

Cognitive Empathy mediates the association between family climate and children's social competence in boys.

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Family environment has been found to be an essential contributor to children's social development (Boyum & Parke, 1995; Chang, Olson, Sameroff, & Sexton, 2011; Eisenberg et al., 2005; Spinrad et al., 2007; Valiente et al., 2006), but the mechanisms through which family can influence children's social competences are still matter of study. Zhou et al., (2002) proposed that a positive family climate would foster children's empathy abilities, which in turn would lead to better social competences. However, the strength of these relationships might vary depending on children's gender. The present work aimed to study the mediational contribution of family climate to children's social behavior *via* children's empathic abilities taking into account the moderator effect of children's gender. Participants were 149 families with children (76 boys and 73 girls) aged 6 to 12 years. Parents informed of the following variables: (1) level of cohesion, expressiveness and conflict at home; (2) children's cognitive and affective empathy, and (3) aggression and social skills. Teachers also reported on the latter variable. Results showed a moderated mediation in which positive family climate was related to higher children's cognitive empathy, which in turn was positively associated with better social behavior at school and home, but this mediational relation was confirmed just for boys. Our findings highlight the importance of taking a gender perspective in addressing social development in childhood.

1. Introduction

Empathy is a crucial interpersonal ability that contributes to children's socioemotional development (Eisenberg & Miller, 1987; Findlay, Girardi, & Coplan, 2006; Garaigordobil, 2009; Garaigordobil & Maganto, 2011; Hoffman, 2008; Miller & Eisenberg, 1988; Zhou et al., 2002). Knafo & Israel (2012) described empathy as "an other-oriented tendency to comprehend and share the states of others"; that is, empathy has a cognitive component as it involves understanding others' feelings, and an emotional component, as it implies feeling similarly to other persons. In this work, we addressed the relationship between family characteristics and children's empathy skills, taking into account both the cognitive and affective empathy components, and in turn, the contribution of these abilities to social functioning in school years, considering children's gender as a moderator variable.

In understanding individual differences in empathy during childhood, family influence has been found relevant. Specifically, maternal support (Soenens, Duriez, Vansteenkiste, & Goossens, 2007), high-quality parenting (Laible, Carlo, & Roesch, 2004), parental positive expressivity (Zhou et al., 2002), and warm parenting (Barnett, 1987) have been positively related to children's empathy. Following Zhou et al., (2002), those findings suggest that parental socialization, which involves the observation of children interacting with parents, is likely to contribute to children's individual differences in empathic abilities.

In turn, individual differences in empathy may explain in part the quality of social adjustment. Previous research has shown that children with higher levels of empathy show higher scores on social competence (Albiero, Matricardi, Speltri, & Toso, 2009; Davis, 1994; Eisenberg, Eggum, & Di Giunta, 2010; Eisenberg & Miller, 1987; Findlay et al., 2006; Taylor, Eisenberg, Spinrad, Eggum, & Sulik, 2013) and exhibit less externalizing problems

(Miller & Eisenberg, 1988; de Wied, Goudena, & Matthys, 2005). In this line, Miller, Johnston, and Pasalich (2014) stated that children with higher levels of empathy are better attuned to the emotional state of others, and this sharing of emotional state is thought to inhibit harmful behavior towards others (Davis, 1994).

Under a gender perspective, there is strong evidence supporting the notion that girls show more empathy (Christov-Moore et al., 2014), as well as more adjusted social behavior (Chaplin & Aldao, 2013; Eagly & Steffen, 1986; Fabes & Eisenberg, 1998) than boys. However, little is known about the influence of gender in this pattern of relations between family environment, children's empathy skills and social behavior. Bearing that in mind, the present study hypothesizes that a positive family climate would be associated with better empathic abilities, which in turn would be related to higher children's social behavior in middle childhood. To study the role of gender on these paths, we computed a moderated mediational analysis to test if the pattern of results differed by gender.

2. Method

2.1. Participants

The sample was composed of 149 families with children aged 6-12 years (76 boys), $M = 8.75$ years, $SD = 1.69$. None of the children had any clinical diagnosis for special needs.

2.2. Measures

Positive Family Climate. Parents completed the *Relationship* dimension of the Family Environment Scale (FES; Moos, Moos, & Trickett, 1984; Spanish version developed by Seisdedos, Victoria de la Cruz, and Cordero, 1989). This scale reports on the cohesion, expressiveness and conflict among family members.

Cognitive and Affective Empathy. Parents filled out the Spanish Basic Empathy Scale - Parent Report- (BES-PR; Sánchez-Pérez, Fuentes, Jolliffe, & González-Salinas, 2014), to inform about their children's cognitive and affective empathy.

Social Behavior. Children's social competence and aggressive behavior was reported by both parents and teachers using the *Social Skills* and *Aggression* scales, respectively, from the Behavior Assessment System for Children (BASC; Reynolds & Kamphaus, 2004; Spanish version developed by González, Fernández, Pérez, and Santamaría, 2004).

3. Results

3.1. Correlational analyses

Zero-order correlations were run to test the associations between positive family climate, children's cognitive and affective empathy, and social behavior (see Table 1).

Table 1. Zero-order correlations for the variables under study.

		1	2	3	4	5
1	Positive Family Climate	1				
2	Cognitive Empathy	.31***	1			
3	Affective Empathy	.16*	.60***	1		
4	Social Behavior	.21**	.21*	.10	1	
5	Gender	.04	-.04	-.08	-.21*	1

Gender was coded as "0" for girls, and "1" for boys; *** $p \leq .001$, ** $p \leq .01$, * $p \leq .05$.

3.2. Moderated mediational analysis

We tested the potential moderating effect of gender in the mediational relation from positive family climate to children's social behavior *via* their cognitive empathic skills, specifically in the path between children's cognitive empathy and social outcomes. The results of the moderated mediation effect are shown in Table 2. We observed a moderated effect of gender on the path from children's cognitive empathy to social behavior. The index of moderated mediation confirmed this effect, with 95% CI [.003, .043].

Table 2. Results of moderated mediation analysis.

	<i>B</i>	<i>SE</i>	<i>t</i>
Positive family climate	.03	.02	2.04*
Cognitive empathy	-.04	.15	-.30*
Gender	-1.89	.76	-2.47
Cognitive empathy x Gender	.41	.19	2.12*

Note: **p* < .05, *B* is unstandardized regression coefficient; *SE* is standard error.

The significant mediational model was found for boys (see Figure 1), but not for girls (see Figure 2), with 95% CIs [.004, .042], and [-.015, .007], respectively.

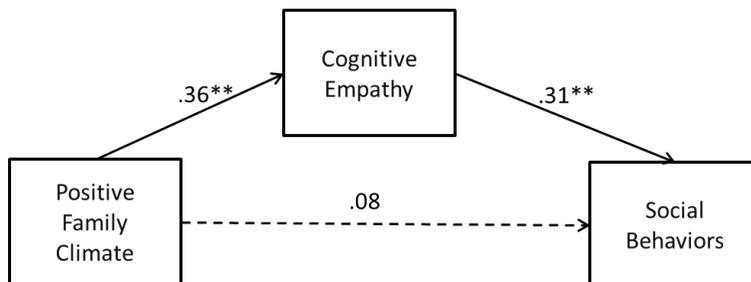


Figure 1. Predicting social behaviors in boys by positive family climate and cognitive empathy.

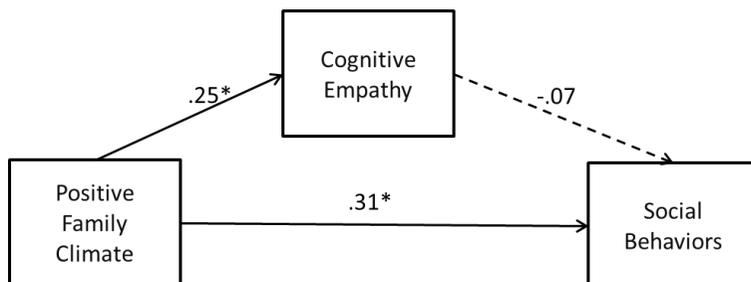


Figure 2. Predicting social behaviors in girls by positive family climate and cognitive empathy.

4. Discussion

The purpose of the present study was to examine the relation between positive family climate, children’s empathy and social behavior, and the extent to which the association between empathy and social behavior differed as a function of gender. The results suggested that positive family climate facilitates children’s cognitive empathy, which in turn was positively associated with social behavior at both school and home. Interestingly, when we tested a moderated mediation with gender as a moderator variable, this finding was true only for boys.

Our findings agree with those observed in previous research (McMahon, Wernsman, & Parnes, 2006; Roberts & Strayer, 1996). It has been found that the relation between empathy and social behavior was much stronger for boys than for girls. This suggests some differences in the socialization process between girls and boys. Girls tend to be more pressured than boys by their context and act more cooperatively and less aggressively,

being the role of empathy as a motivator of social behavior less important. In contrast, for boys, under less social pressure, the role of empathic abilities as a contributor for helpful and social behavior might be more relevant. All these findings suggest that the ability to understand another's emotional states is important for the development of social behavior, particularly among boys in middle childhood and highlight the importance of taking a gender perspective in addressing children's social development.

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