behaviors, it is important to offer them opportunities to practice these behaviors (de Guzman, Edwards, & Carlo,
2005). Also, prior research suggests that parents who endorse specific values are more likely to engage in parenting practices that foster such values in their youth (Calderón-Tena et al., 2011). In turn, children’s perceptions of these practices are expected to relate to their civic responsibility value endorsement and prosocial behaviors. Thus, value-related parenting practices may be a significant way in which parents transmit cultural values to their children.

Parents who strongly endorse civic responsibility values are likely to discuss these values with their children and to involve them in activities that encourage civic responsibility. These values are then expected to coincide with the occurrence of prosocial behaviors. If a person feels that the values of acting in ways that benefit their community is an important part of who he or she is, then it is probable that the person would demonstrate these values through prosocial behaviors toward other people. Although the civic responsibility value is expected to be associated with prosocial behaviors, direct evidence on these links and the intervening mechanisms between cultural values and prosocial behaviors is lacking.

Prior Research on Relations Among U.S. Mexican Culture and Prosocial Behaviors

Prior research on U.S. Mexican culture has suggested some cultural differences in prosocial behaviors when compared to European American samples. In studies where youth are given the opportunity to share resources, U.S. Mexicans demonstrated more prosocial behaviors than European Americans (e.g., Knight & Kagan, 1977). In addition, some studies have provided evidence that U.S. Mexican youth with higher levels of acculturation to the majority culture of the United States demonstrate less prosocial behaviors than U.S. Mexicans with lower levels of acculturation (de Guzman & Carlo, 2004). These results are suggestive of the need to include culture in models of the development of prosocial behaviors in order to better understand the processes through which differences in prosocial behaviors originate among cultures. These
earlier studies with U.S. Mexican youth have not examined different forms of prosocial behaviors, so considering the multidimensionality of prosocial behavior will be important for future research.

**Multidimensionality of Prosocial Behavior**

Prior research has noted the importance of evaluating prosocial behavior as a multidimensional construct, meaning that there are several factors that need to be taken into account in order to describe and understand each behavior (Padilla-Walker & Carlo, 2014). For example, prosocial behavior could manifest in different forms depending on the situation, such as helping someone suffering from heart attack in the middle of a large group of people versus making an anonymous financial donation. Thus, it is important to consider the context, motivation, target of behavior, and type of prosocial behavior. For example, prosocial behaviors can vary in different contexts, such as at school, in the home, or in the community among strangers. Prosocial behaviors can also have different underlying motivations, including selfish motivation, such as public recognition for a good deed, or selfless motivation, for the benefit of others without concern for possible rewards. Prosocial behaviors can be directed at different targets, such as family members, friends, or strangers (Padilla-Walker & Carlo, 2014).

Of the various dimensions of prosocial behavior, such as context, motivation, or recipient, the proposed project will include three types of prosocial behaviors, specifically emotional, dire, and compliant prosocial behaviors. Emotional refers to a tendency to help in situations in which the emotional nature of the situation is salient, such as taking care of the wounds of someone who has fallen (Carlo & Randall, 2002). Dire takes place in response to an emergency situation like a car accident or fire. Compliant prosocial behavior occurs in response
to being asked, such as when a mother asks a child to carry groceries into the house (Carlo & Randall, 2002).

One way that cultures may vary in the ways that they tend to demonstrate prosocial behaviors is the types of prosocial behaviors that they emphasize, such as prosocial behaviors in emotional contexts, emergency situations, or in selflessly-motivated forms. The Prosocial Tendencies Measure (PTM), designed by Carlo and Randall (2002), considers varied contexts, motives, and types of prosocial behaviors. The PTM measures six types of prosocial behaviors (emotional, dire, compliant, altruistic, public, and anonymous) across various contexts and considering different motives. Three of these six types of prosocial behaviors (emotional, dire, and compliant) have been conceptually linked to U.S. Latino culture because they are consistent with learning environments that emphasize familism values (Calderón-Tena et al., 2011). Thus, these three types of prosocial behaviors will be the focus for the current paper and will be used to create a latent factor of prosocial behavior.

Taking into account the importance of incorporating culture into models of prosocial behaviors, a question that follows is whether there are cultural group differences in prosocial actions. Although prosocial behaviors are demonstrated across the world, the ways in which they manifest in different cultures may vary. Cultural comparison studies on prosocial behaviors suggest the need to consider cultural differences in order to better understand the full scope of prosocial behaviors. In this pursuit, it is important to recognize that the goal is not to label cultures as more prosocial than others in general but rather to identify differences in the ways or contexts in which people from various cultures help, which may stem from differences in cultural values and socialization practices.
In order to investigate cultural differences in types of prosocial behavior, researchers have demonstrated the reliability and validity of the PTM for use with U.S. Mexican samples (see Armenta et al., 2011; Calderón-Tena et al., 2011; Carlo, Knight, McGinley, Zamboanga, & Jarvis, 2010). This line of research has helped illuminate predictors of prosocial behaviors in work with U.S. Mexican participants, such as a cultural comparison study by Carlo and colleagues (2011) to consider prosocial behaviors in U.S. Mexican and European American samples. Results were suggestive of mean differences at the group level such that U.S. Mexicans reported less altruistic prosocial behavior (i.e. helping without expectation of gains for the self), yet more public (i.e. helping when others are watching) and anonymous (i.e. helping without recognition) prosocial behavior, than European Americans (Carlo et al., 2011). However, more research is needed to identify which values help explain cultural differences in prosocial behaviors between U.S. Mexican and European American samples.

**Testing the Cultural Value Transmission Model**

One project designed to test the cultural value transmission model was the Family CARE Project. The goal of the Family CARE Project was to contribute to the understanding of the socialization process taking place for cultural values within U.S. Mexican families and to investigate how cultural values contribute to children’s outcomes, including social cognitions and prosocial behaviors. In this project, the researchers proposed that U.S. Mexican cultural values have an important part in teaching children to act prosocially (Carlo et al., 2014).

One test of the cultural value transmission model has been conducted for the U.S. Mexican cultural value of familism. Familism predicts prosocial behavior in that it encourages acting in ways that benefit the other people in one’s family. Calderón-Tena and colleagues (2011) found that mothers’ familism values predicted their familism-related parenting practices,
which predicted early adolescents’ perception of those parenting practices. Early adolescents’ perception of familism-related parenting practices in turn predicted their own familism values, which predicted their prosocial behaviors. Early adolescents’ perception of familism-related parenting practices also predicted their prosocial behaviors, and early adolescents’ familism values partially mediated the relation between their perceptions of familism-related parenting practices and their prosocial behaviors (Calderón-Tena et al., 2011).

Another study was recently conducted to test a U.S. Mexican cultural value transmission model of prosocial behaviors (Knight, Carlo, Mahrer, & Davis, in press). In this longitudinal study, mothers’ and fathers’ familism values positively predicted their use of ethnic socialization practices when their children were in 5th grade. Mothers’, but not fathers’, ethnic socialization practices were associated with an increase in adolescents’ ethnic identification at 7th grade, which positively predicted adolescents’ own familism values at 7th grade. Adolescents’ familism values in 7th grade were related to more emotional, compliant, and dire prosocial behaviors at 10th grade. The results from this study are suggestive of the important role of mothers in the socialization of U.S. Mexican adolescents’ prosocial behaviors, and this study was the first to investigate this role longitudinally among U.S. Mexican participants (Knight et al., in press).

Results from these tests of cultural value transmission models suggest including U.S. Mexican cultural values and parenting practices as contributors to subsequent youth prosocial behaviors. However, more research is needed in this area in order to draw firmer conclusions about the how this process occurs and to what extent cultural values other than familism relate to prosocial behaviors.
Research Questions and Hypotheses

The proposed study will extend prior work using the cultural value transmission model proposed by Knight and colleagues (1995) by testing the model with an additional cultural value. This study will be guided by the question of whether the cultural value transmission model holds for the cultural value of civic responsibility. It is expected that parents who endorse this value are inclined to socialize their children to adopt such values and do so through the parenting practices that they demonstrate.

This study will consider the following hypotheses that are reflected in the model:

1. Mothers’ civic responsibility value endorsement will be positively related to mothers’ value-based parenting practices.
2. Mothers’ value-based parenting practices will be positively associated with children’s perceptions of these value-based parenting practices.
3. Children’s perception of value-based parenting practices will be positively related to their own endorsement of the value.
4. Children’s endorsement of the civic responsibility value will be positively related to a prosocial behavior composite of three types of prosocial behavior conceptually linked to U.S. Mexican culture: dire, compliant, and emotional.
5. Mothers’ cultural value endorsement will be positively associated with children’s perception of value-based parenting practices, and this will occur indirectly via mothers’ value-based parenting practices.
6. Children’s perception of mothers’ value-based parenting practices will be positively related to children’s prosocial behavior, and this relation will work indirectly through children’s own cultural value endorsement.
CHAPTER 3: METHODOLOGY

Methods

This study was a secondary data analysis of the CARE data set from the Arizona Family CARE Project funded by the National Science Foundation to Gustavo Carlo (BNS 0132302) and George Knight (BNS 0132409). The aim of the Family CARE Project was to study the socialization of cultural values in U.S. Mexican families and how this process is related to elements of early adolescents’ social cognition and prosocial behaviors (Carlo et al., 2014). Participants were 204 children between the ages of 9 and 13 years old (\(M_{\text{age}} = 10.9\text{ years}, SD = .84\text{ years}\)) who self-identified as U.S. Mexican. Participants were U.S. Mexican students from public schools in Arizona (51% girls) and their mothers. The majority of the students were born to parents who were both from Mexico (54%). The rest of the sample was comprised of 29% Mexico-born children, and 7% were born to one parent from Mexico. Six percent of children had parents born in the United States and at least one grandparent born in Mexico, and 3% identified no parents or grandparents born in Mexico. Mothers’ ages ranged from 24 to 57 years old (\(M_{\text{age}} = 35.7\text{ years}, SD = 5.7\text{ years}\)). Parents’ mean education was 11 years for participants’ fathers and 10.5 years for mothers.

Procedure

Trained researchers in the Phoenix area collected data using structured interviews in participants’ homes. All children completed interviews in English, and mothers could choose between English or Spanish. Mothers and children each received $25 in compensation for their participation.
Measures

Youth and mothers completed all measures. Both mother and child completed the same measures of value endorsement and parenting practices. Children reported their own prosocial behaviors. These measures can be found in the Appendix.

Value Endorsement

Mothers and children completed the same measure of value endorsement tailored to their role. The Prosocial Values Measure (PVM) was designed to tap into prosocial values, such as civic responsibility, moral person, respeto, personalismo, religiousness, and familism, that are typically endorsed in Latino families (Carlo et al., 2009). The measure was designed by Carlo and colleagues (2009) by reviewing the literature on Latino values to identify the most commonly discussed prosocial values. The PVM is a 42-item measure to be answered on a 5-point scale in response to the question of “How important is it to your parent that you…” or “How important is it to you that your child…” depending on the responder’s role. The scale ranged from very unimportant (1) to very important (5). For the proposed study, the civic responsibility subscale will be used.

In this measure, civic responsibility refers to a sense of duty towards the broader community and to engage in charitable community activities. One example of an item for civic responsibility is “… do what you can to help neighbors who need help?” The civic responsibility subscale contains six items demonstrated to load together in a confirmatory factor analysis (CFA) of the measure (Carlo et al., 2009). In the CFA, the civic responsibility factor accounted for 22.46% of the variance. The five items loaded positively and significantly with the loadings ranging from .59 to .73 (Carlo et al., 2009). In the present study, the alpha for mothers’ reports was .79, and the alpha for children’s reports was .81.
Parenting Practices

Mothers and preadolescents also completed the same measure of parenting practices. The Prosocial Parenting Measure (PPM) was created to investigate the actual behaviors that parents use to provide their children with experiences that encourage prosocial behaviors (Carlo, McGinley, Hayes, Batenhorst, & Wilkinson, 2007). This measure was created by Carlo and colleagues (2007) by conducting a literature review and focus groups in order to determine parenting practices that are related to prosocial behavior. Six focus groups were done with White, English-speaking U.S. Mexican, and Spanish-speaking U.S. Mexican mothers with adolescent children. In the focus groups, mothers were asked to discuss the parenting practices that they use to promote their children’s prosocial behaviors. The measure includes 25 items and factors for five types of parenting practices. Factor loadings for the original measure ranged from .43 to .81. In this measure, mothers were asked, “How well does the following statement describe you?” and adolescents were asked, “How well does the following statement describe your mother?” Responses were measured using a 5-point scale ranging from “does not describe me/my mother at all” (1) to “describes me/my mother very well” (5).

For the current study, a new subscale of the PPM was created for using the cultural value transmission model with the civic responsibility value. Authors familiar with the Family CARE Project created the subscale to consist of items asking about parenting practices that are conceptually linked to the civic responsibility value. The civic responsibility subscale consists of six items. An example item from the child version of the subscale is “Your mother enrolls you in community organizations (e.g., church, food bank, animal shelter) to get you involved in charitable activities.” The alphas for the civic responsibility subscale were .87 for mothers’ reports and .80 for children’s reports.
Prosocial Behaviors

Preadolescents completed a self-report measure of their prosocial behaviors. Prosocial behaviors were measured using the Prosocial Tendencies Measure-Revised (PTM-R) designed by Carlo and colleagues (2003). The original measure was constructed by reviewing the literature on existing measures of prosocial behaviors, as well as by conducting focus groups with European American and U.S. Mexican parents to discuss their children’s prosocial behaviors (Carlo & Randall, 2002; Carlo et al., 2003). This 21-item measure addresses the multidimensionality of prosocial behavior by assessing six distinct forms of action: emotional, dire, compliant, anonymous, public, and altruism. Participants were asked to respond using a 5-point scale ranging from “does not describe me at all” (1) to “describes me greatly” (5).

This measure has been demonstrated as reliable and valid for use with U.S. Mexican early adolescents (Carlo et al., 2010). Carlo and colleagues (2010) conducted a CFA to evaluate the factor structure of the PTM-R and to test measurement equivalence for ethnicity (European American and U.S. Mexican) and gender (boys and girls). Results of the CFA indicated that the measure includes six unique forms of prosocial behaviors. The results of the factorial invariance tests suggested equivalence by ethnicity and gender. In addition, construct validity equivalence tests suggested good functional and scalar equivalence (Carlo et al., 2010). Thus, this measure can be seen as fitting for use with U.S. Mexican adolescents.

For the proposed study, the three types that have been conceptually linked to U.S. Mexican culture’s family-focused environments (see Calderón-Tena et al., 2011) will be of focus: emotional, dire, and compliant. Emotional prosocial behavior describes the tendency to help others when the situation is emotionally evocative, such as if the person is visibly injured and yearning for comfort (Carlo et al., 2010). An example item from the emotional subscale is “I
usually help others when they are very upset.” Dire prosocial behavior refers to helping that occurs in situations marked by crisis or emergency, and compliant prosocial behavior is when an individual helps in response to a request. An example item from the dire subscale is “I tend to help people when they are hurt badly,” and an example item from the compliant subscale is “I never wait to help others when they ask for it.” The alphas for the subscales were .76 for emotional prosocial behavior, .69 for dire prosocial behavior, and .51 for compliant prosocial behavior.
CHAPTER 4: RESULTS

Data Preparation

First, the data were examined for collinearity to determine that unique variables are not measuring the same construct (Kline, 2011). Collinearity was checked by looking at the squared multiple correlation between each variable and the other variables. The criterion used to determine collinearity was that if the squared multiple correlation was greater than .90 for a variable, this would be considered an indicator of multivariate collinearity. There was no evidence of collinearity when looking at the squared multiple correlations, so it was not necessary to eliminate variables or form a composite variable.

The raw data were also evaluated for univariate outliers. To do so, z score frequency distributions were examined for scores that are more than three standard deviations from the mean and box and whisker plots were visually inspected (Kline, 2011). No extreme scores were found in the data, so no responses were removed from the sample.

It was also necessary to check that the data meets the assumption of multivariate normality. Multivariate normality presumes that each univariate distribution is normal, so one way to assess multivariate normality is to look at univariate distributions for skew and kurtosis (Kline, 2011). To see whether a variable is skewed, frequency distributions and box-and-whisker plots were used to visually inspect skewness. No variables were noticeably skewed, so no transformations were conducted to alter the shape of the distribution. The data were also inspected for homoscedasticity of residuals as part of evaluating multivariate normality. This was done by examining scatterplots and histograms of the residuals to visually look for a uniform distribution of residuals (Kline, 2011). Residual distributions appeared acceptable in order to conduct the main analyses.
Preliminary Analyses

Descriptive statistics and correlations between variables were conducted using SPSS (see Table 1). Correlations revealed that mothers’ civic responsibility value endorsement was positively associated with mothers’ reports of civic responsibility parenting practices and children’s perceptions of civic responsibility parenting practices. Children’s reports of mothers’ civic responsibility parenting practices were positively correlated with mothers’ civic responsibility value endorsement, children’s civic responsibility value endorsement, and children’s prosocial behavior. Children’s civic responsibility value endorsement was also positively correlated with children’s prosocial behavior.

Table 1.
Mother and Child Reports of Values, Prosocial Parenting Practices, and Prosocial Behavior: Correlations and Descriptive Statistics (N = 204)

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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</thead>
<tbody>
<tr>
<td>1. Mother civic responsibility</td>
<td>-</td>
<td>.48**</td>
<td>.14*</td>
<td>.08</td>
<td>-.03</td>
<td>.04</td>
</tr>
<tr>
<td>value endorsement</td>
<td></td>
<td></td>
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<tr>
<td>2. Mother report of civic</td>
<td></td>
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<tr>
<td>responsibility parenting practices</td>
<td></td>
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<tr>
<td>3. Child perception of civic</td>
<td></td>
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<tr>
<td>responsibility parenting practices</td>
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<tr>
<td>4. Child civic responsibility</td>
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<tr>
<td>value endorsement</td>
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<tr>
<td>5. Child prosocial behavior</td>
<td></td>
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<tr>
<td>6. Child gender</td>
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<table>
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<th>Variables</th>
<th>1</th>
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<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>3.73</td>
<td>2.84</td>
<td>3.25</td>
<td>3.78</td>
<td>3.83</td>
<td>-</td>
</tr>
<tr>
<td>SD</td>
<td>.54</td>
<td>1.05</td>
<td>.90</td>
<td>.71</td>
<td>.72</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. p** < .01, p* < .05
Post-hoc Power Analysis

A post-hoc power analysis was conducted using a power calculator designed by Preacher and Coffman (2006) for use with R software (R Development Core Team, 2008). This calculator uses the alpha, degrees of freedom for the model, sample size, null RMSEA, and alternative RMSEA to compute the power post-hoc for the model. Using an alpha of .05, degrees of freedom of 13 from the model, sample size of 204, and null RMSEA of .08 (MacCullum, Browne, & Sugawara, 1996), the results are as follows. Further calculations for necessary sample size indicated that a sample size of 228 would be needed to have power of .8. The limitations of calculating power post-hoc and the sample size in the present study will be discussed in the limitations section.

Main Analyses

Structural equation modeling (SEM) using path analysis was done using Mplus software (Muthén & Muthén, 2010) to test the conceptual model presented in Figure 1. Full information maximum likelihood estimation was used to account for missing data (Muthén & Muthén, 2010). Bias-corrected bootstrapping was used to calculate parameter estimates and test the indirect effects (Muthén & Muthén, 2010). The exogenous variable was mothers’ value endorsement, and the endogenous variables were mothers’ reports of prosocial parenting practices, children’s reports of prosocial parenting practices, children’s value endorsement, and children’s prosocial behavior.

Whether the model is identified or not was determined by examining the degrees of freedom for the model (Kline, 2011). If the degrees of freedom for a model are greater than 0, the model is identified and can be used to estimate the model parameters. Model fit indices were examined based on the following criteria. If the chi-square value is close to or equal to zero, this
can be interpreted as the model fitting the data well (Kline, 2011). The Root Mean Square Error of Approximation (RMSEA) was also calculated to check the model fit. If the RMSEA is less than .05, the model can be considered to have good fit (Kline, 2011). The Comparative Fit Index (CFI) was used as another indicator of model goodness of fit. If the CFI is .95 or greater, the model can be seen to have acceptable fit (Kline, 2011).

The model was tested both as a single group model and as a multigroup model by gender. A nonsignificant chi-square difference test between the two models suggested that a single group model should be used. For the multigroup model by gender with 26 degrees of freedom, the model chi-square was 31.93, and the RMSEA was .05 (90% confidence interval [.00, .10]). The CFI for the model was .98, the TLI was .98, and the SRMR was .06. The following results are for the final single group model. The degrees of freedom were 13 for the single group model. Thus, the model was identified and could be used to estimate model parameters and produce model fit indices using path analysis. Children’s gender was included as a control variable in the model. A latent factor for children’s prosocial behavior was created using the three types of prosocial behavior conceptually linked to U.S. Mexican culture (emotional, dire, and compliant). Standardized factor loadings for the prosocial behavior composite were .80 for emotional prosocial behavior, .83 for dire prosocial behavior, and .56 for compliant prosocial behavior.

The civic responsibility model fit the data well, and a complete listing of model fit indices can be found in Table 2. The model chi-square was 17.42, and the RMSEA was .04 (90% confidence interval [.00, .09]). The CFI for the model was .99, the TLI was .97, and the SRMR was .04. Based on these model fit indices, the model fit the data well.
Table 2. Model fit indices and model comparisons.

<table>
<thead>
<tr>
<th>Single Group Path Model Fit Controlling for Gender</th>
<th>( \chi^2_{ML} )</th>
<th>df</th>
<th>CFI</th>
<th>RMSEA</th>
<th>TLI</th>
<th>AIC</th>
<th>BIC</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17.42</td>
<td>13</td>
<td>.99</td>
<td>.04</td>
<td>.97</td>
<td>2826.32</td>
<td>2912.59</td>
<td>.04</td>
</tr>
</tbody>
</table>

Results for the single group path analysis for civic responsibility are as follows (see Figure 2 for standardized path estimates). Mothers’ civic responsibility value endorsement significantly predicted their civic responsibility parenting practices, and their civic responsibility value endorsement significantly predicted children’s perceptions of mothers’ civic responsibility value endorsement. Children’s perceptions of mothers’ civic responsibility parenting practices were significantly related to children’s civic responsibility value endorsement and to children’s prosocial behavior. Children’s civic responsibility value endorsement significantly predicted children’s prosocial behavior. Mothers’ civic responsibility parenting practices were not significantly related to children’s perception of parenting practices. Bootstrapping tests yielded a significant indirect effect of children’s perceptions of parenting practices on children’s prosocial behavior via children’s value endorsement (\( \beta = .13, p<.001 \)).

Figure 2. Final partially constrained model with significant standardized path estimates.

Note. \( p^{***}<.001, p^{**}<.01 \)
The nonsignificant path is indicated with a dotted line.
CHAPTER 5: DISCUSSION

Overall, the results from this study provide partial support for the proposed cultural value transmission model for civic responsibility in an early adolescent U.S. Mexican sample. This study extends the literature on U.S. Mexican cultural value transmission by demonstrating that U.S. Mexican mothers’ endorsement of civic responsibility values is associated with children’s perceptions of parenting practices consistent with such values, their endorsement of such values, and subsequent prosocial behaviors. Moreover, the findings were consistent for both U.S. Mexican boys and girls. Therefore, consistent with ideas from sociocognitive theory (Bandura, 1986) and the guided learning domain (Grusec et al., 2014), these findings demonstrate the importance of mothers’ value endorsements and children’s perceptions of parenting practices in predicting children’s cultural value endorsement and prosocial behavior. Children’s perceptions of value-related parenting practices were indirectly related to children’s prosocial behavior through children’s cultural value endorsement. Although previous research yields evidence for similar mechanisms regarding familism-related parenting practices (see Calderón-Tena et al., 2011) and parents’ familism values and ethnic socialization (see Knight et al., in press), this is the first study to demonstrate that U.S. Mexican parents can also engage in practices that may promote civic responsibility values and related prosocial behaviors.

As expected, mothers’ cultural value endorsement was positively related to their value-related parenting practices and directly related to children’s perceptions of mothers’ value-related parenting practices. This suggests that mothers who strongly endorse the value of civic responsibility utilize parenting practices that are in accordance with their value. Moreover, children who perceive high levels of maternal practices used to foster civic responsibility also more strongly subscribe to the value of civic responsibility. These findings are consistent with
Grusec and Goodnow’s (1994) notion regarding the importance of children accurately interpreting parental moral messages as part of moral socialization. In the present study, children seemed to be taking account of the prosocial parenting practices that their mothers are using, and this perception in turn was related to children’s value endorsement and prosocial behavior. Thus, the messages that children take away from socialization experiences with their parents about prosocial topics help predict the internalization of cultural values that are positively related to children’s prosocial behavior.

The hypothesis that children’s perceptions of value-based parenting practices would be positively associated with children’s value endorsement was supported. This suggests that the messages that children are perceiving their parents to send through their parenting practices seem to have a valuable role in predicting children’s own values associated with those practices. These findings emphasize the importance of parenting practices in cultural value transmission and coincide with existing theories in the socialization literature. This finding is also complimentary to ideas from guided learning domain theory (Grusec et al., 2014), which states that through the opportunities that parents provide their children (also part of the developmental niche; see Super & Harkness, 1986), children can start to internalize the values being taught by their parents.

Relatedly, the hypothesis that children’s perceptions of value-based parenting practices would be positively associated with children’s prosocial behavior and that there would be an indirect effect through children’s own cultural value endorsement was supported. Thus, it appears that the adoption of the civic responsibility cultural value that is taught via civic responsibility-related parenting practices is one way in which parenting practices foster prosocial behavior. This suggests that the mechanism by which children’s perceptions of value-related
parenting practices plays a role in children’s prosocial behavior is via children’s acceptance of
and endorsement of the value being taught in the guided learning domain (see Grusec et al.,
2014) and that these experiences that parents provide their children play an important role in
teaching cultural values that are related to prosocial outcomes. Furthermore, the findings
highlight the importance of civic responsibility values as a relevant predictor of youth prosocial
behaviors. Future research is needed to verify these findings, and models of prosocial
development should account for the role of civic responsibility values in predicting prosocial
behaviors.

Unexpectedly, in the current study, perceived maternal practices were not significantly
related to children’s perceptions of the same maternal practices. Calderón-Tena and colleagues
(2011) tested a similar model focusing on familism values using the same sample and found that
mothers’ perceptions of familism parenting practices were associated with children’s
perceptions. It is possible that familism is a more salient value for this U.S. Mexican sample and
that mothers and/or children were more aware of or intentional about the familism-related
parenting practices that they use. In the literature, it has been found difficult to obtain significant
relations between mother and child report measures, with levels of agreement ranging from
nonsignificant to moderate (see Gonzales, Cauce, & Mason, 1996). Gonzales and colleagues
(1996) discuss that mothers often have more positive views of their parenting than daughters.
Interestingly, in the current study, children reported higher levels of civic responsibility
parenting practices than mothers reported. In this case, perhaps mothers are encouraging civic
responsibility through their parenting practices, but their youth may not perceive their parents’
actions as relevant to promoting civic responsibility. Grusec and Goodnow (1994) noted the
importance of children’s ability to understand their parents’ messages (accurate perception) as
one necessary predictor of moral internalization. However, it is valuable to note that youth who reported mothers’ frequent use of civic responsibility parenting practices were more likely to endorse such values and that this predicted subsequent behaviors. These findings suggest the value of accounting for children’s perceptions of occurrences within the socialization process, as the meaning that they take away from the experience might be a key predictor for later behavior.

**Strengths and Limitations**

Although tests of this model had been previously conducted for the familism value, the present study extends the literature on U.S. Mexican cultural value transmission by considering the role of civic responsibility value as a predictor of positive social behaviors. An additional benefit of this study was that it tests a socialization mechanism occurring among a path of variables in order to better understand various aspects of the socialization process of value transmission. Both mothers’ and children’s reports were included in the model, which made it possible to examine the perceptions of both mothers and children of the parenting practices that are occurring within their relationship.

While this study had strengths, there are also some limitations to note. The present study was a cross-sectional design, which means that neither causality nor the direction of relations can be established with certainty. For example, it is unknown whether or not this mechanism may change over time. Moreover, the present model could be tested with a reverse causal model for paths that make theoretical sense, such as testing children’s prosocial behaviors as predictors of their value endorsement. To address these causality issues, longitudinal studies, including cross-lagged designs, should be conducted. The existing sample size in the data set also limited the power of the study. It is possible that analyzing the same models with a larger sample would yield different results. This limitation highlights the need for replication of this model test with
larger samples. In addition, this study only included mothers (and children), yet fathers might also play an important role in socialization of cultural values and prosocial tendencies. Future studies examining fathers’ socialization influences are needed. An additional limitation is that the data came from self reports by mothers and children, so there is the possibility of social desirability affecting the results, especially considering these measures ask about values and behaviors with positive connotations. However, because data from multiple reporters was used in the model, concerns of social desirability and shared method variance are somewhat reduced. In future studies, observational measures could potentially be added, such as behavioral observations of prosocial behavior, to corroborate the self report findings. The current study, as well as future studies incorporating more of these recommendations, can make valuable contributions to the socialization literature in order to have a better understanding of U.S. Mexican cultural value transmission.

**Conclusions**

This study highlights the importance of investigating the underlying socialization processes for cultural value transmission and did so for a U.S. Mexican sample. Results suggest that one mechanism by which cultural value of civic responsibility is passed to the next generation is through the prosocial parenting practices that mothers use and that this is one cultural value that is related to prosocial behavior. These findings support the cultural value transmission model proposed by Knight and colleagues (1995), as well as literature on the importance of socialization agents in child development (e.g., Bandura, 1986; Grusec et al., 2014; Grusec & Goodnow, 1994) and on culture-related mechanisms in children’s social development (e.g., Super & Harkness, 1986). This study extends the literature by investigating value transmission for the civic responsibility cultural value in a sample of U.S. Mexican
adolescents and suggests the need for more research on cultural values and the parenting practices associated with prosocial behaviors in ethnic minority populations.
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Appendix

Measures

Prosocial Values Measure (PVM)

(Carlo et al., 2009)

Civic Responsibility Subscale

1. Do what you can to help families that are hungry?

2. Understand that sometimes you must donate your own things in order to help others?

3. Help the school raise money?

4. Understand that volunteering in your community is more important than most other activities?

5. Participate in neighborhood drives (collecting food or clothes)?

6. Do what you can to help neighbors who need help?
Parenting Practices Measure (PPM)

(Carlo et al., 2007)

Civic Responsibility Subscale

1. You see your mother give or donate to people in need.

2. Your mother enrolls you in community organizations (e.g. church, food bank, animal shelter) to get you involved in charitable activities.

3. Your mother takes you with her when she volunteers at a charitable organization (e.g. church, clubs).

4. Your mother signs you up to participate in fundraising activities for charities.

5. Your mother and you get involved in charitable activities (e.g. fundraisers) together.

6. Your mother enrolls you in organizations (boy and girl scouts, 4-H clubs) that promote moral values.
Prosocial Tendencies Measure-Revised (PTM-R)

(Carlo et al., 2003)

Emotional Subscale

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.

Dire Subscale

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.

Compliant Subscale

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