

Externalizing and Internalizing Problems: Contributions of Attachment and Parental Practices

Problemas Externalizantes e Internalizantes: Contribuições do Apego e das Práticas Parentais

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Abstract

The relation between attachment and parental practices with externalizing (aggression and delinquency) and internalizing (social withdrawal and anxiety/depression) behavioral problems were investigated in this study. Participants were 289 children (from 9 to 12 years old) and 205 caregivers who answered distinct questionnaires: the formers on attachment and the later on parental practices. Results indicated that poor maternal attachment relationships, high levels of parental rejection and being a boy predicted aggression. Moreover, poor paternal attachment and father's low education predicted social withdrawal. Finally, parental rejection was marginally associated with anxiety/depression. The results reinforce, partially, the existing literature and help to understand the complex relationship between parenting and behavioral problems.

Keywords: Externalizing problems, internalizing problems, attachment, rejection, parental control.

Resumo

As relações do vínculo de apego e das práticas parentais com problemas externalizantes (agressividade e delinquência) e internalizantes (retraimento social e ansiedade/depressão) foram investigadas neste estudo. Os participantes foram 289 crianças (9 a 12 anos de idade) e 205 cuidadores que responderam questionários sobre vínculo de apego e sobre práticas parentais. Os resultados indicaram que vínculo frágil de apego materno, altos níveis de rejeição parental e o fato de ser menino predizem agressividade. Ademais, vínculo frágil de apego paterno e baixa escolaridade paterna predizem retraimento social. Finalmente, rejeição parental associou-se marginalmente à ansiedade/depressão dos filhos. Os resultados reforçam parcialmente a literatura e auxiliam na compreensão da complexa relação entre parentalidade e problemas comportamentais.

Palavras-chave: Problemas externalizantes, problemas internalizantes, apego, rejeição, controle parental.

Behavioural problems that precede or are concomitant with most common mental disorders in childhood and adolescence have been the focus of interest of Developmental Psychopathology (Cicchetti, 1984; Sroufer & Rutter, 1984). Within the theoretical framework of Developmental Psychopathology, children who face difficulties in their relations with peers can be grouped into two broad categories: those with "externalizing problems" – little control (undercontrol) over their emotions, thoughts and behaviours – and those with "internalizing problems" – excessively control (overcontrol) of these processes (Achenbach & Edelbrock, 1978; Achenbach, Howell, Quay, & Connors,

1991). In the first category, the effects of low control, expressed by aggressive, impulsive, antisocial and challenging behaviours, has an immediate impact on others. In the second category, the excessive control, expressed in forms of social withdrawal, inhibition, depression or various forms of anxiety, brings immediate consequences for the child himself/herself, limiting social experiences and thus creating obstacles for the social and psychological adjustment in childhood (Aunola & Nurmi, 2005).

Due to the negative consequences for the individual mental health, and given the emotional and social cost for the families and society in general, the correlates and

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predictors of internalizing and externalizing behaviours, in childhood and adolescence, have been the focus of great attention from researchers, in different cultures. Among the many factors involved in the genesis and course of these problems, those related to the quality of parent-child relationships have gained attention in the field of Developmental Psychopathology (Masten et al., 2005).

The parent-child attachment, understood as an innate behavioural system, whose basic function is to search for parental closeness and security, promotes the establishment of an early and persistent bond between the baby and his/her primary caregiver. Even in the most advanced stage of childhood mothers and fathers tend to be cited as the main source of social support on children's lives (Furman & Buhrmester, 1992). Even though the involvement of both parents in raising their children constitute a fundamental factor in promoting children's adaptive behaviours and, in inhibiting risk behaviours as well, several researchers, in different cultures, have suggested that mothers and fathers play different roles on their children's development (Boller et al., 2006; Bandeira, Goetz, Pontes, & Vieira, 2005). Therefore to investigate children's behavioural problems, not just is necessary to examine the child-mother attachment, but also examining the child's relation with father becomes paramount.

Most studies focusing on attachment relationships and their implications for development has directed its interest to the early relationship between mothers and infants, or mothers and preschoolers. However, few studies have focused on the features and quality of attachment in middle childhood and preadolescence (Dwyer, 2005). In the second half of this decade, some important research on this subject were published (Booth-Laforce et al., 2006; Diener, Russell, Behunin, & Wong, 2008), but they were mostly restricted to the U.S.A. and Europe. Yet, a small number of these studies included, besides the mother, the father in their analysis (Booth-Laforce et al., 2006). It has been shown that the attachment relationship between children and their fathers would be more salient in predicting children's social-emotional functioning, especially, regarding internalizing problems (Brumariu & Kerns, 2010; Desjardins & Leadbeater, 2011; Roelofs, Meesters, ter Huurne, Bamelis, & Muris, 2006).

In investigating the quality of child's attachment with both parents, it is essential to characterize what is meant by attachment in middle and late childhood. According to Kerns, Keplac and Cole (1996), the quality of this relationship, at this stage of development, derives from the child's perception of: (a) unconditional parental availability and responsiveness, (b) an ease and open communication, particularly in time of more intense emotional states, and (c) trust and emotional support that can be received in times of stress.

There are strong evidences in the extant literature that the attachment with mother is negatively associated with externalizing problems (Doyle & Markiewicz, 2005; Fearon, Bakermans-Kranenburg, van IJzendoorn, Lapsley, & Roisman, 2010) and internalizing as well (Brumariu &

Kerns, 2010; Nishikawa, Hägglöf, & Sundbom, 2010). It have been also suggested that the paternal attachment is negatively associated with externalizing (Booth-Laforce et al., 2006) and internalizing problems (Brumariu & Kerns, 2010; Desjardins & Leadbeater, 2011; Roelofs et al., 2006).

Besides the quality of the attachment, the educational practices adopted by parents toward their children tend to interfere in the occurrence of behavioral problems in the course of their development. Educational practices refer to a set of behaviors or specific strategies that parents use in everyday situations in order to raise their children to socialize them according to culturally accepted standards (Darling & Steinberg, 1993).

It has been claimed that parental rejection (Rohner & Britner, 2002) and parental practices of behavioural and psychological control are among the parental behaviours that most affect the children's socioemotional adjustment (Barber, 1996). While high levels of parental rejection appear, in different cultures, as an important predictor of internalizing and externalizing problems (Nishikawa, Sundbom & Hägglöf, 2010; Roelofs et al., 2006; Rohner & Britner, 2002) low levels of behavioural control in turn, would lead to externalizing problems - aggression, disruptive behaviours, impulsivity, difficulty coping with frustration (Aunola & Nurmi, 2005; Barber, 1996; Laird, Marrero, & Sentse, 2010). Furthermore, high levels of psychological control - a practice that contrapose (set over against) the child's psychological need for autonomy - would generate either problems of externalizing nature (Aunola & Nurmi, 2005; Finkenauer, Engels, & Baumeister, 2005) or of internalizing nature (Aunola & Nurmi, 2005; Barber, 1996; Finkenauer et al., 2005; Karreman, van Tuijl, van Aken, & Deković, 2009). Finally, there are evidences that parental practices may be influenced by both, children's individual characteristics, such as age and gender (Muris, Meesters, & van den Berg, 2003) and caregivers' individual characteristics, such as age and education level. (Roelofs et al., 2006).

Regarding parental sociodemographic variables, for some researchers, the experience gained by parents through life course tend to favour the use of positive parental practices such as behavioural control and to restrain the use of negative practices such as rejection and psychological control (Bornstein & Putnick, 2007; Marin & Levandowski, 2008). Other studies point to an association between low parental warmth and family and community low socio-economic status (having low educational level as a leading indicator; Klebanov, Brooks-Gunn, & Duncan, 1994).

The goal of this study was to examine the contributions of: (a) the quality of child attachment (to the mother and/or to the father), and, (b) the parental practices (rejection and/or behavioural and/or psychological control) in the occurrence of externalizing problems (aggression and delinquency) and internalizing difficulties (social withdrawal and anxiety/depression). Since these aspects configure two distinct yet interconnected parental systems, it is expected that both, attachment quality and the parental practices

would contribute uniquely for variability in internalizing and externalizing behavioral problems.

Method

Participants

The study included 289 children (48.2% girls, 51.8% boys) from two schools in each of two cities in southern area of Brazil, and 205 caregivers (181 mothers, 18 fathers and 6 other caregivers), accounting for a total of 494 subjects. The children had an average of 10.5 years ($SD = .77$), mothers, 37.28 years ($SD = 7.06$) and fathers 41.13 years ($SD = 7.92$). Most mothers (84.4%) and fathers (82.4%) had primary or secondary level of education.

Measures

The quality of the attachment was accessed by the Security Scale (Kerns et al., 1996), which consists of 15 items for mothers ($\alpha = .74$) and the same 15 items for fathers ($\alpha = .81$). Example, "Some kids find it easy to rely on his/her mother for help, BUT other kids find it hard to tell his/her mother when they need it". Children were instructed to firstly choose, between the two, the statement that best described them and, next, to indicate the degree of agreement (1 = partly true and 2 = true) with the statement. The internal consistency reported for these and other scales employed were derived from the sample data analyzed in this study.

The dimensions of parenting practices were accessed through the Child Rearing Practices-Report Questionnaire (CRPR-Q) reviewed by Rickel and Biasatti (1982). The CRPR-Q is composed of 42 items, with a six-point scale (with 1 = strongly disagree and 6 = strongly agree) that access the basic dimensions of parenting: control (restrictiveness) and affection (nurturance). Exploratory Factor Analyses identified two dimensions:

1. Rejection, composed of three items ($\alpha = .69$) denoting disappointment, hostility and conflictual interaction between parent and child (e.g. "I feel a little disappointed with my child").
2. Control, which in subsequent analyses was divided into two factors: (a): behavioral control, with 14 items ($\alpha = .70$) that accesses how parents supervise their children's behavior, through means of plausible requirement of maturity, and through monitoring (Ex: "I keep informed about where my child is and what he/she is doing") and (b) psychological control, with 13 items ($\alpha = .69$), marked by parental intrusiveness aiming to control not only the child's behavior but also his/her emotions, and done by means of affection withdrawal threatening, guilt induction, and other forms of emotional manipulation (Ex: "I believe that my child should be aware of how much I sacrifice myself for him/her").

The internalizing and externalizing problems were accessed separately through four subscales of the Child

Behavior Checklist 4-18 years (Achenbach, 1991). For externalizing problems we employed two subscales: (a) aggression ($\alpha = .90$), which contains 21 items that describe openly aggressive behaviors, and (b) delinquency ($\alpha = .83$), with 15 items covering behaviors that violate legal or moral rules. For internalizing problems we employed the following subscales: (a) social withdrawal ($\alpha = .75$), composed by 10 items that describe behaviors of social isolation, shyness and social difficulties with peers, and (b) anxiety/depression ($\alpha = .82$), which contains 18 items that access symptoms of depressive behavior and thinking and generalized anxiety.

Data Collection Procedure

This study was approved by the Ethics Committee in Human Research of the *Universidade do Vale do Rio dos Sinos* (UNISINOS), process number 038/2009, on May 29th 2009. Once obtained the approval of the Ethics Committee, the research proposal was submitted to and approved by the Principal of the schools. All the children received an informed consent to be read and signed by their parents/caregivers. The sample was composed only by the children whose parents/caregivers signed the informed consent form. Children completed the questionnaire that accesses attachment quality towards both parents, during regular class hours reserved for the study. The caregivers completed two questionnaires, one regarding their parenting practices and the other regarding their children's behavior problems at school or at another prearranged locations (as in community centers or in their homes) in individual or group situation.

Data Analysis

Data analyses were performed using descriptive (frequency, mean and standard deviation) and inferential statistics (correlation analysis and multiple regression analysis). The Pearson r was employed as the correlation coefficient in this study, since the data were parametric, with a significance level of .05 or lower.

The hierarchical multiple regression analyses were used to investigate the unique and combined contribution of the explanatory variables (quality of attachment and parenting practices) on the criteria variables (externalizing and internalizing behavior problems). In hierarchical regression analysis, the variables were included in the regression equation in different blocks, which allowed to control the prior variables, allowing also to make an integrative analysis, in which the effects of all explanatory variables on externalizing and internalizing problems (criteria variables) were taken into account.

Results

Before proceeding with the predictive analysis, we performed a series of correlational analyses between the explanatory and the criteria variables, which are presented in Table 1.

Table 1
Pearson's Correlations between Attachment, Parental Practices and Internalizing and Externalizing Problems

	Externalizing Problems		Internalizing Problems	
	Aggression	Delinquency	Social Withdrawal	Anxiety Depression
Mother Attachment	-.20**	-.18*	-.21**	-.14†
Father Attachment	-	-	-.23**	-.14†
Rejection	.19**	.28**	-	.17*
Behavioral Control	-.17*	-.20**	-	-
Psychological Control	-	-	-	-

* $p \leq .05$, ** $p \leq .001$, † $p < .10$.

According to the results presented in Table 1, poor maternal attachment was correlated with aggression, delinquency and social withdrawal in childhood, and showed a tendency to be correlate with depression/anxiety. However, the quality of paternal attachment was not associated with any of externalizing problems. With regard to internalizing problems, poor paternal attachment was associated with social withdrawal and showed a tendency to be associated with child depression/ anxiety.

The investigation of the correlations between the different dimensions of parenting practices and behavior problems indicated that high levels of parental rejection and low behavioral control correlated with aggression and delinquency. In contrast, only parental rejection correlated with anxiety/depression. Social withdrawal did

not correlate neither with parental control practices nor with rejection, and, finally, psychological control did not correlate with any behavioral problem (externalizing or internalizing types).

Hierarchical regression analyses were performed through stepwise method due to its exploratory nature. The explanatory variables were included in a single block in the regression equation. The socio-demographic variables (children's sex and age, mother's and father's education level and age) were included in a separate block to see if the presence of these variables would affect the predictive value of the explanatory variables and would change the multiple regression coefficients. The gender variable was transformed into a dummy variable. The results are reported below in Table 2.

Table 2
Hierarchical Regression Models (Stepwise Method) for Aggression and Delinquency

	Aggression		Delinquency	
	B	β	B	β
Step 1				
Constant B	.76***		.21**	
(SE)	(.20)		(.08)	
Mother Attachment	-.12*	-.17*	-.04†	-.14†
Rejection	.04*	.16*	.03**	.25**
F	5.50**		9.09***	
R ²	.07		.10	
Step 2				
Block 1				
Constant B	.81***		.21**	
(SE)	(.20)		(.08)	
Mother Attachment	-.11 *	-.16*	-.04†	-.14†
Father Attachment	-	-	-	-
Rejection	.04†	.15†	.03**	.25**
Block 2				
Child Sex	-.12*	-.16*	-	-
F	5,18**		9.14***	
R ²	.091		.10	

*** $p < .001$, ** $p < .01$, * $p < .05$, † $p < .10$.

Table 2 shows that maternal attachment and parental rejection predict aggression [$F(2,156) = 5.50, p \leq .01$]. Together the two variables accounted for 7% of the variance on aggressive behavior in children. By adding the socio-demographic variables to the model, the regression coefficient increased with the presence of the variable sex of the child. Being a boy offered an additional contribution to the model (r^2 changed from .07 to .09). Thus, the best regression model was the one which combined high levels of parental rejection, poor attachment with the mother and

the fact of being a boy. Together, these variables explained 9.1% of the variance on child aggression.

Similarly, with respect to delinquency, the results indicated that poor maternal attachment and parental rejection predict delinquency [$F(2,170) = 9.09, p \leq .001$]. The two variables together explained 10% of the variance on child delinquency. However, unlike the model of aggression, the model that predicts delinquency was not altered with the inclusion of socio-demographic variables.

Table 3

Hierarchical Regression Models (Stepwise Method) for Social Withdrawal and Anxiety/Depression

Step 1	Social Withdrawal		Anxiety/Depression	
	<i>B</i>	β	<i>B</i>	β
Constant <i>B</i>	.60***		.29***	
(SE)	(.10)		(.02)	
Father Attachment	-.10**	-.23**	-	-
Rejection	-	-	.03*	.17*
<i>F</i>	.62**		4.52*	
<i>R</i> ²	.055		.028	
Step 2				
Block 1				
Constant <i>B</i>	.68***		.40**	
(SE)	(.11)		(.15)	
Father Attachment	-.10**	-.22**	-	-
Rejection	-	-	.03†	.15†
Block 2				
Mother's age	-	-	.01†	.21†
Father's age	-	-	-.01†	-.19†
Father's Education level	-.04†	-.13	-.05†	-.15†
<i>F</i>	6.43**		3.13*	
<i>R</i> ²	.073		.076	

*** $p < .001$, ** $p < .01$, * $p < .05$, † $p < .10$.

Regarding the model for social withdrawal (see Table 3) that included only the explanatory variables in the regression equation (attachment quality towards both parents, rejection, behavioral and psychological control) we found that only paternal attachment was a good predictor [$F(1, 165) = 9.62, p \leq .01$]. The addition of socio-demographic variables in the regression model produced a small increase in the regression coefficient (from .05 to .073), if one considers the tendency of association of the variable level of paternal education. Thus, specifically, poor paternal attachment and lower levels of paternal education offered unique contributions to the model and,

combined, explained 7.3% of the variance on child social withdrawal [$F(2,164) = 6.43, p \leq .01$].

On the other hand, when we entered only the explanatory variables into the model, only parental rejection [$F(1,156) = 4.52, p \leq .05$] was predictive of anxiety/depression. In fact, parental rejection explained 2.8% of the variance on this dimension. With the entry of socio-demographic into the model a different picture emerged - maternal age, paternal age and educational level were marginally significant in predicting anxiety/depression [$F(4,153) = 3.13, p \leq .05$]. Thus the final predictive model was the one that grouped unique contributions of parental

rejection, maternal age, paternal age and paternal educational level and together these variables explained 5.1% of the variance on anxiety/depression in childhood.

Discussion

This study was based on the assumption that both the infant attachment system and the parenting practices system contribute uniquely to exacerbate or minimize the signs of behavior problems in childhood, due to its negative or positive quality. At the same time, it was assumed that such contributions would continue to exist, even if the effects of socio-demographic variables that have been shown to be important in explaining each of the behavioral problems in the study were controlled for. Therefore, a series of correlational hypotheses were tested preliminarily, which were partially confirmed, and the results are discussed below.

Mother's and Father's Attachment Quality and Behaviour Problems

Children who, reported they are sure that their mothers are available, responsive and supportive had also low scores in aggression, delinquency, social withdrawal and had a strong tendency to be less anxious and depressed. These findings are in accordance with in the international literature which indicates a negative relationship between secure maternal attachment and externalizing problems (Fearon et al., 2010) and between secure maternal attachment and internalizing problems (Brumariu & Kerns, 2010; Nishikawa, Hägglöf, et al., 2010).

In contrast to the findings of Booth-Laforce et al. (2006), paternal attachment was not correlated with externalizing problems in the sample studied. On the other hand, children who reported low confidence in the availability, responsiveness and emotional support from their fathers tend to demonstrate internalizing problems (which was significant for social withdrawal and with a strong correlational trend to anxiety/depression), confirming the results found by Brumariu and Kerns (2010), Desjardins and Leadbeater (2011) and Roelofs et al. (2006).

Parental Practices and Behavior Problems

In the present study, as it has been reported in the literature (Nishikawa, Sundbom, et al., 2010; Roelofs et al., 2006; Rohner & Britner, 2002), parental rejection was an important correlate of externalizing problems (aggression and delinquency). It was also found to be associated with anxiety/depression in children, but not with social withdrawal, confirming in part the results of other studies (Nishikawa, Sundbom, et al., 2010; Roelofs et al., 2006; Rohner & Britner, 2002). This may be due to the fact that the studies that found an association between negative parenting practices (like rejection) and internalizing problems used a global score of internalizing problems (Nishikawa, Sundbom, et al., 2010), and not separate scores for each

internalizing problem as it was done here or, in some cases, the studies measure only symptoms of anxiety and depression, not the indicators of social withdrawal (Roelofs et al., 2006; Rohner & Britner, 2002).

Studies on social withdrawal (Rubin, Burgess, & Hastings, 2002; Rubin, Coplan, & Bowker, 2009) indicate that the affective climate that exists between the inhibit child and his parents can be both of acceptance and affection and of little affection as well. That is, little affection does not seem to be, necessarily, a characteristic of parents of children socially inhibited. In fact, for these authors, it is the characteristic of being over solicitous (parents who are controlling, very affectionate, but, paradoxically, little responsive to the real needs of children) which may put children at risk of becoming socially withdrawn.

In relation to externalizing problems, the results suggest that aggressive children with signs of delinquency also tend to have caregivers whose strategies for behaviour control are ineffective, confirming findings in the literature (Aunola & Nurmi, 2005; Barber, 1996; Laird et al., 2010). However, contrary to the findings of various researchers, psychological control was not correlated with either externalizing problems (Aunola & Nurmi, 2005; Barber, 1996; Finkenauer et al., 2005), nor with internalizing problems (Aunola & Nurmi, 2005; Barber, 1996; Finkenauer et al., 2005; Karreman et al., 2009). At this point, it is necessary to consider the meaning that psychological control would have on our culture. As in the other Latin American cultures, psychological control can be understood as a socially acceptable way of promoting the need for children to be good citizens and of teaching the children to respect (and even feared) parental authority (Halgunseth, Ispa, & Rudy, 2006). Thus, unlike the negative impact that forms of psychological control appear to have on Euro-American children (For a review see Barber, 1996), Brazilian children can be resilient to the effects of maternal emotional manipulation strategies when it is perceived as a way of correcting their behavior. Indeed, in this present study, caregivers had higher scores on items that denoted emotional control and overprotection of children (eg, "I do not let my daughter questioning my decisions" and "I prefer that my child not try things she/he may fail" and on items denoting clearly emotional manipulation strategies, which typically would induce anxiety in children of Western developed countries (e.g., "I believe that my daughter should be aware of how much I sacrifice for she/he", "I say to my daughter how much I feel ashamed and disappointed when she/he misbehaves").

Predictive Models

For the externalizing problems investigated, at least one variable in each parental system, specifically, a fragile maternal attachment and high levels of parental rejection, offered unique contributions to explain both delinquency and aggression (although, in this case, the regression coefficient of the variable maternal attachment was only

marginally significant). These variables remain as significant predictors, even when controlling sociodemographic variables (specifically, the child's age, maternal and paternal ages and educational levels). Moreover, being a boy offered an additional contribution to the model which predicts aggressiveness; a result consistent with other studies (Burt, Mikolajewski, & Larson, 2009; Prinzie, Onghena, & Hellinckx, 2006).

With respect to predictive analysis of internalizing problems, only the child's attachment towards his/her father was able to predict social withdrawal, not diminishing its predictive power in the presence of sociodemographic variables. Thus, the perceived poor attachment to the father, along with low paternal education level explained the increase levels of social withdrawal in childhood and preadolescence. It is possible that in this particular age (late childhood and early teens) fathers assume a specific role and relevance in the consolidation of child personality (Lieberman, Doyle, & Markiewicz, 1999; Steele & Steele, 2005).

In the prediction of anxiety/depression, parental rejection showed predictive contribution, but with a marginally significant effect. Therefore, unlike the findings of Doyle and Markiewicz (2005), the hypothesis that both groups of variables (attachment and parenting practices) could provide independent contributions in predicting internalizing problems was not confirmed in this present study. This indicates the need of more specific studies examining cultural values that may explain these variations. Individual characteristics of parents, such as age and educational level, seemed also to have effects on the child's psychological well-being. However, it is likely that the age of the parents does not exert a direct impact on the emotional problems of the children, but rather, indirect effect, perhaps mediated by their beliefs and values as well as their perception of social networks support in their educational practices (Marin & Levandowski, 2008). Finally, the decline of paternal education level, as well as in social withdrawal, seems to be also associated with increased levels of anxiety and depression in children. This result is consistent with studies showing that low parental education is associated with adverse developmental outcomes of their children, since they affect the way as parents exercise their parenting (Klebanov et al., 1994). Furthermore, the suggestion that parental rejection was the best predictor and correlate of anxiety depression finds strong support in the revision work of Rohner and Britner (2002).

Finally, it seems appropriate a comment the contribution of variables exclusively related to father in the prediction of internalizing problems and, on the other hand, the variables exclusively related to mothers in the prediction of externalizing problems. In this sense, researchers have emphasized the protective function that a paternal attachment appears to have against internalizing problems in children from middle childhood (Brumariu & Kerns, 2010; Desjardins & Leadbeater, 2011; Roelofs et al., 2006). Regarding the aggressive behaviors associated

with maternal variables, they can be revealing behaviors that Rohner (2002) called "defensive independence" and that Dozier, Stovall, and Albus (1999) called strategy of "minimizing the need for bonding". That means that these findings indicate a need of more studies focused in the specificities and the impact of paternal and maternal practices on children's developmental behavioral trajectory.

Final Considerations

In general, the results obtained with children in Southern of Brazil reinforce the international literature on the relationship between parenting and behavior problems. Specifically, the results confirmed the relevance of parental rejection, behavioral control and poor maternal attachment in the occurrence of externalizing problems.

The findings related to internalizing problems are less clear and are not in complete agreement with the literature. Such problems often are unnoticed by parents, since they include internal emotional states with difficulty expression or not clearly perceived. Furthermore, the role of psychological control, associated with internalizing problems in studies another countries, have not showed the same influence among the Brazilian children in the present sample. The reasons for this difference in results may be due to cultural differences, in Brazil like other Latin cultures, where the acceptance of parental practices which inadvertently employ strategies involving a emotional manipulation of the children (induction of guilt, threats of punishment) are seen as socially acceptable ways to discipline them.

This argument, however, needs further investigation. It is recommended that futures studies examine in a more comprehensive way the impact of social and cultural specificities associated with the role of psychological control in our culture using different and validated instruments. Furthermore, it is important to notice that the values of the regression coefficients in the adjustment of the proposed models were quite low, indicating that the explanatory variables investigated contributed modestly to explain the variability of the internalizing and externalizing behavior problems. Thus, new variables should be included in future predictive studies, to give explicit account of the multifaceted nature of these behavior problems.

Beside the contributions of this study, there are also some limitations. First, the measures on parenting practices were applied to any caregivers (mother or father or any other person responsible for raising the child), making it impossible to carry out comparative analyses between maternal and paternal practices. This study reflects the general vision of the mothers, who were the majority of caregivers (88.3%). Furthermore, parenting practices were assessed from the parents' perspectives, and would be important to obtain the children perceptions about these practices as well. Assuming the possibility of finding divergent views, information obtained from both parents and from children could bring more accurate information

to understanding the development of internalizing and externalizing problems.

In studying development, it is also necessary to conduct research including longitudinal data that can be helpful to understanding of the trajectory and consequences of internalizing and externalizing problems in childhood. Finally, in future studies, it is suggested to include information on the quality of other social relationships that children establish (eg, friendship) in the peer group, a sphere of social relationships that, at this stage of development, plays a fundamental role in children's socialization processes.

References

- Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist and 1991 Profile*. Burlington, VT: Department of Psychiatry, University of Vermont.
- Achenbach, T. M., & Edelbrock, C. (1978). The classification of child psychopathology: A review and analysis of empirical efforts. *Psychological Bulletin*, 85, 1275-1301.
- Achenbach, T. M., Howell, C. T., Quay, H. C., & Conners, C. K. (1991). National survey of problems and competencies among four- to sixteen-year-olds: Parents' reports for normative and clinical samples. *Monographs of the Society for Research in Child Development*, 56, 1-131.
- Aunola, K., & Nurmi, J. (2005). The role of parenting styles in children's problem behavior. *Child Development*, 76(6), 1144-1159.
- Bandeira, M., Goetz, E. R., Vieira, M. L., & Pontes, F. A. R. (2005). O cuidado parental e o papel do pai no contexto familiar [The parental care and the role of the father in the family context]. In F. A. R. Pontes, M. C. M. Celina, R. C. S. Brito, & W. L. B. Martin (Eds.), *Temas pertinentes à construção da Psicologia contemporânea* [Relevant topics to the construction of contemporary Psychology] (pp. 191-230). Belém, PA: Editora Universitária.
- Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development*, 67, 3296-3319.
- Boller, K., Bradley, N. C., Raikes, H., Pan, B., Shears, J., & Roggman, L. (2006). The early head start father studies: Design, data collection, and summary of father presence in the lives of infants and toddlers. *Parenting*, 6(2-3), 117-143.
- Booth-Laforce, C., Oh, W., Kim, A. K., Rubin, K.H., Rose-Krasnor, L., & Burgess, K. (2006). Attachment, self-worth, and peer-group functioning in middle childhood. *Attachment & Human Development*, 8(4), 309-325.
- Bornstein, M. H., & Putnick, D. L. (2007). Chronological age, cognitions, and practices in European American mothers: A multivariate study of parenting. *Developmental Psychology*, 43(4), 850-864.
- Brumariu, L. E., & Kerns, K. A. (2010). Parent-child attachment and internalizing symptoms in childhood and adolescence: A review of empirical findings and future directions. *Development and Psychopathology*, 22, 177-203.
- Burt, S. A., Mikolajewski, A. J., & Larson, C. L. (2009). Do aggression and rule-breaking have different interpersonal correlates? A study of antisocial behavior subtypes, negative affect, and hostile perceptions of others. *Aggressive Behavior*, 35, 453-461.
- Cicchetti, D. (1984). The emergence of developmental psychopathology. *Child Development*, 55, 1-7.
- Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin*, 113(3), 487-496.
- Desjardins, T. L., & Leadbeater, B. J. (2011). Relational victimization and depressive symptoms in adolescence: Moderating effects of mother, father, and peer emotional support. *Journal of Youth Adolescence*, 40, 531-544.
- Diener, M. L., Russell, A. I., Behunin, M. G., & Wong, M. S. (2008). Attachment to mothers and fathers during middle childhood: Associations with child gender, grade, and competence. *Social Development*, 17(1), 84-101.
- Doyle, A. B., & Markiewicz, D. (2005). Parenting, marital conflict and adjustment from early- to mid- adolescence: Mediated by adolescent attachment style? *Journal of Youth and Adolescence*, 34, 97-110.
- Dozier, M., Stovall, K. C., & Albus, K. E. (1999). Attachment and psychopathology in adulthood. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment. Theory, research, and clinical applications* (pp. 497-519). New York: Guilford Press.
- Dwyer, K. M. (2005). The meaning and measurement of attachment in middle and late childhood. *Human Development*, 48, 155-182.
- Fearon, R. P., Bakermans-Kranenburg, M. J., van IJzendoorn, M. H., Lapsley, A. M., & Roisman, G. I. (2010). The significance of insecure attachment and disorganization in the development of children's externalizing behavior: A meta-analytic study. *Child Development*, 81(2), 435-456.
- Finkenauer, C., Engels, R. C. M. E., & Baumeister, R. F. (2005). Parenting behaviour and adolescent behavioural and emotional problems: The role of self-control. *International Journal of Behavioral Development*, 29(1), 58-69.
- Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. *Child Development*, 63, 103-115.
- Halgunseth, L. C., Ispa, J. M., & Rudy, D. (2006). Parental control in Latino families: An integrated review of the literature. *Child Development*, 77(5), 1282-1297.
- Karremans, A., van Tuijl, C., van Aken, M. A. G., & Dekovic, M. (2009). Predicting young children's externalizing problems interactions among effortful control, parenting, and child gender. *Merrill-Palmer Quarterly*, 55(2), 111-134.
- Kerns, K. A., Klepac, L., & Cole, A. K. (1996). Peer relationships and preadolescents' perceptions of security in the child-mother relationship. *Developmental Psychology*, 32, 457-466.
- Klebanov, P. K., Brooks-Gunn, J., & Duncan, G. J. (1994). Does neighborhood and family poverty affect mothers' parenting, mental health, and social support? *Journal of Marriage and the Family*, 56, 441-455.
- Laird, R. D., Marrero, M. D., & Sentse, M. (2010). Revisiting parental monitoring: Evidence that parental solicitation can be effective when needed most. *Journal of Youth and Adolescence*, 39, 1431-1441.
- Lieberman, M., Doyle, A. B., & Markiewicz, D. (1999). Developmental patterns in security of attachment to mother and father in late childhood and early adolescence: Associations with peer relations. *Child Development*, 70, 202-213.
- Marin, A. H., & Levandowski, D. C. (2008). Práticas educativas no contexto da maternidade adolescente: Breve revisão da literatura [Childrearing practices in the context of adolescent motherhood: Brief literature review]. *Interação em Psicologia*, 12(1), 107-113.
- Masten, A. S., Roisman, G. I., Long, J. D., Burt, K. B., Obradovic, J., Riley, J. R., ...Tellegen, A. (2005). Developmental cascades: Linking academic achievement and externalizing and internalizing symptoms over 20 years. *Developmental Psychology*, 41, 733-746.

- Muris, P., Meesters, C., & van den Berg, S. (2003). Internalizing and externalizing problems as correlates of self-reported attachment style and perceived parental rearing in normal adolescents. *Journal of Child and Family Studies, 12*, 171-183.
- Nishikawa, S. Hägglöf, B., & Sundbom, E. (2010). Contributions of attachment and self-concept on internalizing and externalizing problems among Japanese adolescents. *Journal of Child and Family Studies, 19*(3), 334-342.
- Nishikawa, S., Sundbom, E., & Hägglöf, B. (2010). Influence of perceived parental rearing on adolescent self-concept and internalizing and externalizing problems in Japan. *Journal of Child and Family Studies, 19*(1), 57-66.
- Prinz, P., Onghena, P., & Hellinckx, W. (2006). A cohort-sequential multivariate latent growth curve analysis of normative CBCL aggressive and delinquent problem behavior: Associations with harsh discipline and gender. *International Journal of Behavioral Development, 30*(5), 444-459.
- Rickel, A. U., & Biasatti, L. L. (1982). Modification of the block child-rearing practices report. *Journal of Clinical Psychology, 38*, 129-134.
- Roelofs, J., Meesters, C., ter Huurne, M., Bamelis, L., & Muris, P. (2006). On the links between attachment style, parental rearing behaviors, and internalizing and externalizing problems in non-clinical children. *Journal of Child and Family Studies, 15*(3), 319-332.
- Rohner, R. P. (2002). *Introduction to parental acceptance-rejection theory*. Retrieved February, 2011, from <http://vm.uconn.edu/~rohner>
- Rohner, R. P., & Britner, P. A. (2002). Worldwide mental health correlates of parental acceptance-rejection: Review of cross-cultural and intracultural evidence. *Cross-Cultural Research, 36*(1), 16-47.
- Rubin, K. H., Burgess, K. B., & Hastings, P. D. (2002). Stability and social-behavioral consequences of toddlers' inhibited temperament and parenting behaviors. *Child Development, 73*, 483-495.
- Rubin, K. H., Coplan, R. J., & Bowker, J. (2009). Social withdrawal in childhood. *Annual Review of Psychology, 60*, 1111-1131.
- Sroufer, L. A., & Rutter, M. (1984). The domain of developmental psychopathology. *Child Development, 55*, 17-29.
- Steele, H., & Steele, M. (2005). Understanding and resolving emotional conflict: The London parent-child project. In K. E. Grossmann, K. Grossmann, & E. Waters (Eds.), *Attachment from infancy to adulthood: Major longitudinal studies* (pp. 137-164). New York: Guilford.