



Empathy and Sympathy as Mediators Between Parental Inductive Discipline and Prosocial Behavior in Colombian families

Empatía y simpatía como Mediadores entre la Disciplina Inductiva Parental y la Conducta Prosocial en Familias Colombianas.



Research

Ivón Paola Guevara ^a *✉, Victoria Eugenia Cabrera ^a, Martha Rocío Gonzalez ^b, José Vicente Devis ^b

^a Instituto de la Familia, Universidad de la Sabana, Bogotá, Colombia.

^b Departamento de Psicología, Universidad de la Sabana Bogotá, Colombia.

ARTICLE INFO

ABSTRACT

The objective of this study was to evaluate the mediation of adolescent empathy and sympathy between parental inductive discipline and adolescent prosocial behavior, as well as to understand whether there are differences between male and female adolescents regarding moral emotions and prosocial behavior and differences between fathers and mothers regarding inductive discipline. The study enrolled 717 participants: 239 fathers, 239 mothers, and one adolescent child of each paired mother and father. Two models of mediation were undertaken, one for empathy and another for sympathy, both resulted statistically significant. Significant differences were also found between male and female adolescents in empathy but not in sympathy or prosocial behavior; specifically, female adolescents tended to be more empathetic than male adolescents. We suggest future studies focus on prosocial behavior associated with parental socioeconomic and educational levels.

Article history:

Received: 21-10-2014

Revised: 15-02-2015

Accepted: 30-04-2015

Key words:

Empathy, sympathy, adolescence, prosocial behavior, inductive discipline.

RESUMEN

El objetivo de este estudio fue evaluar la simpatía y la empatía en adolescentes como mediadores entre la disciplina inductiva en los padres y el comportamiento prosocial en los adolescentes, así como conocer si existen diferencias entre hombres y mujeres adolescentes en las emociones morales y el comportamiento prosocial y las diferencias entre padres y madres en cuanto a la disciplina inductiva. Este estudio contó con 717 participantes: 239 padres, 239 madres y un hijo adolescente por cada pareja de padres. Se llevaron a cabo dos modelos de mediación, uno para empatía y otro para simpatía, ambos resultaron estadísticamente significativos. También se encontraron diferencias significativas entre hombres y mujeres adolescentes en empatía pero no en la simpatía o comportamiento prosocial; concretamente, mujeres adolescentes tienden a ser más empáticas que los hombres adolescentes. Sugerimos que futuros estudios se enfoquen en comportamiento prosocial asociado con niveles socioeconómicos y de educación.

Palabras clave:

Empatía, simpatía, adolescentes, conducta prosocial, disciplina inductiva.

* **Correspondencia a:** Ivón Paola Guevara, Instituto de la Familia. Address: Campus del Puente del Común, Km. 7, Autopista Norte de Bogotá. Chía, Cundinamarca, Colombia. Phone: +57.1. 861 5555, E mail: ivon.guevara@unisabana.edu.co



| ISSN printed 2001-2084 | ISSN electronic 2001-2079 |

1. INTRODUCTION

At present, different contexts acknowledge the importance of promoting prosocial behavior (Cabrera, González, & Guevara, 2012; Pichardo, Justicia, & Fernández-Cabezas, 2009; Ramaswamy & Bergin, 2009; Romano, Tremblay, Boulerice, & Swisher, 2005). In this sense, the family is recognized as the first socializing scenario, with the ability to inhibit or facilitate the development of emotions and prosocial behavior and of inhibiting problematic behavior at every age of development in children (Bush & Peterson, 2008; Cuervo, 2010; Guevara, Cabrera, & Barrera, 2007; Goodnow, 2010).

Regarding the influence of parents on the development of prosocial behavior, the emphasis placed by a number of different studies on parental practices has been notable (Dekovic, Janssens, & Van As, 2003; Dodge & Pettit, 2003; Eisenberg & Fabes, 1998; Pichardo et al., 2009; Richaud de Minzi, 2009; Richaud de Minzi, Lemos, & Mesurado, 2011). Some studies have highlighted inductive discipline as a particularly relevant parental practice that favors the development of moral emotions, such as empathy and sympathy, which are necessary for prosocial behavior (Eisenberg & Sheffield, 2004; Guevara et al., 2007; Mestre, Tur, Samper, & Latorre, 2010; Oliva, Parra, & Arranz, 2008).

In fact, some studies have shown that moral emotions are the best predictor of prosocial behavior (Cabrera & Guevara, 2007). Still, there have been few studies that have accounted for the systematic and controlled influence of inductive discipline and of the primary emotional factors referenced in the literature — empathy and sympathy — on prosocial behavior, as well as on the shared influence of these two moral emotions during adolescence (Barr & Higgins-D'Alessandro, 2009; Eisenberg, 2006; Eisenberg & Fabes, 1990).

In contrast, there has been greater empirical evidence on child-rearing practices, especially disciplinary practices, in the context of transgression. Still, few studies have reviewed child-rearing practices related to prosocial behaviors. Additionally, research on the mediating role of sympathy on the relationship between child rearing and prosocial behavior has only recently emerged, especially in adolescents (Carlo, McGinley, Hayes, Batenhorst, & Wilkinson, 2007).

In this context, aggression in adolescents is considered a social problem (Crick & Pepler, 2007; Olweus, 1993, Salmivalli, Lagerspetz, Björkqvist, Österman & Kaukiainen, 1996) and a public health problem in the majority of the World's countries

(Organización Mundial de la Salud, 2002). In Colombia, interpersonal aggression between adolescents, according to some authors, does not seem to have a direct relationship with Political Violence and the Armed Conflict of the Country, this may explain why this phenomenon has received much less attention (Chaux, 2002). Nevertheless, studies have shown that adolescent aggression is present in different ways, at different ages, and has negative long term consequences (Crick, Casas & Mosher, 1997; Gladstone, Parker & Malhi, 2006; Olweus, 1993). Following Cavell (2000), the widespread of aggressive behavior seems to be the predecessor of the progression toward antisocial behavior in adulthood. The comprehension of prosocial behavior thus allows the development of prevention and intervention strategies of aggressive behavior which may allow curbing their trajectories towards young adulthood.

In this line of thought, this study analyzed whether empathy and sympathy play a mediating role in the relationship between inductive discipline and prosocial behavior. As an additional interest, the explanatory value of empathy and sympathy for prosocial behavior was analyzed, given that empirical findings have differed in recognizing which of these two moral emotions contributes more to explaining prosocial behavior (Čavojsková, Belovičová, & Sirota, 2011; Mestre, Samper, Tur, Cortés, & Nácher, 2006).

Similarly, the study considered the importance of analyzing whether the exercise of inductive discipline differs between fathers and mothers, given that while in the literature the relationship between parental discipline and prosocial behavior is recognized, few studies have delved into the differences between fathers and mothers (Calvete, Gamez-Gaudix, & Orue, 2010).

In contrast, the study also examined the differences between adolescents (male and female) regarding moral emotions and prosocial behavior. This aspect is important, as it provides information that allows for the determination of whether sex is a significant variable in understanding prosocial behavior and moral emotions.

1.1 Prosocial Behavior and Moral Emotions

Prosocial behavior is defined as voluntary conduct that benefits other people (Barr & Higgins-D'Alessandro, 2009; Eisenberg & Fabes, 1998; Ramaswamy & Bergin, 2009; Richaud de Minzi et al., 2011). Evolutionary studies have shown that prosocial responses become relatively stable during the last years of childhood and the first years of adolescence,

as cognitive and emotional changes stimulate this behavior (Caprara, Steca, Zelli, & Capanna, 2005). Thus, changes in adolescence, related to youth development, have been conceptually and empirically associated with the development of prosocial behavior (Barr & Higgins-D'Alessandro, 2009; Eisenberg, 1990).

Recent studies have analyzed the moral emotions that are considered to be facilitators of prosocial behaviors and inhibitors of problematic behaviors (Carlo, Knight, McGinley, & Hayes, 2011; Garner, 2012; Maibom, 2012). The role of moral emotions such as empathy and sympathy in social and moral development is a topic that has interested researchers; nevertheless, the literature on this topic has been scarce (Eisenberg, 2000; Hoffman, 2002; Padilla-Walker & Christensen, 2011; Richaud de Minzi et al., 2011). Some empirical studies have shown that emotions such as guilt and sympathy appear to motivate prosocial behavior and play an important role in their development (Hoffman, 1998; Richaud de Minzi et al., 2011). Thus, empathy for a victim and the awareness of what has caused pain in another person, as a result of shame, both result in actions to repair conduct (Eisenberg, 2000). Thus, empathy and sympathy would also be of interest as emotions that can lead people to help others and avoid hurting them.

In contrast, the literature has also shown that differences in prosocial behavior according to sex have been well documented. Nevertheless, the results have tended to be contradictory; that is, some of the results have shown greater levels of prosociality in women (Eisenberg, Cumberland, Guthrie, Murphy, & Shepard, 2005; Navarro, 2004; Sánchez-Queija, Oliva, & Parra, 2006; Sureda, García-Bacete, & Monjas, 2009), while others have not shown significant differences in prosocial development based on sex (Etxebarria, Apodaca, Fuentes, López, & Ortíz, 2009).

1.2 Moral Emotions: Empathy and Sympathy

Moral emotions are thought to be facilitators of prosocial behaviors (Eisenberg & Strayer, 1992) and inhibitors of problematic behaviors (Davis, 1996). However, moral emotions have not received much attention, and this deficiency is worth noting if one considers that emotions are increasingly important as motivators of moral action (Eisenberg, 2000; Villegas, 2002). Thus, empathy and sympathy are also of interest as emotions that can lead people to help others and avoid hurting them (Carlo, McGinley, Hayes, & Martínez, 2012).

Empathy has been defined by different authors as an emotional reaction elicited by and congruent with the emotional state of another person and that is identical or very similar to what the other person is feeling or may be expected to feel (Eisenberg, Zhou, & Koller, 2001; Holmgren, Eisenberg, & Fabes, 1998; Preston, 2007; Sánchez-Queija et al., 2006). Similarly, Eisenberg and Strayer (1992) reported that empathy involves sharing the emotion perceived in another person, a vicarious affective response that involves feeling with another person.

Beyond involving a process of emotional recognition of another person, empathy also involves participation in the affective states of others. It not only recognizes but also shares in the other's affective state (Ortiz, Fuentes, & López, 2003).

Some studies have shown an inverse relationship between empathy and aggression (Caprara & Pastorelli, 1993; Cepeda, 2003; Maibom, 2012; Miller & Eisenberg, 1988; Richaud de Minzi, 2008). Other studies have shown a direct relationship between empathy and prosocial behavior (Carlo, Knight et al. 2011; Geng, Xia, & Qin, 2012; Panfile & Laible, 2012; Richaud de Minzi, 2008; Richaud de Minzi et al., 2011). Other researchers have found that female adolescents show higher scores in empathy than male adolescents (Garaigordobil, Maganto, Pérez, & Sansinenea, 2009; Retuerto, 2004; Sánchez-Queija et al., 2006; Skoe, Cumberland, Eisenberg, Hansen, & Perry, 2002).

Eisenberg (2000), in contrast, defined sympathy as "an emotional response stemming from the apprehension or comprehension of another's emotional state or condition, which is not the same as what the other person is feeling (or is expected to feel) but consists of feelings of sorrow or concern for the other" (p. 671).

Hoffman (2002) recognized two types of affliction: one is empathetic, and the other is sympathetic; the latter form of affliction is characterized by feelings of worry toward the affliction of another person that involve helping the victim. This type of affliction, which Hoffman (2002) called sympathetic affliction, coincides with Eisenberg's (2000) definition of sympathy. Thus, when empathetic affliction (empathy) is accompanied by cognitive consciousness of others, it can awaken sympathetic affliction (sympathy).

According to Eisenberg et al. (1998), what stands out about empathy is that it is an emotional reaction to the emotional condition or state of another person, while sympathy is made up of feelings of

worry or sorrow that are felt for another person as a reaction to his or her emotional state or condition. Moreover, these authors noted that sympathy involves the cognitive processes of perspective-taking, and thus, this emotion involves worry for another person based on recognition of the emotional state or situation of this other person (Eisenberg et al., 1998).

In some studies, such as those of Carlo, Raffaelli, Laible, and Meyer (1999), it has been shown that sympathy is a multidimensional emotion, that is, it possesses cognitive and emotional components and has been negatively associated with aggressive behaviors. Recent studies have shown that sympathy is the strongest moral emotion associated with prosocial behavior (Carlo, Mestre, Samper, Tur, & Armenta, 2011; Maibom, 2012; Sánchez-Queija et al., 2006). Additionally, different studies have shown that sympathy mediates the relationship between parents as moral models and the prosocial behavior of their children (Velásquez, Barrera, & Bukowski, 2006), and these studies have also shown that there are greater levels of sympathy in women than in men (Sureda et al., 2009).

Eisenberg (2000) showed that the development of sympathy in children is correlated with: (a) parental sympathy; (b) parents allowing their children to express negative emotions that do not hurt others; (c) low levels of hostile emotions in the home; (d) parental practices that help children with their negative emotions; and (e) parental practices that help children focus on understanding others' emotions. Thus, regarding parental practices, it would be expected that some practices would be associated with the development of moral emotions, and it should be possible to attribute this development more to certain practices than to others.

1.3 Parental Practices, Inductive Discipline and Prosocial Behavior

This study uses the definition by Dekovic et al. (2003) regarding parental practices as mechanisms through which parents have their children follow rules and norms, as well as how parents supervise the activities of their children.

Different studies have found that parental practices are systematically associated with prosocial behavior (Eisenberg & Fabes, 1998; Garner, 2012; Hoffman, 2000; Krevans & Gibbs, 1996; Padilla-Walker, Carlo, Christensen, & Yorgason, 2012). These studies have shown that parents that transmit support and affection to their children, develop communication in a family environment, establish family norms, and meet these norms by exercising authority and using

inductive reasoning as a disciplinary technique, are more likely to raise sociable, cooperative, and autonomous children. The use of criteria and inductive discipline is correlated with prosocial behavior and, concretely, with the internalization of morals and with empathy (Garner, 2012; Krevans & Gibbs, 1996; Mestre, Tur, Samper, Nacher, & Cortés, 2007).

Inductive discipline, according to Eisenberg and Fabes (1998), consists of providing explanations or reasons to a child when some change in his or her conduct is necessary. Hoffman (1983) showed that inductive discipline could promote moral development because it establishes an optimum level of learning. Hoffman also showed that inductive messages are internalized as experiences because adolescents play an active role in processing information.

Eisenberg and Murphy (1995) added that inductive discipline is a parental practice associated with the development of prosocial behaviors, and one of the reasons they offered for this relationship was that parents that emphasize their reasoning to their children regarding the feelings of others or the harm done to another might promote the ability in the children to take the perspective of others.

Parents use induction or reasoning to generate the consideration of others in their adolescents, as well as their desire to be mature and their abilities to understand and voluntarily accept the perspectives of their parents (Garner, 2012). The purpose of induction is to help the adolescent to understand why rules are necessary, why poor conduct is not acceptable, how his or her behavior affects others, and how his or her behavior could be more acceptable.

The explanation given by Hoffman (2002) for the relationship between inductive discipline and prosocial development was the possibility of promoting the empathetic tendency and the perspectives of others in children. That is, discipline allows one to induce empathetic affliction, and it creates the possibility that the child will be aware of the harm that his or her behavior could cause another person.

Recent studies have found that mothers report more frequent use of inductive discipline than fathers (Cabrera & Guevara, 2007; Garner, 2012; Tur, Mestre, Samper, & Malonda, 2012). Other studies have shown that sympathy mediates the relationship between parental induction and prosocial behaviors (Carlo, Mestre et al., 2011).

According to this theoretical and empirical background, this study proposed the following research questions.

Are there significant differences between fathers and mothers regarding the practice of inductive discipline?

Are there significant differences between male and female adolescents regarding their moral emotions and prosocial behavior?

Are there relationships among parental inductive discipline, moral emotions, and prosocial behavior in adolescents?

How well does inductive discipline by fathers and mothers and the moral emotions held by adolescents explain the variability in the prosocial behavior of children?

Do moral emotions mediate the relationship between inductive discipline (fathers and mothers) and the prosocial behavior of adolescents (male and female)?

2. METHOD

2.1 Participants

The sample in this study consisted of 717 Colombian participants grouped in the following way: 239 fathers, 239 mothers, and one of the adolescent children of these matched couples (239 in total). The average age of the fathers was 46 years old, with an age range of 28 to 65. The average age of the mothers was 43 years old, with an age range between 27 and 60. The average age of the adolescent children was 15.17 years old, with a range of 12 to 18 years. One hundred twenty male adolescents and 119 female adolescents participated.

Families were arranged into three levels: high, medium and low educational level according to what CEPAL (2004) has denominated as "household educational climate". The household educational climate refers to the educational and cultural resources with which parents can support their children during their different learning stages, and the value that the household assigns to educational achievement and the demands for education services in general. Of the 239 families, 34.3% (82 families) were of a high educational level, 30% (69 families) medium, and 31% (74 families) were in the low level.

2.2 Instruments

With the aim of increasing the possibility that the information found would be reliable, the experiment relied on the reports of people who experienced or practiced each of the variables of the study (Dekovic et al., 2003). In the case of fathers and mothers, information was gathered on the practice of inductive discipline with their children, and in the case

of the adolescents, the subjects were asked about their experiences with moral emotions and prosocial behaviors.

Inductive discipline was evaluated using an eight-question questionnaire designed by Barrera (2003), which evaluated reasoning on the part of parents that constituted an attempt to call the adolescent's attention to the consequences of his or her actions on others. Fathers and mothers responded using a Likert-type scale, on which 1 indicated "never," and 5 indicated "always." The following is an example of the questions: "When I set rules for my son/daughter, I explain why." The instrument reported a Cronbach's alpha of 0.88 in the father's version and Cronbach's alpha of 0.86 in the mother's version.

Empathy was measured using 15 questions from the Questionnaire on Situations and Emotions created by Chaux, Castro, Daza, Díaz, and Hurtado (2004), which references what people feel for others. The following is an example of the questions: "I feel sad when a classmate is unfairly punished." These questions are answered using a scale on which 1 indicated "never," and 5 indicated "always" (Cronbach's alpha of 0.81).

Sympathy was measured using two subscales that comprise the Interpersonal Reactivity Index (IRI) by Davis (1980). The subscales used in the study were Empathic Concern, with four questions, and the Perspective Taking scale, with five questions. These are answered using a Likert scale from 1 to 5 (1 = does not describe me at all; and 5 = it describes me very well). An examples of the Empathic Concern questions is: "When I see someone taking advantage of someone else, I have protective feelings for them" (Cronbach's alpha of 0.66). In contrast, an example of the Perspective Taking scale is: "Before criticizing, I try to imagine how I would feel if I were in their place" (Cronbach's alpha of 0.67).

Prosocial behavior was measured with nine questions from the Prosocial Behavior Scale by Caprara and Pastorelli (1993). Adolescents responded using a Likert scale (1 = never; and 5 = always). An example is: "You help others in their tasks and chores" (Cronbach's alpha of 0.83).

2.3 Procedure

Home visits were undertaken with the aim of obtaining informed consent from the fathers and mothers. Additionally, questionnaires were administered separately to each of the participants (father, mother, and adolescent son or daughter) during the visit, with the aim of avoiding information transfer. Contact was established using references

from the research group and students at the Family Institute at the Universidad de la Sabana, which collaborated in providing the questionnaires as members of the research pool.

3. RESULTS

3.1 Descriptive Results

Descriptive statistics for each of the variables used in the study were analyzed. Table 1 shows the

means and standard deviations of the continuous variables in the study. It is worth noting that the mothers, compared with the fathers, used more inductive discipline, and female adolescents also showed higher levels of empathy, sympathy, and prosocial behavior than adolescent males.

Table 1. Means and Standard Deviations of Variables in the Study.

Variables	Father (n=239)	Mother (n=239)	Child	
			Male	Female
Inductive discipline F(1,200)=4.96; p<0.5; η^2 =0.02	4.02(0.74)	4.22(0.63)		
Empathy F(1,98)=5.00; p<0.05; η^2 =0.05			3.36(0.57)	3.61(0.55)
Sympathy F(1,92)=2.24; p=0.14; η^2 =0.02			3.19(0.64)	3.39(0.70)
Prosocial behavior F(1,97)=.65; p=0.42; η^2 =0.007			3.69(0.61)	3.89(0.60)

Note: The values in parentheses represent standard deviations.

What follows is a description of the results found, organized according to the research questions in the study.

3.2 Differences Between Fathers and Mothers Regarding Inductive Discipline and Moral Emotions and Male and Female Adolescent Prosocial Behavior

In order to determine whether there are differences between fathers and mothers in the inductive discipline, moral emotions and prosocial behavior, a difference of means analysis was performed of the difference in means (ANOVA). Significant results were found for inductive discipline ($F(1,200)=4.96$; $p<.5$; $\eta^2=.02$). That is, significant differences were found between fathers and mothers regarding the exercise of inductive discipline with their children, with mothers ($M=4.34$) showing higher levels of this practice than fathers ($M=4.16$).

With the aim of determining whether there were significant differences between male and female adolescents in their levels of empathy, sympathy, and prosocial behavior, ANOVA was run for one factor.

Significant differences were not found between adolescents in the study of sympathy ($F(1,92)=2.24$; $p=0.14$; $\eta^2=.02$) or prosocial behavior ($F(1,97)=.65$; $p=0.42$; $\eta^2=.007$), but differences were found in levels of empathy ($F(1,98)=5.00$; $p<.05$; $\eta^2=.05$). Male adolescents ($M=3.36$) showed lower levels of empathy than female adolescents ($M=3.61$).

3.3 Relationships Among Inductive Discipline, Moral Emotions, and Prosocial Behavior

With the goal of determining the relationships among inductive discipline exercised by parents, moral emotions, and prosocial behavior reported by adolescents, an analysis of variable correlations was run, with the results shown in Table 2.

As seen in Table 2, inductive discipline on the part of the father and mother was directly and significantly correlated with the empathy, sympathy, and prosocial behavior of their child. That is, with greater levels of inductive discipline by fathers and mothers, their children showed higher levels of empathy, sympathy, and prosocial behavior.

Table 2. Correlations Among Inductive Discipline, Moral Emotions, and Prosocial Behavior.

Variable	1	2	3	4	5
1. Inductive discipline, father	-	0.35**	0.21**	0.16*	0.21**
2. Inductive discipline, mother		-	0.14*	0.21**	0.23**
3. Empathy			-	0.42**	0.46**
4. Sympathy				-	0.50**
5. Prosocial behavior					-

Note: *significant correlation at 0.05; ** significant correlation at 0.01.

3.4 Inductive Discipline and Moral Emotions as Factors Explaining Prosocial Behavior

A multiple linear regression analysis was calculated using the enter method, with the aim of evaluating whether inductive discipline by the father and mother and moral emotions explained adolescent prosocial behavior in a significant manner. The variables that were studied provided significant explanation for 32% of the variance in prosocial behavior ($R^2=.32$; $F(4,191)=24.11$; $p=.000$). The variable that had the greatest weight in this explanation was sympathy ($\beta=.35$; $p=.000$), followed by empathy ($\beta=.31$; $p=.000$). Paternal and maternal inductive discipline did not contribute significantly to the explanation of prosocial behavior.

3.5 Moral Emotions as Mediators Between Inductive Discipline (Fathers and Mothers) and Adolescent Prosocial Behavior (Sons and Daughters)

Mediation analysis were run, in order to determine whether the correlation between paternal and maternal inductive discipline and prosocial behavior was direct or whether it arose through moral emotions (empathy and sympathy). Several studies follow the mediator analysis of Baron and Kenny (1986). However, other recent methods of analysis provide more accurate estimation of mediated effects

(MacKinnon, Lockwood, & Williams, 2004; MacKinnon, Fairchild, & Fritz, 2007). Mediator analysis was performed and later verified using the Sobel test (Sobel, 1986). This test performs well only in large samples like the one in this study. Mediation analysis was run with 95% confidence intervals, after variables were standardized.

3.6 The Mediating Effect of Empathy

The mediation results showed that inductive discipline by parents was correlated with the prosocial behavior of their children through empathy. As seen in Table 3, the relationship between paternal inductive discipline and prosocial behavior in children was no longer significant in the presence of empathy. That is, empathy had a mediating effect between the two variables.

In the case of mothers, the association decreased between inductive discipline by the mother and prosocial behavior in the presence of empathy, but it did not cease to be significant. That is, partial mediation was observed for empathy with regard to maternal inductive discipline and the prosocial behavior of the adolescent child (see Table 4). The Sobel test showed a score above 1.96 for both fathers and mothers, indicating that the mediation was significant.

Figure 1. Mediating effect of moral emotions (empathy and sympathy) between inductive discipline and prosocial behavior.

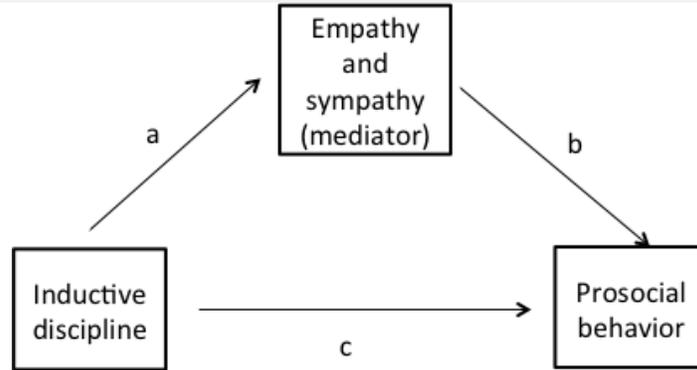


Table 3. Analysis of Mediation of Empathy Between Paternal Inductive Discipline and Child Prosocial Behavior.

IV	DV	R ²	B
1. Inductive discipline, father	Empathy	*	0.04**
2. Inductive discipline, father	Prosocial behav.		0.21**
3. Inductive discipline and empathy	Prosocial behav.	*	0.23**
Inductive discipline, father			0.10
Empathy			0.46***

Note: Sobel (Z=2.98).

Table 4. Analysis of Mediation of Empathy Between Maternal Inductive Discipline and Child Prosocial Behavior.

IV	DV	R ²	B
1. Inductive discipline, mother	Empathy		0.02*
2. Inductive discipline, mother	Prosocial behav.	*	0.05**
3. Inductive discipline and empathy	Prosocial behav.	*	0.22**
Inductive discipline, mother			0.12*
Empathy			0.44***

Note: Sobel (Z=2.00).

3.7 The Mediating Effect of Sympathy

Sympathy had a mediating effect between inductive discipline and prosocial behavior. Concretely, partial mediation was observed for fathers. That is, while in the third equation, the contribution of inductive discipline decreased, it remained significant (see Table 5). In the case of mothers, the association between inductive discipline and prosocial behavior

occurred via sympathy. That is, in the third equation, the contribution of the inductive discipline of mothers to prosocial behavior decreased and ceased to be significant in the presence of sympathy (see Table 6). The Sobel test yielded a score greater than 1.96 for both mothers and fathers, indicating that the mediation was significant.

Table 5. Analysis of Mediation of Sympathy Between Paternal Inductive Discipline and Child Prosocial Behavior.

IV	DV	R ²	B
1. Inductive discipline, father	Sympathy	0.02*	0.16*
2. Inductive discipline, father	Prosocial behav.	0.04**	0.21**
3. Inductive discipline and sympathy	Prosocial behav.	0.26***	
Inductive discipline, father			0.12*
Sympathy			0.48***

Note: Sobel (Z=2.25).

Table 6. Analysis of Mediation of Sympathy Between Maternal Inductive Discipline and Child Prosocial Behavior.

IV	DV	R ²	B
1. Inductive discipline, mother	Sympathy	0.04**	0.21**
2. Inductive discipline, mother	Prosocial behav.	0.05***	0.23***
3. Inductive discipline and sympathy	Prosocial behav.	0.25***	
Inductive discipline, mother			0.10
Sympathy			0.47***

Note: Sobel (Z=2.84).

4. DISCUSSION

The purpose of this study was to analyze the contributions of inductive discipline and moral emotions (empathy and sympathy) in explaining variability in prosocial behavior. A discussion of the results follows, as well as the limitations of the study and recommendations for future studies.

Differences by Sex in the Exercise of Inductive Discipline Among Fathers and Mothers, Moral Emotions, and the Prosocial Behavior of Adolescent Males and Females

Regarding the practice of maternal and paternal inductive discipline, the results of this study showed that mothers tended to provide explanations or reasons to their children when some change in behavior was required, compared to fathers. That is, mothers practiced this act more frequently, as some studies have shown (Cabrera & Guevara, 2007; Garner, 2012; Tur, Mestre, Samper & Malonda, 2012). This finding indicates that in this study, mothers continued to be the primary agents in child discipline, as shown in prior studies. This result is a contribution in light of the limited number of existing studies on the interactions between parent sex and the prosocial behavior of their children (Sturge-Apple, Davies, Boker, & Cummings, 2004).

Moreover, the results showed that adolescent girls showed greater averages for empathy than adolescent boys, which coincides with the empirical

literature (Garaigordobil et al., 2009; Retuerto, 2004; Sánchez-Queija et al., 2006; Skoe et al., 2002).

Regarding sympathy and prosocial behavior, significant differences were not found between male and female children. Contrasting with this result, other studies have shown that there are greater levels of prosociality among women (Navarro, 2004; Sánchez-Queija et al., 2006; Sureda et al., 2009), as well as higher levels of sympathy (Sureda et al., 2009). Nevertheless, more recent studies have shown that female subjects are more prosocial in childhood, but the tendency changes with age, whereas male subjects have more social preference and are more prosocial (Plazas et al., 2010).

Relationships Among Inductive Discipline, Moral Emotions, and Prosocial Behavior

As proposed by previous investigations, there were direct relationships among inductive discipline of parents, empathy, and the prosocial behavior of children (Garner, 2012; Hoffman, 1998; Krevans & Gibbs, 1996; Mestre et al., 2007). Additionally, as shown by Hoffman (2002), inductive discipline was associated with and promoted a tendency toward empathy.

Similarly, the results allow us to conclude there are direct relationships among empathy (Carlo, Knight et al., 2011; Geng et al., 2012; Panfile & Laible, 2012; Richaud de Minzi, 2008; Richaud de Minzi et al., 2011), sympathy (Carlo, Mestre et al., 2011; Maibom, 2012; Sánchez-Queija et al., 2006) and prosocial

behavior. That is, as shown by previous authors, prosocial behavior is not explained only by parental discipline; moral emotions also favor it.

Importance of Inductive Discipline and Moral Emotions in the Explanation of Prosocial Behavior

Empirical findings have differed regarding whether empathy or sympathy contributes more to the explanation of prosocial behavior (Cavojová, et al., 2011; Mestre et al., 2006). This study attempted to contribute to this discussion and found that among the moral emotions, sympathy was the greatest predictor of prosocial behavior in adolescence. It is possible that these results occurred due to the presence of the mother as the principal facilitator of the development of prosocial behavior via sympathy, while the father facilitates prosocial behavior through empathy (see the mediation results). On this topic, Eisenberg (2000) proposed that parental sympathy is associated with sympathy in children, which is an argument for including it in future studies on parental moral emotions.

While inductive discipline was not found to be a predictor of social behavior in the model used in this study (Ortiz, Apodaca, Etxeberria, Fuentes, & López, 2007), the association between these two variables is undeniable. It is possible that this result was due to moral emotions lending significant weight to the explanation of prosocial behavior, compared to the contribution of inductive discipline. As a result, it is important to favor empathy and sympathy in adolescents via inductive discipline and other parenting practices.

Mediation of Empathy and Sympathy in the Relationship Between Paternal and Maternal Inductive Discipline and Adolescent Prosocial Behavior

As shown by Carlo et al. (2007), the study of moral emotions as mediators between child-rearing practices and prosocial behavior has only just begun. From this perspective, the results of this study constitute a contribution in that they help to confirm the hypothesis that both empathy and sympathy play mediating roles between these two variables.

In the case of fathers, the exercise of inductive discipline with children is directly associated with an increase in empathy, and at the same time, it is associated with the presence of prosocial behavior in their children. The same relationship occurs in the case of mothers, yet it occurs only partially. The role of the father regarding the total mediation of empathy could occur due to the existing association between the father's inductive discipline and his child's empathy. This association received a lower score in the case of mothers.

For the purpose of extending our understanding of the role of the father in the generation of empathy and prosocial behavior, it would be important to promote future studies that explore the reasons or motivations for this effect.

Regarding sympathy, the results found also confirmed the mediating effect of this emotion between paternal and maternal inductive discipline and child prosocial behavior. As shown in the study by Carlo, Knight et al. (2011), sympathy mediates the relationships between parental inductions and prosocial behaviors. While these authors confirmed the proposed hypothesis of mediation, the results found were different for fathers and mothers. These results showed partial mediation for fathers and total mediation for mothers, which is the opposite of the results obtained for empathy. The role of the mother with regard to obtaining total mediation of sympathy could be due to the relationship found between her inductive discipline and adolescent sympathy. This association was stronger in mothers than it was in fathers.

4.1 Limitations and Future Research Directions

Among the limitations of this study are that the data for parents and adolescents obtained were at a single transversal moment in their lives. As such, we recommend that future studies gather data over time to evaluate the evolution of these variables from an early age until the children reach adulthood.

Similarly, prosocial behavior could be associated in future studies with an analysis of family factors, such as the socioeconomic and educational levels of parents, as prior studies have shown that these variables are associated with parenting practices and prosocial behavior. Nevertheless, their association has not been concretely analyzed with regard to inductive discipline. Additionally, while there have been numerous advances in recent years regarding the study of empathy and sympathy and their relationships with prosocial behaviors, a notable lack of integration of parenting processes, family functioning, and child-rearing practices persists with regard to the characteristics and behaviors that parents cause in their adolescent children.

5. REFERENCES

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of*

- Personality and Social Psychology*, 51, 1173-1182.
- Barr, J. J., & Higgins-D'Alessandro, A. (2009). How adolescent empathy and prosocial behavior change in the context of school culture: A two-year longitudinal study. *Adolescence*, 44, 751-72. doi: 20432599
- Barrera, F. (2003). *Conexiones entre las prácticas parentales y las competencias psicosociales propias de la autonomía y la vinculación de los hijos* [Connections between parenting practices and psychosocial competencies of child autonomy and bonding]. Proyecto presentado a la convocatoria cofinanciación de proyectos del Centro de Estudios Socioculturales e Internacionales CESO [Project presented at the project cofinancing convening of the CESO Sociocultural and International Study Center], Social Sciences Department, Universidad de Los Andes, Bogotá, Colombia.
- Bush, K. R., & Peterson, G. W. (2008). Family influences on childhood development. In T. P. Gullotta (Ed.), *Handbook of childhood behavioral issues* (pp. 43-67). New York, NY: Taylor & Francis.
- Cabrera, González, & Guevara (2012). Estrés parental, trato rudo y monitoreo como factores asociados al comportamiento agresivo. *Universitas Psychologica*, 11, 1, 657-670.
- Cabrera, V., & Guevara, I. (2007). *Relaciones familiares y ajuste psicológico: Dos estudios en adolescentes de familias colombianas*. [Family relationships and psychological adjustment: Two studies of adolescents in Colombian families.] Bogotá, Colombia: Ediciones Uniandes.
- Calvete, E., Gámez-Gaudix, M. & Orue, I. (2010). El inventario de dimensiones de disciplina (DDI), versión niños y adolescentes: Estudio de las prácticas de disciplina parental desde una perspectiva de género [The disciplinary dimensions inventory (DDI), child and adolescent version: Study of parental discipline practices from a perspective of gender]. *Anales de Psicología*, 26, 410-418.
- Caprara, G., & Pastorelli, C. (1993). Early emotional instability, prosocial behaviour, and aggression: Some methodological aspects. *European Journal of Personality*, 7, 19-36.
- Caprara, G. V., Steca, P., Zelli, A., & Capanna, C. (2005). A new scale for measuring adult's prosocialness. *European Journal of Psychological Assessment*, 21, 77-89. DOI 10.1027/1015-5759.21.2.77
- Carlo, G., McGinley, M., Hayes, R. & Martínez, M. (2012). Empathy as a mediator of the relations between parent and peer attachment and prosocial and physically aggressive behaviors in Mexican American college students. *Journal of Social and Personal Relationships*, 29, 3, 337-357. doi: 10.1177/0265407511431181
- Carlo, G., Knight, G., 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. *Journal of Early Adolescence*, 31, 757-781. doi: 10.1177/0272431610373100
- 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, 147-176. doi:10.3200/GNTP.168.2.147-176
- Carlo, G., Mestre, M. V., Samper, P., 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, 116-124. doi: 10.1177/0165025410375921
- Carlo, G., Raffaelli, M., Laible, D., & Meyer, K. (1999). Why are girls less physically aggressive than boys? Personality and parenting mediators of physical aggression. *Sex Roles: A Journal of Research*, 40, 711-729. Doi: 10.1023/A:1018856601513
- Cavell, T. (2000). Working with parents of aggressive children. A Practitioner's Guide. *Journal of primary prevention*. 24, 3, 407- 409
- Čavojská, V., Belovičová, Z., & Sirota, M. (2011). Mindreading and empathy as predictors of prosocial behavior. *Studia Psychologica*, 53, 351-362.
- Cepeda, A. (2003). *La relación inversa entre empatía y agresión: Precisiones conceptuales y metodológicas. Un estudio con niño(a)s de cuarto de primaria* [The inverse relationship between empathy and aggression: Conceptual and methodological considerations. A study of 4th grade children (Unpublished thesis). Universidad de los Andes, Bogotá, Colombia.
- Chaux, E., Castro, L., Daza, J., Díaz, C., & Hurtado, N. (2004). Empatía: Instrumento de autoreporte [Empathy: Self-reporting

- instrument.] Unpublished document, Bogotá, Colombia: Universidad de los Andes.
- Chaux, E. (2002). Buscando pistas para prevenir la violencia urbana en Colombia: Conflictos y agresión entre niños y adolescentes de Bogotá. *Revista de Estudios Sociales*, *12*, 41-51
- Cuervo, A. (2010). Pautas de crianza y desarrollo socioafectivo en la infancia [Child rearing guidelines and socioaffective development in childhood] *Diversitas: Perspectivas en Psicología*, *6*, 111-121.
- Crick, N. & Pepler, D. (2007). Understanding bullying: From research to practice. *Canadian Psychology*, *48*, 2, 86-93. doi.org/10.1037/cp2007010
- Crick, N., Casas, J. & Mosher, M. (1997). Relational and overt aggression in preschool. *Developmental Psychology*, *33*, 4, 579-588. doi.org/10.1037/0012-1649.33.4.579
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology*, *10*, 85-103.
- Davis, M. H. (1996). *Empathy. A social psychological approach*. Boulder, CO: Westview Press.
- Dekovic, M., Janssens, J. M., & Van As, N. M. (2003). Family predictors of antisocial behavior in adolescence. *Family Process*, *42*, 223-235. doi: 10.1111/j.1545-5300.2003.42203.x
- Dodge, K., & Pettit, G. (2003). A biopsychosocial model of the development of chronic conduct problems in adolescence. *Developmental Psychology*, *39*, 349-371.
- Eisenberg, N. (1990). Prosocial development in early and mid adolescence. In R. Montemayor, G. R. Adams, & T. P. Gullotta (Eds.), *From childhood to adolescence: A transitional period?* (pp. 240-269). Newbury Park, CA: Sage.
- Eisenberg, N. (2000). Emotion, regulation, and moral development. *Annual Review of Psychology*, *51*, 665-697. doi: 10.1146/annurev.psych.51.1.665
- Eisenberg, N. (2006). Introduction. In W. Damon, R. M. Lerner, & N. Eisenberg (Eds.), *Handbook of child psychology, Vol. 3: Social, emotional, and personality development* (6th. ed., pp. 1-23). New York, NY: Wiley.
- Eisenberg, N., Cumberland, A., Guthrie, I. K., Murphy, B. C., & Shepard, S. A. (2005). Age changes in prosocial responding and moral reasoning in adolescence and early adulthood. *Journal of Research on Adolescence*, *15*, 235-260. doi: 10.1111/j.1532-7795.2005.00095.x
- Eisenberg, N., & Fabes, R. A. (1990). Empathy: Conceptualization, assessment, and relation to prosocial behavior. *Motivation and Emotion*, *14*, 131-149. doi 10.1007/BF00991640
- Eisenberg, N., & Fabes, R. A. (1998). Prosocial development. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology, Vol. 3: Social, emotional, and personality development* (5th. ed., pp. 701-778). New York, NY: Wiley.
- Eisenberg, N., Fabes, R. A., Shepard, S. A., Murphy, B. C., Jones, J., & Guthrie, I. K. (1998). Contemporaneous and longitudinal prediction of children's sympathy from dispositional regulation and emotionality. *Developmental Psychology*, *34*, 910-924. doi.org/10.1037/0012-1649.34.5.910
- Eisenberg, N., & Murphy, B. (1995). Parenting and children's moral development. In M. Bornstein (Ed.), *Handbook of parenting* (Vol. 4, pp. 227-257). New York, NY: Wiley.
- Eisenberg, N., & Sheffield, A. (2004). Moral cognitions and prosocial responding in adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd. ed., pp. 155-188). New York, NY: Wiley.
- Eisenberg, N., & Strayer, J. (1992). La empatía y su desarrollo [Empathy and its development]. Bilbao, Spain: Desclée de Brouwer.
- Eisenberg, N., Zhou, Q., & Koller, S. (2001). Brazilian adolescents' prosocial moral judgment and behavior: Relations to sympathy, perspective taking, gender-role orientation, and demographic characteristics. *Child Development*, *72*, 518-534. doi: 10.1111/j.1532-7795.2005.00095
- Etxebarria, I., Apodaca, P., Fuentes, M. J., López, F., & Ortiz, M. J. (2009). La crianza y la educación de los hijos en la sociedad actual ¿Lo estamos haciendo bien? [Child rearing and education of children in current society. Are we doing it well?] *Revista de Psicología Social*, *24*, 81-96. doi:10.1174/021347409786922952
- Garaigordobil, M., Maganto, C., Pérez, J. I., & Sansinenea, E. (2009). Gender differences in socioemotional factors during adolescence and effects of a violence prevention program. *Journal of Adolescent Health*, *44*, 468-477. doi: 10.1016/j.jadohealth.2008.09.014.

- Garner, P. W. (2012). Children's emotional responsiveness and sociomoral understanding and associations with mothers' and fathers' socialization practices. *Infant Mental Health Journal*, 33, 95-106. doi: 10.1002/imhj.20339
- Geng, Y., Xia, D., & Qin, B. (2012). The Basic Empathy Scale: A Chinese validation of a measure of empathy in adolescents. *Child Psychiatry & Human Development*, 43, 499-510. doi: 10.1007/s10578-011-0278-6.
- Goodnow, J. (2010). *Fuentes, efectos y cambios posibles en habilidades parentales: Comentarios sobre Belsky, Grusec, y Sanders y Morawska* [Sources, effects, and possible changes in parenting abilities: Commentaries on Belsky, Grusec, and Sanders and Morawska]. Retrieved from http://www.encyclopedia-infantes.com/pages/PDF/habilidades_parentales.pdf
- Gladstone, G., Parker, G. & Malhi, G. (2006). Do bullied children become anxious and depressed adults? A cross-sectional investigation of the correlates of bullying and anxious depression. *The Journal of Nervous and Mental Disease*, 194, 3, 201-208. doi: 10.1097/01.nmd.0000202491.99719.c3
- Guevara, I., Cabrera, V., & Barrera, F. (2007). Factores contextuales y moral emotions como predictores del ajuste psicológico en la adolescencia [Contextual factors and moral emotions as predictors of psychological adjustment in adolescence]. *Universitas Psychologica*, 6, 269-283.
- Hoffman, M. (1983). Affective and cognitive process in moral internalization: An information processing approach. In E. T. D. Higgins, D. Ruble, & W. Hartup (Eds.), *Social cognition and social development: A socio-cultural perspective* (pp. 236-274). Cambridge, UK: Cambridge University Press.
- Hoffman, M. L. (1998). Varieties of empathy based guilt. In J. Bybee (Ed.), *Guilt and children* (pp. 91-110). London, UK: Academic Press.
- Hoffman, M. L. (2000). *Empathy and moral development: Implications for caring and justice*. Cambridge, UK: Cambridge University Press.
- Hoffman, M. (2002). *Desarrollo moral y empatía. Implicaciones para la atención and la justicia* [Moral development and empathy. Implications for caring and justice]. Barcelona: Idea Books, S.A.
- Holmgren, R., Eisenberg, N., & Fabes, R. A. (1998). The relations of children's situational empathy related emotions to dispositional prosocial behaviour. *International Journal of Behavioral Development*, 22, 169-193. doi:10.1080/016502598384568
- Krevans, J., & Gibbs, J. (1996). Parent's use of inductive discipline: Relations to children's empathy and prosocial behavior. *Child Development*, 67, 3263-3277. doi: 10.1111/j.1467-8624.1996.tb01913.x
- Maibom, H. L. (2012). The many faces of empathy and their relation to prosocial action and aggression inhibition. *WIREs Cognitive Science*, 3, 253-263. doi: 10.1002/wcs.1165
- MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation analysis. *Annual Review of Psychology*, 58, 593 - 614. doi: 10.1146/annurev.psych.58.110405.085542
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39, 99 - 128. doi: 10.1207/s15327906mbr3901_4
- Mestre, M. V., Samper, P., Tur, A. M., Cortés, M. T., & Nácher, M. J. (2006). Conducta prosocial y procesos psicológicos implicados: Un estudio longitudinal en la adolescencia [Prosocial behavior and implicated psychological processes: A longitudinal study in adolescence]. *Revista Mexicana de Psicología*, 23, 203-215.
- Mestre, M. V., Tur, A., Samper, P., & Latorre, A. (2010). Inestabilidad emocional y agresividad. Factores predictores [Emotional instability and aggressiveness. Predicting factors]. *Ansiedad and Estrés*, 16, 33-45.
- Mestre, M. V., Tur, A. M., Samper, P., Nácher, M. J., & Cortés, M. T. (2007). Estilos de crianza en la adolescencia y su relación con el comportamiento prosocial [Child rearing styles in adolescence and its relationship with prosocial behavior]. *Revista Latinoamericana de Psicología*, 39, 211-225. doi.org/10.14349/rlp.v39i2.434
- Miller, P. A., & Eisenberg, N. (1988). The relation of empathy to aggressive and externalizing/antisocial behavior. *Psychological Bulletin*, 103, 324-344. doi.org/10.1037/0033-2909.103.3.324
- Navarro, E. (2004). Género y relaciones personales íntimas [Gender and intimate personal

- relationships]. In E. Barberá & I. Martínez (Eds.), *Psicología y género* [Psychology and gender] (pp. 171-192). Madrid, Spain: Pearson Education.
- Oliva, A., Parra, A., & Arranz, E. (2008). Estilos relacionales parentales y ajuste del adolescente [Parental relational styles and adolescent adjustment]. *Childhood and learning*. *Infancia and Aprendizaje*, *31*, 93-106. doi: 10.1174/021037008783487093
- Olweus, D. (1993). *Conductas de acoso y amenaza entre escolares*. Morata.
- Organización Panamericana de la Salud para la Organización Mundial de la Salud. (2002). Washington. D.C. Informe mundial sobre la violencia y la salud.
- Ortiz, M. J., Apodaca, P., Etxebarria, I., Fuentes, M. J., & López, F. (2007). Predictores de la educación moral en las familias actuales [Predictors of moral education in contemporary families]. *Infancia y Aprendizaje*, *30*, 227-244. doi:10.1174/021037007780705247
- Ortiz, M. J., Fuentes, M., & López, F. (2003). Desarrollo socio-afectivo en la primera infancia [Socio-affective development in early childhood]. In J. Palacios, A. Marchesi, & C. Coll (Eds.), *Desarrollo psicológico y educación 1. Psicología evolutiva* [Psychological development and education 1. Evolutionary psychology] (2nd. ed., pp. 151-178). Madrid, Spain: Alianza Editorial.
- Padilla-Walker, L. M., Carlo, G., Christensen, K. J., & Yorgason, J. B. (2012). Bidirectional relations between authoritative parenting and adolescents' prosocial behaviors. *Journal of Research on Adolescence*, *22*, 400-408. doi: 10.1111/j.1532-7795.2012.00807
- Padilla-Walker, L. M., & Christensen, K. J. (2011). Empathy and self-regulation as mediators between parenting and adolescents' prosocial behavior toward strangers, friends, and family. *Journal of Research on Adolescence*, *21*, 545-551. doi: 10.1111/j.1532-7795.2010
- Panfile, T., & Laible, D. (2012). Attachment security and child's empathy: The mediating role of emotion regulation. *Journal of Developmental Psychology*, *58*, 1-21. doi: 10.1353/mpq.2012.0003
- Pichardo, M. C., Justicia, F., & Fernández-Cabezas, M. (2009). Prácticas de crianza y competencia social en niños de 3 a 5 años [Child rearing practices and social competence among children aged 3 to 5 years]. *Pensamiento Psicológico*, *6*, 37-48. doi:10.11600/1692715x.11116030912
- Plazas, E., Morón, M., Santiago, A., Sarmiento, H., Ariza, S., & Patiño, C. (2010). Relaciones entre iguales, conducta prosocial y género desde la educación primaria hasta la universitaria en Colombia [Relationships among peers, prosocial conduct and gender from primary to university education in Colombia]. *Universitas Psychologica*, *9*, 357-369.
- Preston, S. (2007). A perception-action model for empathy. In T. Farrow & F. Woodruff (Eds.), *Empathy in mental illness* (pp. 171-192). Cambridge, UK: Cambridge University Press.
- Ramaswamy, V., & Bergin, C. (2009). Do reinforcement and induction increase prosocial behavior? Results of a teacher-based intervention in preschools. *Journal of Research in Childhood Education*, *23*, 527-538. doi:10.1080/02568540909594679
- Retuerto, A. (2004). Diferencias en empatía en función de las variables género y edad [Differences in empathy as a function of gender and age]. *Apuntes de Psicología*, *22*, 323-339.
- Richaud de Minzi, M. (2008). Evaluación de la empatía en población infantil Argentina [Evaluation of empathy in the child population in Argentina]. *Revista de Investigación en Psicología*, *11*, 101-115.
- Richaud de Minzi, M. (2009). Influencia del modelado de los padres sobre el desarrollo del razonamiento prosocial en los/las niños/as [Influence of parental modeling on the development of prosocial reasoning in boys and girls]. *Interamerican Journal of Psychology*, *43*, 187-198.
- Richaud de Minzi, M., Lemos, V., & Mesurado, B. (2011). Relaciones entre la percepción que tienen los niños de los estilos de relación y de la empatía de los padres y la conducta prosocial en la niñez media y tardía [Relationship between the perceptions that children have of styles of relating and of parental empathy and prosocial conduct in middle and late childhood]. *Avances en Psicología Latinoamericana*, *29*, 330-343.
- Romano, E., Tremblay, R. E., Boulerice, B., & Swisher, R. (2005). Multilevel correlates of childhood physical aggression and prosocial behavior. *Journal of Abnormal Child*

- Psychology*, 33, 565-578. doi: 10.1007/s10802-005-6738-3
- Salmivalli, C., Lagerspetz, K., Björkqvist, K., Österman, K. & Kaukiainen, A. (1996). Bullying as a group process: Participant roles and their relations to social status within the group. *Aggressive Behavior*, 22, 1-15. doi: 10.1002/(SICI)1098-2337(1996)22:1<1::AID-AB1>3.0.CO;2-T
- Sánchez-Queija, I., Oliva, A., & Parra, A. (2006). Empatía y conducta prosocial durante la adolescencia [Empathy and prosocial conduct during adolescence]. *Revista de Psicología Social*, 21, 259-271. doi:10.1174/021347406778538230
- Skoe, E. E. A., Cumberland, A., Eisenberg, N., Hansen, K., & Perry, J. (2002). The influences of sex and gender-role identity on moral cognition and prosocial personality traits. *Sex Roles*, 46, 295-309. doi: 10.1023/A:1020224512888
- Sobel, Michael E. (1986). "Some New Results on Indirect Effects and Their Standard Errors in Covariance Structure". *Sociological Methodology* 16: 159–186. doi:10.2307/270922.
- Sturge-Apple, M. L., Davies, P. T., Boker, S. M., & Cummings, E. M. (2004). Interparental discord and parenting: Testing the moderating role of child and parent gender. *Parenting: Science and practice*, 4, 365-384. doi:10.1207/s15327922par0404_7
- Sureda, I., Garcia-Bacete, F. J., & Monjas, M. I. (2009). Razones de niños y niñas de diez y once años para preferir o rechazar a sus iguales [Reasons boys and girls aged ten and eleven prefer or reject their peers]. *Revista Latinoamericana de Psicología*, 41, 305-321. doi: http://dx.doi.org/10.14349/rlp.v41i2.382
- Tur, A., Mestre, V., Samper, P., & Malonda, E. (2012). Crianza y agresividad de los menores: ¿Es diferente la influencia del padre y de la madre? [Childrearing and juvenile aggressiveness: Is the influence of the father or mother different?]. *Psicothema*, 24, 284-288.
- Velásquez, A., Barrera, F., & Bukowski, W. (2006). Crianza y comportamiento moral: Un modelo mediacional [Childrearing and moral behavior: A mediating model]. *Suma Psicológica*, 13, 141-158. doi: http://dx.doi.org/10.14349/sumapsi2006.51
- Villegas, C. (2002). *Educación para el desarrollo moral* [Education for moral development]. Bogota: Colombia: CESO, Universidad de los Andes and Alfaomega Grupo Editor.