

Relationship between Parenting Styles and Aggressiveness in Adolescents

De la Torre-Cruz, M.J., García-Linares, M.C. and Casanova-Arias, P.F.

Department of Psychology, University of Jaen, Jaen

Spain

Correspondence: Manuel J. de la Torre Cruz. Departamento de Psicología, Edif. C-5. Las Lagunillas s/n. Jaén. Spain. E-mail: majecruz@ujaen.es

© Education & Psychology I+D+i and Ilustre Colegio Oficial de Psicología de Andalucía Oriental (Spain)

Abstract

Introduction. Physical and verbal aggressive behavior that children and adolescents show toward peers is associated with parenting styles. The aim of this research was to examine the relation between perceived parenting styles (of mothers and fathers) and the level of physical and verbal aggressive behavior, anger and hostility shown towards peers.

Method. Three hundred and seventy-one students between the ages of 12 and 16 completed several self-report measures: *Escala de Afecto* (EA) [Scale of Affect], *Escala de Normas y Exigencias* (ENE) [Scale of Rules and Demands] as well as the *Cuestionario de Agresividad* [Aggressiveness Questionnaire].

Results. Analysis of variance revealed that adolescents whose parents showed an authoritative parenting style obtained lower scores in physical and verbal aggressive behaviors than peers whose parents showed an authoritarian style. In addition, boys scored higher than girls in physical aggressive behavior.

Discussion and Conclusion. A perceived authoritarian parenting style was associated with more aggressive behavior. Low levels of affect and high levels of control, which define an authoritarian style, were associated with the expression of aggressive behavior, becoming a potential threat to the adolescent's adjustment in different contexts such as peer interaction.

Keywords: parenting styles, adolescents, physical and verbal aggressive behavior.

Received: 10/25/13

Initial acceptance: 12/12/13

Final acceptance: 03/14/14

Relaciones entre Estilos Educativos Parentales y Agresividad en Adolescentes

Resumen

Introducción. La agresividad física y verbal que niños y adolescentes dirigen hacia sus iguales se relaciona con las pautas de actuación o los estilos educativos que emplean sus progenitores. El objetivo de nuestra investigación residió en examinar la relación existente entre la percepción que un grupo de jóvenes adolescentes tenía del estilo educativo exhibido por sus progenitores (madres y padres) y el nivel de agresividad física, verbal, ira y hostilidad que manifestaban hacia sus iguales.

Método. 371 estudiantes con edades comprendidas entre los 12 y los 16 años emitieron sus respuestas a varias medidas de autoinforme: la *Escala de Afecto (EA)* y la *Escala de Normas y Exigencias (ENE)* así como, al *Cuestionario de Agresividad*.

Resultados. El análisis de varianza reveló que los adolescentes que atribuían a madres y padres un estilo de socialización democrático obtenían menores puntuaciones en las dimensiones agresividad física y verbal que sus iguales que etiquetaron a sus madres y padres como autoritarios. Adicionalmente, los chicos informaron ser físicamente más agresivos que las chicas.

Discusión y Conclusión. La percepción de un estilo parental autoritario parece asociada al incremento de las manifestaciones de agresividad. La percepción de un bajo nivel de afecto y un elevado grado de control, propia de un estilo autoritario, se vincula con la expresión de conductas agresivas que podrían deteriorar seriamente el ajuste que los adolescentes exhiben en diferentes contextos como el de las interacciones con los iguales.

Palabras Clave: estilos educativos, adolescentes, agresividad física y verbal.

Recibido: 25/10/13

Aceptación inicial: 22/12/13

Aceptación final: 14/03/14

Introduction

Interactions that take place in the family environment play an important role in children's and adolescents' learning process, since they encourage acquisition of social behaviors that are then generalized to other contexts, such as peer relations (Lamborn & Felbab, 2003; Lamborn, Mounts, Steinberg & Dornbusch, 1991). Similarly, different parenting practices, such as affection, receptivity, supervision and discipline are related to important developmental indicators such as physical and emotional well-being, vulnerability to stress, academic achievement, altruistic behavior and aggressive and antisocial behavior that children exhibit toward their classmates (De la Torre, Casanova, García, Carpio & Cerezo, 2011; Hernando, Oliva & Pertegal, 2012; Kim, Brody & Murry, 2003; Oliva, Parra & Arranz, 2008; Steinberg, Lamborn, Darling, Mounts & Dornbusch, 1994; Tur-Porcar, Mestre, Samper & Malonda, 2012).

Two of these practices have occupied the center of most research on parent-child relations: affect and control. Joint consideration of the *affect* and *control* dimensions has formed the basis for defining different parenting styles. According to Glasgow, Dornbusch, Troyer, Steinberg and Ritter (1997), parenting styles are a compendium of attitudes, behaviors and non-verbal expressions that characterize the nature of relations between parents and children in different scenarios. The combination of high and low levels of affect and control leads to the definition of four parenting styles: authoritative, indulgent (permissive), authoritarian and neglectful (Baumrind, 1971; Maccoby & Martin, 1983).

The *authoritative parenting style* is characterized by an effective balance of high levels of affect and control. Parents in this category supervise their children's behavior and use their authority as parents when rules are disobeyed. The *neglectful style* is defined by the lack of control and lack of interest in children's behavior or interests. An *indulgent style* is based on high levels of affect and a lack of control, which translates into insufficient requirements for maturity. Finally, an *authoritarian style* seldom shows expression of affection, and seeks to control both the behavior and attitudes of children and adolescents, emphasizing obedience without arguing and respect for parental authority.

Parental figures are first and foremost in their children's socialization, providing a model for relationships established with peers and benefactors. Hence, several studies have

sought to discover possible effects of parental practices or styles on the appearance of aggressive behavior, whether physical, verbal or relational, in children and adolescents (Buschgens, van Aken, Swinkels, Ormel, Verhulst & Buitelaar, 2010; Côté, Vaillancourt, Barker, Nagin & Tremblay, 2007; Kawabata, Alink, Tseng, van Ijzendoorn & Crick, 2011; Underwood, Beron & Rosen, 2009; Vaillancourt, Miller, Fagbemi, Côté & Tremblay, 2007).

Some studies provide evidence for relationships between parenting practices and aggressive behaviors in children and adolescents. Buschgens et al. (2010) considered whether perception of certain types of parenting practices increased the risk for externalizing behaviors in a sample of preadolescents. Results showed that children who attributed to their parents a lack of emotional support, high levels of rejection, and over-protection were considered by parents and teachers as more aggressive youths, they also committed delinquent behaviors. Kawabata et al. (2011) used a meta-analysis procedure in order to analyze and integrate existing findings regarding the association between different parenting patterns (positive parenting, psychological control, strict imposed discipline and indulgence) and the level of relational aggression expressed by children and adolescents. Results revealed that levels of relational aggression declined in proportion to a rise in positive parenting behaviors. Similarly, greater perceived disciplinary strictness, maternal indulgence, and exertion of strong psychological control from the father, were associated with higher indices of relational aggressiveness in childhood and youth.

In a similar line, Côté et al. (2007) tried to identify different family variables that could predict the development of both physical and social aggressiveness expressed in middle childhood. For one example, two-year-olds experiencing hostile maternal behavior (angry spells, constant disapproval and inability to control the child's behavior) predicted high, atypical levels of physical and relational aggressiveness exhibited at age eight. More recently, Underwood et al., (2009) conducted a study whose main objective was to examine the development of physical and social aggression in thirteen-year-old boys and girls, and to find predicting family factors that could account for the different patterns of aggressive behavior exhibited. Results revealed that both an indulgent parenting style and an authoritarian style predicted that some of these preadolescents would later be found in the group characterized by their teacher as increasingly aggressive, both physically and socially.

In the context of Spain, Estévez, Musitu and Herrero (2005) explored parents' role in the relationship between aggressive behavior and psychosocial adjustment. To do so, a sample of adolescents between the ages of 11 and 16 reported the frequency with which they had manifest physically or verbally aggressive behaviors toward their peers, over the past year. They also reported the ease or difficulty with which they communicated with their fathers and mothers. Results revealed that having open communication with both parents was negatively related to the quantity of aggressive behaviors, while misunderstanding and lack of communication between parents and children was associated with greater reported frequency of aggressive behaviors. Similarly, Gallarin and Alonso-Arbiol (2012) found negative relationships between parental involvement and aggressiveness, and positive relationships between imposition and aggressiveness in a sample of Spanish adolescents. Tur-Porcar et al. (2012) set an objective to analyze the role of a set of negative parenting variables (control, permissiveness, hostility and neglectfulness) in children's physical and verbal aggressiveness. Results showed that practices such as hostility and permissiveness were related to aggressiveness expressed by children and adolescents. Specifically, maternal hostility predicted displays of aggression in boys and girls, while permissiveness had a differential effective according to the child's gender. Girls showed more aggressiveness with excessive parental indulgence, while the opposite occurred in the case of the boys.

Based on the above studies, there is a confirmed relationship between children's and adolescents' physical, verbal and relational aggressiveness toward their peers and the parenting styles or practices they experience. Prior research suggests that youths raised in homes characterized by a lack of affection, little communication or severe imposition of rules – manifestations of an authoritarian parenting style – show greater frequency of aggressive behaviors toward their peers (Côté et al., 2007; Estévez et al., 2005; Hale III, van der Valk, Engels & Meeus, 2005; Kawabata et al., 2011; Tur-Porcar et al., 2012).

Objectives and hypothesis

In this line, our present research objective is to examine any relationship between how a group of adolescents perceives the parenting style exhibited by their parents (mothers and fathers) and the level of physical or verbal aggression, anger and hostility that they show toward their peers. One contribution of this study is separate consideration of perceptions of mothers and fathers, due to increasing recognition of the importance of the father figure in his children's upbringing and socialization (Hoeve, Dubas, Gerris, van der Laan & Smeenk,

2011; McKinney & Renk, 2008; Rodríguez, Peña & Torío, 2009). A large share of the prior research establishes a family socialization style, taking the average of the scores of mother and father, without considering the specific relationship each parent's parenting style may have on the psychosocial adjustment of their adolescent children.

Similarly, practically all of the studies that analyze parenting styles have used two dimensions, affect and control, to configure the four traditional categories. However, it seems reasonable to suggest that the way control is exhibited by authoritative parents differs markedly from how it is used by authoritarian parents, even though a single control dimension is used for defining the four classic styles. In different authors' characterization of these parenting styles (Baumrind, 1991; Chao, 2001, Dwairy, 2008; Glasgow et al., 1997; Steinberg, 2001), they agree that authoritative parents are authority figures to be respected, but at the same time they show sensitivity to the needs of their children, while authoritarian parents assert themselves as authority figures who appeal to obedience for obedience's sake. Similarly, authoritative parents establish limits and rules for their children's expected behavior, rules that are explained with reasons and that may even be discussed or debated respectfully. By contrast, authoritarian parents justify the existence of rules with "that's the way it is" or "because I said so." Rules are unquestionable and noncompliance can lead to punishment, a fact that indicates stringency and lack of flexibility. For this reason, three dimensions are used in this study: affect, inductive discipline/control and strict discipline/control. In this way we seek to more precisely define different family socialization styles, understanding that authoritative and authoritarian parents differ not only in the degree of affect expressed, but also in the type of control that they exhibit toward their children (more flexible in the former, more rigid in the latter).

It was thus hypothesized that the adolescents who perceived either authoritarian or neglectful parenting in their mothers or fathers would show greater aggressiveness toward their peers. In addition, gender differences were hypothesized in how they manifest aggressiveness. Prior studies have revealed that boys are more frequently involved in physical forms of aggression, while girls exhibit a greater number of relational aggressive actions (Bjorkqvist, Lagerspetz & Kaukiainen, 1992; Toldos, 2005). According to Kistner, Counts-Allan, Dunke, Drew, David-Ferdon and Lopez (2010), these gender differences in the pattern of aggressive behavior become more evident at the beginning of secondary education. Consequently, boys

were predicted to have higher scores than girls in manifestation of physical aggressiveness, while the girls would obtain higher values in verbal aggressiveness.

Method

Participants

Initially, the study incorporated 886 students between the ages of 12 and 16 ($M = 13.07$, $SD = .97$), from first year ($n = 483$, 54.5%) and second year ($n = 403$, 45.5%) of compulsory secondary education (46 participating classrooms). The groups belonged to seven different schools (five public schools and two subsidized private schools), in two cities from in the region of Andalusia. Four schools were located in the inner city, and three schools were suburban. Gender distribution was 449 boys (50.7%) and 437 girls (49.3%), and 97.2 % of the students were of Spanish nationality. The sample was incidental, according to the availability and accessibility of the schools. After narrowing the group to those students whose parents could each be classified in one of the parenting styles, the data from 371 students (173 boys, 46.6%, and 198 girls, 53.4%) were used in the analyses that followed. The mean age of this reduced group was similar to the original ($M = 13.10$, $SD = 1.00$). Distribution according to year in school was 187 first-year students (50.45%) and 184 (49.6%) in second year.

Instruments

Escala de Afecto (EA) [Scale of Affect], *Escala de Normas y Exigencias* (ENE) [Scale of Rules and Demands] (Fuentes, Motrico & Bersabé, 1999; Bersabé, Fuentes & Motrico, 2001). In order to establish mother's and father's parenting style, items were used from the "affect and communication" dimension (e.g.: "Takes time to talk with me") of the affect scale (EA), and items from the dimensions of "inductive discipline" (e.g.: "Listens to my explanation before punishing me") and "strict discipline" (e.g.: "Demands that I follow the rules even if I don't understand them") from the son/daughter version of the rules and demands scale (ENE), by Bersabé et al. (2001). Each of these dimensions contained 10 items with Likert-type responses on a five-point scale (1 = never, 2 = rarely, 3 = sometimes, 4 = often and 5 = always), assessing the frequency that the adolescents perceive certain behaviors in their parents. A high score reflects a greater perception of affect or of strict or inductive discipline. Reliability indices obtained in this study, according to the Cronbach alpha for mothers and for fathers, in that

order, were as follows: affect (.87 & .89), inductive discipline (.85 & .86), strict discipline (.74 & .74).

In the original study that analyzed the psychometric properties of the affect scale (EA) and the rules and demands scale (ENE), the internal consistency index ranged from .72 (strict maternal discipline) to .90 (paternal affect and communication). Moreover, there were strong correlations with different methods of measuring these constructs (affect and communication, inductive discipline and strict discipline). Specifically, the correlation between the affect and communication dimension of the EA and affect measured by the Inventory of Parent and Peer Attachment (IPPA) (Armsden & Greenberg, 1987) was greater than .70, while correlations between the dimensions of inductive and strict discipline, and two of the three prototypes (authoritative and authoritarian) on the Parental Authority Questionnaire (PAQ) (Buri, 1991) were greater than .49 (Bersabé et al., 2001).

Aggression Questionnaire (AQ, Buss & Perry, 1992) *Cuestionario de Agresividad* (Andreu, Peña & Graña, 2002). The aggressiveness questionnaire is one of the most widely used instruments in assessing aggressive behavior during adolescence (García-León, Reyes, Vila, Pérez, Robles & Ramos, 2002; Morales-Vives, Codorniu-Raga, Vigil-Colet, 2005; Santisteban & Alvarado, 2009). This study used the 26-item version proposed by Andreu et al. (2002). The authors found a factor structure with four dimensions: physical aggressiveness, eight items (e.g. “Sometimes I can’t control the urge to hit another person”), verbal aggressiveness, five items (e.g.: “When I don’t agree with my friends, I argue with them openly”), anger, 6 items (e.g.: “When I feel frustrated I show my anger”) and hostility, 7 items (e.g.: “Sometimes I get quite jealous”). These dimensions reveal different aspects of aggressiveness, including cognitive (negative thoughts, resentment, distrust), behavioral (physical and verbal aggression) and affective-emotional (rage, anger and rejection). The questionnaire uses a Likert format with five response options indicating to what extent the item content matches the respondent’s behavior (1 = completely false ... 5 = completely true). A high score corresponds to more aggressive and hostile behavior. Reliability indices measured by Cronbach’s alpha were: .86 for physical aggressiveness, .71 for verbal aggressiveness, .67 for anger and .76 for hostility. These values are very similar to those found by Andreu et al. (2002). In their validation study that uses this questionnaire with a sample of Spanish youth and adolescents, the reliability indices ranged from .68 for the verbal aggressiveness dimension to .86 for phys-

ical aggressiveness. In addition, a confirmatory factor analysis revealed the presence of a tetrafactorial structure that corresponds to each of the subscales described above.

Procedure

In order to gain access to the desired sample, a meeting was held with the school administrators, where they were informed about the study objectives and permission was requested for the application of tests. In addition, letters were sent to the parents describing the purpose of the research and asking permission for their child's participation. These were delivered through parent associations as well as through the children themselves. A passive consent procedure was used (informed mothers and fathers had the opportunity to return the letter signed if they did not wish their son or daughter to participate). Eighty families signed the attachment to the informational letter, declining their child's participation in the study. Tests were then applied during normal class hours. No pupil left the classroom during the testing, and pupils without authorization used the class time as a study hall.

Scores on the three dimensions mentioned earlier (affect, inductive discipline and strict discipline) were considered simultaneously in order to establish maternal and paternal parenting styles. Median values assigned to the mother on these dimensions were 42, 40 and 29, respectively, while medians of father ratings were 38, 40 and 28. Based on these values, parents who were assigned scores lower than the median on all dimensions were included in the group of parents perceived as neglectful; those given scores higher than the median in the dimensions of affect and inductive discipline, and lower than the median in strict discipline, were included in the group of authoritative parents. Where the adolescents assigned lower-than-the-median scores in affect and in inductive discipline, but higher than the median in strict discipline, parents were included in the group of authoritarian parents. Finally, the parents who were assigned scores higher than the median in affect and lower than the median in both forms of discipline made up the group of indulgent parents. If a value on one of the dimensions was equal to the median, or the combination of scores did not match any of the patterns described, the data was excluded from the analyses.

According to this classification criteria, 146 mothers (39.4%) were perceived as neglectful, 102 (27.5%) authoritative, 80 (21.6%) authoritarian and, finally, 43 (11.6%), indulgent. The same classification applied to the fathers showed category frequencies of 132 (35.6%), 102 (27.5%), 91 (24.5%) and 46 (12.4%), respectively. These percentages are

very similar to those obtained by Glasgow et al. (1997) in their study with American adolescents, using the two traditional dimensions of affect and control for their classification.

This procedure involves a more rigorous classification of parenting style, even at the risk of reducing the sample size. It represents a finer distinction by considering two different types of disciplinary action or forms of control, one that is more reasoned and that promotes greater autonomy and participation from the adolescent in decision making (inductive discipline), typical of an authoritative parenting style, and a second type which is more impositional, rigid and prohibitive (strict discipline), in line with an authoritarian parenting style (Buri, 1991).

Statistical Analysis

The statistical analyses applied were multivariate analysis of variance (MANOVA), univariate analysis of variance (ANOVA) and post-hoc comparisons using the Bonferroni test.

Results

As shown in Table 1, statistically significant correlations were obtained between practically all the parenting dimensions considered and the measurements taken with the aggression questionnaire. The pattern of results was very similar between the adolescent's judgments pertaining to the mother and to the father. Greater perceived affect was negatively related to levels of physical or verbal aggressiveness, anger and hostility, while a greater degree of strict discipline was positively related to all the dimensions assessed. In addition, perception of inductive discipline in both fathers and mothers was negatively associated with manifestation of physical aggressiveness, while only paternal inductive discipline was negatively related to hostility.

Two multivariate analyses of variance (MANOVA) were performed, one for each parent. The independent variables were parenting style and adolescent's gender. Dependent variables were scores obtained on the dimensions of physical and verbal aggressiveness, anger and hostility. The first analysis revealed a statistically significant main effect of the variable mother's perceived parenting style, $\lambda = .86$, $F(12, 952.76) = 4.68$, $p < .001$, $\eta^2 = .05$, as well as a main effect of the variable gender, $\lambda = .89$, $F(4, 360) = 10.35$, $p < .001$, $\eta^2 = .10$. The interaction of mother's perceived style x gender was not statistically significant, $\lambda = .96$, $F(12,$

952.76) = 1.26, $p > .05$. The following univariate analyses showed statistically significant differences on every dimension, according to perceived maternal style, $F(3, 363) = 14.20$, $p < .000$, $\eta^2 = .11$ for the physical aggressiveness dimension, $F(3, 363) = 7.35$, $p < .000$, $\eta^2 = .06$, for the verbal aggressiveness dimension, $F(3, 458) = 8.69$, $p < .001$, $\eta^2 = .07$ for the anger dimension, and finally, $F(3, 458) = 8.32$, $p < .05$, $\eta^2 = .06$ for the hostility dimension. Regarding gender, a statistically significant difference was found only in the manifestation of physical aggressiveness, $F(1, 363) = 26.97$, $p < .001$, $\eta^2 = .07$, where this was greater for the boys than for the girls.

Table 1. Bivariate correlations between the different dimensions of parenting (maternal and paternal) and measurements of physical and verbal aggressiveness, anger and hostility

	1	2	3	4	5	6	7	8	9	10
Affect (M)	1	.75**	-.28**	.66**	.59**	-.19**	-.30**	-.12**	-.17**	-.21**
Inductive (M)		1	-.12*	.60**	.80**	-.02	-.21**	-.05	-.10	-.09
Strict (M)			1	-.23**	-.09	.76**	.27**	.26**	.32**	.30**
Affect (F)				1	.80**	-.28**	-.27**	-.20**	-.21**	-.22**
Inductive (F)					1	-.13**	-.22**	-.10	-.13*	-.09
Strict (F)						1	.28**	.24**	.27**	.29**
Physical Agg.							1	.52**	.48**	.42**
Verbal Agg.								1	.54**	.44**
Anger									1	.55**
Hostility										1

N = 371, ** $p < .01$, * $p < .05$, (M) = mother, (F) = father

A posteriori comparisons using the Bonferroni test reveal statistically significant differences in the physical aggressiveness dimension. Youths who attributed an authoritative parenting style to their mothers showed less physical aggressiveness than their peers who attributed a neglectful or an authoritarian parenting style to their mothers. In addition, adolescents whose mothers exercised a neglectful style reported lower levels of physical aggressiveness than those who perceived their mothers as authoritarian ($M = 14.70$, $M = 18.15$ and $M = 20.67$). With regard to the verbal aggressiveness dimension, differences were found between youths who perceived their mothers as authoritative and those who considered them authoritarian, the former group having a lower score on this dimension ($M = 10.52$ and $M = 13.0$). Similarly, levels of anger were higher in adolescents who attributed an authoritarian style to their mothers, as compared to the rest of the respondents ($M = 13.97$, $M = 14.58$, $M = 15.21$ and $M = 17.34$). Finally, perception of an authoritarian mother was associated with a

higher rate of hostility in comparison to adolescents who attributed to their mothers an authoritative or indulgent style ($M = 14.58$, $M = 13.66$ and $M = 17.98$).

Table 2. Average scores and standard deviations (in parentheses) on measurements of physical and verbal aggressiveness, anger and hostility as a function of maternal parenting style

	Maternal parenting style							
	Authoritative		Indulgent		Neglectful		Authoritarian	
	Girl (n = 63)	Boy (n = 39)	Girl (n = 28)	Boy (n = 15)	Girl (n = 72)	Boy (n = 74)	Girl (n = 35)	Boy (n = 45)
Physical Ag.	13.59 (5.66)	15.82 (5.48)	13.04 (5.14)	19.53 (7.61)	17.00 (6.89)	19.30 (5.87)	18.54 (7.55)	22.80 (6.19)
Verbal Ag.	10.94 (3.60)	10.10 (3.17)	10.25 (3.42)	12.87 (4.27)	11.63 (3.34)	12.14 (3.66)	13.17 (3.78)	12.84 (3.40)
Anger	14.16 (4.01)	13.79 (4.48)	13.89 (4.31)	15.27 (4.64)	15.50 (4.42)	14.92 (4.28)	17.89 (5.03)	16.80 (4.94)
Hostility	14.76 (5.53)	14.41 (5.47)	14.00 (5.49)	13.33 (4.40)	16.21 (5.30)	15.93 (5.009)	18.63 (4.99)	17.33 (5.78)

The second analysis revealed a statistically significant main effect of the variable perceived *paternal style*, $\lambda = .85$, $F(12, 952.76) = 5.13$, $p < .001$, $\eta^2 = .05$, as well as the variable *adolescent's gender*, $\lambda = .90$, $F(4, 363) = 9.73$, $p < .001$, $\eta^2 = .10$. The interaction *perceived paternal style x gender* was not statistically significant, $\lambda = .97$, $F(12, 952.76) = .81$, $p > .05$. Subsequent univariate analyses showed statistically significant differences for each of the dimensions assessed, $F(3, 363) = 16.68$, $p < .001$, $\eta^2 = .12$, for physical aggressiveness, $F(3, 363) = 7.22$, $p < .000$, $\eta^2 = .06$, for verbal aggressiveness, $F(3, 363) = 10.25$, $p < .001$, $\eta^2 = .08$ for anger, and finally, $F(3, 363) = 8.61$, $p < .001$, $\eta^2 = .07$, for hostility. With regard to gender, a statistically significant difference was found on the physical aggressiveness dimension, $F(1, 363) = 26.55$, $p < .000$, $\eta^2 = .07$, being greater for the boys than for the girls.

A posteriori comparisons using the Bonferroni test yielded statistically significant differences on the physical aggressiveness dimension between adolescents who perceived their fathers as authoritative or indulgent as compared to those who considered them neglectful or authoritarian, with the first two groups showing lower indices of physical aggressiveness than the other two ($M = 15.01$, $M = 14.76$, $M = 18.38$ and $M = 20.41$). In addition, statistically significant differences were found in the verbal aggressiveness dimension. Youths who

attributed an authoritarian parenting style to their fathers obtained higher scores in this dimension than those who assigned them an authoritative style ($M = 10.71$ and $M = 13.07$). Finally, statistically significant differences were found between youths who attributed to their fathers an authoritarian style, compared to all other youths, in the dimensions of anger ($M = 14.13$, $M = 13.74$, $M = 15.23$ and $M = 17.32$) and hostility ($M = 14.66$, $M = 14.10$, $M = 15.70$ and $M = 18.10$). In every case, the children of authoritarian fathers scored higher on these measurements.

Table 3. Average scores and standard deviations (in parentheses) on measurements of physical and verbal aggressiveness, anger and hostility as a function of paternal parenting style.

	Paternal parenting style							
	Authoritative		Indulgent		Neglectful		Authoritarian	
	Girl (n = 62)	Boy (n = 40)	Girl (n = 27)	Boy (n = 19)	Girl (n = 71)	Boy (n = 61)	Girl (n = 38)	Boy (n = 53)
Physical Ag.	13.73 (5.89)	16.30 (5.79)	11.41 (3.19)	18.11 (6.86)	16.70 (6.20)	20.05 (6.52)	19.71 (8.04)	21.60 (5.84)
Verbal Ag.	10.68 (3.55)	10.73 (3.58)	10.04 (2.31)	12.53 (4.26)	11.72 (3.44)	11.82 (3.71)	13.39 (3.98)	12.74 (3.26)
Anger	14.03 (4.22)	14.23 (4.60)	13.26 (3.73)	14.21 (4.22)	15.73 (4.41)	14.72 (4.31)	17.84 (4.76)	16.79 (4.81)
Hostility	14.81 (5.62)	14.50 (5.37)	13.78 (4.68)	14.42 (5.63)	16.17 (5.40)	15.23 (4.69)	18.50 (5.21)	17.70 (5.62)

Discussion and Conclusions

The main results of this study suggest that attribution of an authoritarian parenting style is related to manifestation of more aggressive and hostile behavior toward peers, as compared to attribution of an authoritative or indulgent style. The perceived use of strict discipline is positively related to the different forms of aggressiveness, while a negative relationship is found with the affect dimension. The perception of high levels of inductive discipline is negatively associated with indices of physical aggressiveness. In addition, the boys resort to use of physical aggression more frequently than the girls.

The findings provide partial support for our hypotheses, given that significant differences between the perception of authoritative and neglectful parenting styles were found

only in the level of reported physical aggressiveness. Similarly, statistical significance in gender differences was reached only in the level of physical aggressiveness expressed, as found in prior studies (Bjorkqvist et al., 1992; Côté et al., 2007; Toldos, 2005; Underwood, Beron, Geutsch, Galperin & Risser, 2008). However, differences between perception of an authoritative parenting style and an authoritarian style appeared on all the measurements taken.

Our results agree with prior investigations that reveal that perception of an authoritarian parenting style is related to an increase in aggressiveness. The demand for obedience without discussion, typical of an authoritarian style, is linked to the exhibition of aggressive behaviors that may seriously impair adolescents' adjustment in different contexts, such as in peer interaction. This finding is consistent even though strict discipline does not imply other more damaging actions such as manipulation, provocation of guilt, withdrawal of affection or psychological control (Galambos, Barker & Almeida, 2003).

The relationship observed between parenting style and aggressiveness, anger and hostility can be explained through modeling or vicarious reinforcement (Bandura, 1997). Increased cognitive capacity makes it possible to become aware of, to represent and later on reproduce behaviors exhibited by others. Therefore, children and adolescents learn through observing significant models, particularly their parents, that being hostile or aggressive can produce certain types of benefits. This fact leads youths to adopt aggressive strategies in peer interactions because they have been exposed to these behaviors with relative frequency (Kawabata et al., 2011).

Similarly, children and adolescents that receive little affect but experience strict enforcement of rules may develop a mental model of interpersonal relationships characterized by insecurity and uncertainty. As a result, they may show a lack of confidence both in themselves and in others, placing them at risk in the social environment. Harsh treatment experienced at home may increase the adolescent's baseline level of anger and hostility, leading to a greater number of negative emotions and aggressive behaviors in interactions with peers (Underwood et al., 2008).

By contrast, perception of maternal and paternal authoritative parenting is related to less expression of aggressive behavior, anger and hostility. The benefit associated with an indulgent parenting style is less conclusive. Despite *a posteriori* comparisons that produce a

very similar pattern of results, when analysis is taken as a function of the parent's gender (benefit associated with an indulgent style), the results found with an attribution of maternal indulgence, especially in sons, are not so favorable. Namely, in the particular case of verbal aggressiveness, boys who attribute to their mothers an indulgent style obtain a higher score on this dimension than their peers who perceive their mothers as neglectful or authoritarian. One possible reason for this may be that sons who perceive their mothers as indulgent may be attributing a less appropriate parenting style (neglectful or authoritarian) to their other parent, thereby reducing the possible beneficial effect of an indulgent maternal style that is seen in the case of girls. In any case, perceived consistency or inconsistency in the parenting styles of both parents is beyond the scope of our objectives.

As Steinberg (2001) indicates, authoritative family contexts are related to better psychosocial adjustment in children and adolescents for three reasons. First, greater affect and acceptance causes children to show more receptivity to parental influences. Second, an adequate combination of involvement and setting limits on children's behavior, characteristic of the authoritative style, facilitates the development of self-regulation skills that enable youths to act competently. Finally, encouragement of verbal exchange between parents and children involves children in a process that fosters cognitive and social competence, thereby enhancing their participation outside of the family framework.

Along these lines, several studies conclude that adolescent children's perception of positive parental influences (affect and quality care), as well as proper supervision, act as protective elements that decrease the likelihood of violent and antisocial behaviors (Arm, Dahinten, Marshall & Shapka, 2011; Vieno, Nation, Pastore & Santinello, 2009). Specifically, affective relationships promoted self-revelation in adolescent children, which in turn predicted a decline in the expression of aggressive behavior toward peers (Vieno et al., 2009). Thus, parental care can eliminate adolescent feelings of fear, anger, insecurity, negative emotions that act as risk factors for the appearance of behavioral problems.

The possible benefit of indulgent parenting on adolescent children, in terms of less expressed aggressiveness, anger and hostility, has been pointed out in other investigations. In recent studies, García and Gracia (2009, 2010) found that children who defined their parents as indulgent scored the same as those who perceived them to be authoritative, and showed better scores than those who labeled their parents as authoritarian or neglectful, on different

measurements of psychosocial adjustment. Wolfradt, Hempel and Miles (2003) found in their study of German adolescents that those who perceived their parents as indulgent showed lower scores in depersonalization and anxiety, and they reported greater use of active strategies for coping with stressful situations.

In conclusion, the expression of high levels of aggressive and hostile behavior may become a risk factor associated with the appearance of emotional and behavioral maladjustment. An understanding of its origins, including the child's experiences in the home setting, as well as the consequences of expressing aggressive behavior, are key elements for promoting and developing preventive programs or interventions that help youths develop a sense of belonging and resolve conflicts in socially desirable ways (Underwood et al., 2009).

This study presents certain limitations. The first has to do with the use of questionnaires or self-reports for collecting the desired information. This assumes that answers are given honestly; however, it is possible that respondents provide less-than-honest information in order to preserve a positive image of self or of their families. In an attempt to reduce responses based on social desirability, participants were guaranteed anonymity. Second, as a cross-sectional study, there is no possibility of testing causal hypotheses that explore directionality in the results obtained. Finally, it must be noted that the adolescents act here as the only informants, even though it would be more adequate to collect information from both parents and children, or even from independent informants.

Future objectives should seek to understand the effects of perceived consistency or inconsistency between mothers' and fathers' parenting styles on different measures of adolescent adjustment. Some research results (Hoeve et al., 2011; Fletcher, Steinberg & Sellers, 1999; McKinney & Renk, 2008; Simons & Conger, 2007) indicate a mitigating effect of inconsistent parenting when at least one parent uses an authoritative style.

References

- Andreu, J. M., Peña, M. E. & Graña, J. L. (2002). Adaptación psicométrica de la versión española del Cuestionario de Agresión. [Psychometric adaptation of the Spanish version of the Aggression Questionnaire] *Psicothema*, *14*, 476-482.
- Arm, R. G., Dahinten, V.S., Marshall, S. K. & Shapka, J. D. (2011). An examination of the reciprocal relationships between adolescents' aggressive behaviors and their perceptions of parental nurturance. *Journal of Youth Adolescence*, *40*, 207-220. doi:10.1007/s10964-009-9493-x
- Armsden, G. C. & Greenberg, M. T. (1987). The Inventory of Parent and Peer Attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, *16*, 427-454. doi:10.1007/BF02202939.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- Baumrind, D. (1971). Current theories of parental authority. *Developmental Psychology Monographs*, *4*, 1-103. doi:10.1037/h0030372
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence*, *11*, 56-95. doi:10.1177/027243169111110004.
- Bersabé, R. M., Fuentes, M. J. & Motrico, E. (2001). Análisis psicométrico de dos escalas para evaluar estilos educativos parentales. [Psychometric analysis of two scales for assessing parenting styles.] *Psicothema*, *13*, 678-684.
- Bjorkqvist, K., Lagerspetz, K. M. & Kaukiainen, A. (1992). Do girls manipulate and boys fight? Developmental trends in regard to direct and indirect aggression. *Aggressive Behavior*, *18*, 117-127. doi:10.1002/1098-2337
- Buri, J. R. (1991). Parental Authority Questionnaire. *Journal of Personality Assessment*, *57*, 110-119. doi:10.1207/s15327752jpa5701_13.
- Buschgens, C., van Aken, M., Swinkels, S., Ormel, J., Verhulst, F., & Buitelaar, J. (2010). Externalizing behaviors in preadolescents: familial risk to externalizing behaviors and perceived parenting styles. *European Child and Adolescent Psychiatry*, *19*, 567-575. doi:10.1007/s00787-009-0086-8.
- Buss, A. H. & Perry, M. (1992). The Aggression Questionnaire. *Journal of Personality and Social Psychology*, *63*, 452-459. doi:10.1037/0022-3514.63.3.452

- Chao, R. K. (2001). Extending research on the consequences of parenting style for Chinese Americans and European Americans. *Child Development, 72*, 1832-1843. doi:10.1111/1467-8624.00381.
- Côté, S., Vaillancourt, T., Barker, E. D., Nagin, D. & Tremblay, R. E. (2007). The joint development of physical and indirect aggression: Predictors of continuity and change during childhood. *Development and Psychopatology, 19*, 37-55. doi:10.1017/S0954579407070034
- Dwairy, M. A. (2008). Parental inconsistency versus parental authoritarianism: Associations with symptoms of psychological disorders. *Journal of Youth and Adolescence, 37*, 616-626. doi:10.1007/s10964-007-9169-3.
- De la Torre, M. J., Casanova, P. F., García, M. C., Carpio, M. V. & Cerezo, M. T. (2011). Estilos educativos paternos y estrés en estudiantes de educación secundaria obligatoria. [Fathers' parenting styles and stress in students of compulsory secondary education.] *Psicología Conductual, 19*, 577-590.
- Estévez, E., Musitu, G. & Herrero, J. (2005). The influence of violent behavior and victimization at school on psychological distress: the role of parents and teachers. *Adolescence, 40*, 183-196.
- Fletcher, A. C., Steinberg, L. & Sellers, E. B. (1999). Adolescents' well-being as a function of perceived interparental consistency. *Journal of Marriage and the Family, 61*, 599-610.
- Fuentes, M. J., Motrico, E. & Bersabé, R. M. (1999). *Escala de Afecto (EA) y Escala de Normas y Exigencias (ENE): Versión hijos y versión padres*. [Scale of Affect (EA) and Scale of Rules and Demands (ENE): Child and parent versions.] University of Malaga.
- Galambos, N. L., Barker, E. T. & Almeida, D. M. (2003). Parents do matter: Trajectories of change in externalizing and internalizing problems in early adolescence. *Child Development, 74*, 578-594. doi:10.1111/1467-8624.7402017
- Gallarin, M. & Alonso-Arbiol, I. (2012). Parenting practices, parental attachment and aggressiveness in adolescence: A predictive model. *Journal of Adolescence, 35*, 1601-1610. doi:10.1016/j.adolescence.2012.07.002.
- García, F. & Gracia, E. (2009). Is authoritative always the optimum parenting style? Evidence from the Spanish. *Adolescence, 44*, 101-131.

- García, F. & Gracia, E. (2010). ¿Qué estilo de socialización parental es el idóneo en España? Un estudio con niños y adolescentes de 10 a 14 años. [What parenting style most suitable in Spain? A study with children and adolescents from ages 10 to 14.] *Infancia y Aprendizaje*, 33, 365-384.
- García-León, A., Reyes, G. A., Vila, J., Pérez, N., Robles, H. & Ramos, M. M. (2002). The Aggression Questionnaire: A validation study in student samples. *The Spanish Journal of Psychology*, 5, 45-53.
- Glasgow, K. L., Dornbusch, S. M., Troyer, L., Steinberg, L. & Ritter, P. L. (1997). Parenting styles, adolescents' attributions, and educational outcomes in nine heterogeneous high schools. *Child Development*, 68, 507-529. doi:10.1111/j.1467-8624.1997.tb01955.x
- Hale III, W. W., van der Valk, I., Engels, R. & Meeus, W. (2005). Does perceived parental rejection make adolescents sad and mad? The association of perceived parental rejection with adolescent depression and aggression. *Journal of Adolescent Health*, 36, 466-474. doi:10.1016/j.jadohealth.2004.04.007
- Hernando, A., Oliva, A. & Pertegal, M. A. (2012). Variables familiares y rendimiento académico en la adolescencia. [Family variables and academic performance in adolescence.] *Estudios de Psicología*, 33, 51-65. doi:10.1174/021093912799803791
- Hoeve, M., Dubas, J. S., Gerris, J. R. M., van der Laan, P. H. & Smeenk, W. (2011). Maternal and paternal parenting styles: Unique and combined links to adolescent and early adult delinquency. *Journal of Adolescence*, 34, 813-827. doi:10.1016/j.adolescence.2011.02.004
- Kawabata, Y., Alink, L. R. A., Tseng, W., van IJzendoorn, M. H. & Crick, N.R. (2011). Maternal and paternal parenting styles associated with relational aggression in children and adolescents: A conceptual analysis and meta-analytic review. *Developmental Review*, 31, 240-278. doi:10.1016/j.dr.2011.08.001
- Kim, S., Brody, G. H. & Murry, V. M. (2003). Longitudinal links between contextual risks, parenting, and youth outcomes in rural African American families. *Journal of Black Psychology*, 29, 359-377. doi:10.1016/S0140-1971(03)00059-9
- Kistner, J., Counts-Allan, C., Dunke, S., Drew, C. H., David-Ferdon, C. & Lopez, C. (2010). Sex differences in relational and overt aggression in the late elementary school years. *Aggressive Behavior*, 36, 282-291. doi:10.1002/ab.20350

- Lamborn, S. D. & Felbab, A. J. (2003). Applying ethnic equivalence and cultural values models to African American teens' perceptions of parents. *Journal of Adolescence*, 26, 605-622. doi:10.1177/0192513X06289649
- Lamborn, S., Mounts, N., Steinberg, L. & Dornbusch, S. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful homes. *Child Development*, 62, 1049-1065. doi:10.1111/j.1467-8624.1991.tb01588.x
- Maccoby, E. E. & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In P. H. Mussen (dir.), *Handbook of child psychology*, vol. 4 (pp. 1 -101). New York: Wiley.
- McKinney, C. & Renk, K. (2008). Differential parenting between mothers and fathers. Implications for late adolescents. *Journal of Family Issues*, 29, 806-827. doi:10.1177/0192513X07311222
- Morales-Vives, F., Codorniu-Raga, M. J. & Vigil-Colet, A. (2005). Características psicométricas de las versiones reducidas del cuestionario de agresividad de Buss y Perry. [Psychometric characteristics of the reduced versions of the Aggressiveness Questionnaire by Buss and Perry.] *Psicothema*, 17, 96-100.
- Oliva, A., Parra, A. & Arranz, E. (2008). Estilos relacionales parentales y ajuste adolescente. [Parental relational styles and adolescent adjustment.] *Infancia y Aprendizaje*, 31, 93-106. doi:10.1174/021037008783487093
- Rodríguez, M. C., Peña, J. V. & Torío, S. (2009). La experiencia de la paternidad y la maternidad: análisis del discurso de las creencias sobre la crianza y el cuidado infantil. [The experience of paternity and maternity: discourse analysis on beliefs about childraising and child care.] *Infancia y Aprendizaje*, 32, 81-95. doi:10.1174/021037009787138248
- Santisteban, C. & Alvarado, J. M. (2009). The Aggression Questionnaire for Spanish preadolescents and adolescents. AQ-PA. *The Spanish Journal of Psychology*, 12, 320-326.
- Simons, L. G., & Conger, R. D. (2007). Linking Mother-Father differences in parenting to a typology of family parenting styles and adolescent outcomes. *Journal of Family Issues*, 28, 211-245. doi: 10.1177/0192513X06294593.

- Steinberg, L. (2001). We know some things: Parent-adolescent relationships in retrospect and prospect. *Journal of Research on Adolescence*, *11*, 1-19. doi:10.1111/1532-7795.00001
- Steinberg, L., Lamborn, S., Darling, N., Mounts, N. & Dornbusch, S. (1994). Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, *65*, 754-770. doi:10.1111/j.1467-8624.1994.tb00781.x
- Toldos, M. P. (2005). Sex and age differences in self-estimated physical, verbal and indirect aggression in Spanish adolescents. *Aggressive Behavior*, *31*, 13-23. doi:10.1002/ab.20034
- Tur-Porcar, A., Mestre, V., Samper, P. & Malonda, E. (2012). Crianza y agresividad de los menores: ¿es diferente la influencia del padre y de la madre? [Childraising and aggressiveness in minors: is there a difference between the father's and mother's influence?] *Psicothema*, *24*, 284-288.
- Underwood, M. K., Beron, K. J., Gentsch, J. K., Galperin, M. B. y Risser, S. D. (2008). Family correlates of children's social and physical aggression with peers: Negative interparental conflict strategies and parenting styles. *International Journal of Behavioral Development*, *32*, 549-562. doi:10.1177/0165025408097134
- Underwood, M. K., Beron, K. J. & Rosen, L. H. (2009). Continuity and change in social and physical aggression from middle childhood through early adolescence. *Aggressive Behavior*, *35*, 357-375. doi:10.1002/ab.20313
- Vaillancourt, T., Miller, J. L., Fagbemi, J., Côté, S. & Tremblay, R. E. (2007). Trajectories and predictors of indirect aggression: Results from a nationally representative longitudinal study of Canadian children aged 2-10. *Aggressive Behavior*, *33*, 314-326. doi:10.1002/ab.20202
- Vieno, A., Nation, M., Pastore, M. & Santinello, M. (2009). Parenting and antisocial behavior: A model of the relationship between adolescent self-disclosure, parental closeness, parental control, and adolescent antisocial behavior. *Developmental Psychology*, *45*, 1509-1519. doi:10.1037/a0016929

Wolfradt, U., Hempel, S. & Miles, J. N. V. (2003). Perceived parenting styles, depersonalization, anxiety and coping behavior in adolescents. *Personality and Individual Differences*, 34, 521-532. doi:10.1016/S0191-8869(02)00092-2

[This page intentionally left blank]