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Behavioral and Emotional Profiles of Neglected Children

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This study explored the emotional and behavioral profiles of 41 neglected children, ages 6 to 12 years, who were compared with a control group of 41 children. The Achenbach System was used in order to describe emotional and behavioral profiles based on the Diagnostic Criteria of the DSM-IV [Diagnostic and Statistical Manual of Mental Disorders*, 4th ed.*]*). Neglected children had more symptoms on DSM-IV Scales related to conduct or attention/hyperactivity problems. Based on the perceptions of teachers, children exposed to neglect showed more externalized and internalized problems as well as symptoms on DSM-IV Scales. Results supported the relevance of using the Diagnostic Criteria of the DSM-IV and the importance of getting the different perceptions of respondents to better understand the emotional and behavioral portrait of neglected children.*

Keywords child neglected, internalization problems, externalization problems, ADHD, oppositional defiant problems, posttraumatic stress problems

The relationship between abuse (all types) and the emergence of psychological, emotional, and behavioral difficulties has been well documented. Indeed, various studies have shown that abused children presented more psychopathologies (Cook et al., 2005, Ford, 2005) including posttraumatic stress disorders (Saigh, Yasik, Sack, & Koplowicz, 1999), self-mutilation behaviors, depression and anxiety problems (Kendall-Tackett, 2002), sexualized behaviors (Hall, Mathews, & Pearce, 2002), oppositional problems and conduct problems (Jaffee, Caspi, Moffitt, & Taylor, 2004), attachment problems (Schore, 2001), and eating disorders (Johnson, Cohen, Kasen, & Brook, 2002). However, certain studies have proposed that affective, social, and behavioral components were not affected in the same way, depending on the type of maltreatment experienced by the child (Cicchetti, & Toth, 2000; Trocmé et al., 2003).

The Canadian Incidence Study of Reported Child Abuse and Neglect carried out by Trocmé et al. (2003) draws attention to four categories of abuse: (a) physical abuse, (b) sexual abuse, (c) emotional abuse, and (d) neglect. Although neglect is the most frequent type of maltreatment, this category of abuse is least studied (De Bellis, 2005). When neglected, the child's security and development are jeopardized by lack of attention or protection by

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the caregiver (Trocmé et al., 2003). Parents show inability to provide the necessary care or answer basic needs linked to health, hygiene, protection, education, and affective environment (Éthier, Lacharité, & Gagnier, 1994). Neglect not only affects the daily functioning of the child, but also its entire development. In children particularly, this exposure may result in delays or impairments in motor, language, cognitive, emotional, or behavioral development and acquisition of social skills (De Bellis, Hooper, Spratt, & Woolley, 2009; Hildyard, & Wolfe, 2002; Nolin & Ethier, 2007).

The theory of attachment and neurobiological development proposed by Schore (2001) is certainly one of the explanatory models that can help to understand the affective and behavioral manifestations of neglected children. This model allows viewing neglect as a traumatizing situation, but also as a source for altering psychological or biological development, as well as the abilities of interpersonal regulation, which can contribute to the emergence of psychopathologies. Indeed, severe alterations in the attachment relationship (e.g., parent's responses are not adjusted to the child's emotional needs, thus, the child cannot use proper self-regulation abilities) increase sensitivity to stress (e.g., problems focusing attention and modulating awareness level), and compromise socioemotional learning or self-regulation of emotions and behaviors (e.g., inability to regulate emotions without external support, the sensation of being invaded by many intense emotions, excessive search for help, social dependency or isolation, disengagement). In this connection, Schore (2001) pointed out the importance of a stable attachment link in the psychological and neurodevelopment of the child. Thus, it seems that trauma at a young age alters the development of the brain regions associated with modulating emotions and stress responses (Cook et al., 2005).

When faced with traumatizing events in relationships, neglected children find it difficult to adjust to situations that produce stress or assimilate new emotional experiences. Thus, under these conditions, their analytical capacities tend to disintegrate; hence, the emergence of their cognitive, emotional, and behavioral disorganization and their proneness to react with extreme helplessness, confusion, withdrawal, or rage (Teicher, Anderson, Polcari, Anderson, & Navalta, 2002).

Emotional Problems Associated with Neglect

Attachment failures and neurobiological integrity may also lead to severe problems regarding self-regulation of affect (Cook et al., 2005; Perry, Pollard, Blakely, Baker, & Vigilante, 1995; Schore, 2001). First of all, self-regulation of affect starts with the precise identification of internal emotional experiences. The child must be able to express his emotion while feeling safe, modulate it, or regulate it based on his internal experiences. Neglected children show more pathological expressions including dissociation, cyclothymia, or avoidance of emotionally charged situations, and have poor adapting strategies (Cook et al., 2005; Schore, 2001). Also, these children often present with emotional liability, a quick escalating of responses when faced with anxiogenic situations deemed to be minor (Cook et al., 2005) and they develop more emotional problems associated with anxiety or depression (Lacharité, 1999).

Indeed, they are easily upset and have more trouble discriminating between emotions in comparison to those who have not been exposed to this specific type of abuse (Pollack, Cicchetti, Hornung, & Reed, 2000). Moreover, these children obtain lower scores on scales measuring self-esteem and have negative moods and a poor sense of humor (Erickson, Egeland, & Pianta, 1989). Also, they tend to be more negative and more

dependent toward others (Egeland, Sroufe, & Erickson, 1983). Internalized symptoms have been the main focus of studies for neglected children. However, researchers and practitioners do not necessarily associate internalized symptoms with potential developmental psychopathologies.

Behavioral Problems Associated with Neglect

When it comes to behavioral problems, studies suggest that aggressive and delinquent behaviors are more associated with physical abuse than neglect (Lacharité, 1999; Prino & Peyrot, 1994; Shonk & Cicchetti, 2001). However, when we consider that neglected children tend to be passive and avoidant in their interactions (Crittenden, 1992), their behaviors are less disturbing but are still consider an oppositional response. Furthermore, certain studies have shown that neglected children have more aggressive behaviors (Bousha, & Twentyman, 1984; Erickson et al., 1989) and are less cooperative and conformist (Crittenden, 1992; Haskett & Kistner, 1991; Hoffman-Plotkin & Twentyman, 1984) than children who were not exposed to any form of abuse. Thus, neglected children also showed a certain level of aggressiveness, had disturbing behaviors, were not very cooperative, and were at higher risk of social and emotional problems (Hildyard & Wolfe, 2002). Externalized symptoms can also evolve into developmental psychopathologies even if these links have not been shown yet.

Social Problems Associated with Neglect

Neglected children were also characterized as being withdrawn from others (Prino & Peyrot, 1994), were involved in a limited number of social interactions (Erickson & Egeland, 1996; Erickson, Egeland & Pianta, 1989; Hildyard, & Wolfe, 2002), predominantly adopted an avoidance behavior in their interactions with others (Camras, & Rappaport, 1993; Erickson et al., 1989; Hoffman-Plotkin, & Twentyman, 1984), were not very popular with other young people (Erickson, & Egeland, 1996; Erickson et al., 1989), and had fewer friends in class than other children (Bolger, Patterson, & Kupersmidt, 1998).

However, the child may function differently in the various settings it is in (e.g., family and school). Moreover, the relationship between the child and his parent may lead to a different analysis of his behavior than its teacher's perception. For examples, certain authors consider the teacher's perceptions as more objective than the parent's points of view, because (a) the perception of the mother who herself grew up in a maltreating family is tainted with subjectivity and negativity (Lacharité, 1999) or is insensitive and unresponsive to her children's feelings (Lyons-Ruth, Connell, & Zoll, 1989); (b) some parents have overly high expectations when it comes to their children's behavior or harbor negative perceptions of their children (Feldman et al., 1995); (b) that maltreating parents have unrealistic expectations as to the capabilities and needs of their children and biased perceptions of their children's behaviors (Jourdan-Ionescu & Palacio-Quintin, 1997); and (d) the parents' perceptions can be biased by multiple factors, including stress, conflicts, and lack of parenting skills (Reid, Kavanagh, & Baldwin, 1987). These findings emphasize the importance of calling upon more than one type of respondent in order to get a more complete profile of the child's affect and behavior.

The review of the literature clearly shows that neglect is associated with social, emotional, and behavioral problems, which are largely internalized. However, those findings are based on the assessment of only one respondent which do not represent the child's global

functioning. In consequence, this does not totally exclude the possibility of observing externalized symptoms in these children. Another possibility to explain this divergence consists in the child's own protection factors (e.g., his context of evolution, his temperament, and his personality).

Therefore, the purpose of this study was to explore the role of the respondents when they assess emotional and behavioral problems and investigate those internalized symptoms and externalized symptoms of neglected children based on traditional scales (Syndrome Scales) and clinical scales (DSM-IV [*Diagnostic and Statistical Manual of Mental Disorders*, 4th ed.] Oriented Scales; American Psychiatric Association, 1994) from the Achenbach System of Empirically Based Assessment: School-Age Forms and Profiles (ASEBA) in comparison to a control group. The DSM-IV Oriented Scales were used to document the possible developmental psychopathologies based on diagnostic categories that could be associated with neglected children. To proceed, two versions of the same questionnaire were used: one completed by the biological parent (Child Behavior Checklist for Ages 6–18 [CBCL]) and one by the teacher (Teacher's Report form [TRF]) of the child.

Therefore, it has been suggested that: (a) neglected children will present more internalized symptoms (anxious/depressed, withdrawn/depressed, thought problems), but also present more externalized symptoms (rule-breaking behavior and aggressive behavior) in comparison to the control group; (b) neglected children will also present more symptoms on clinical scales (DSM-IV Oriented Scales) than the control group; and (c) different profiles of children will be obtained depending on the two types of respondents.

Method

Participants

This study involved a total of 82 children ages 6 to 12, divided into two groups. Demographic data relevant to both groups are presented in Table 1. Group 1 (neglected children) included 41 children including 22 boys and 19 girls with an average age of 10.13 years old. Neglected children were recruited by the Child Protection Services of Mauricie and Centre-du-Québec (CJMCQ, Québec, Canada). This institution has the legal mandate to identify cases of maltreatment (neglect or abuse). CJMCQ standard procedures require that

Table 1
Clinical characteristics for neglected children and nonmaltreated children

Variables	Neglect	Controls	*t*	Pearson χ^2
N	41	41		
Chronological age, mean (*SD*)	10.13 (1.99)	9.39 (1.58)	1.87	
% Male	46%	46%		0.80
Child IQ, mean (*SD*)	94.12 (12.41)	102.05 (14.00)	2.71**	
Hollingshead SES Score, mean (*SD*)	66.09 (11.28)	63.22 (6.16)		45.32***

**$p < .01$. ***$p < .001$.

the type of maltreatment be determined by a detailed study conducted by agency practitioners. Procedures concerning protection of the child involve therefore, a succinct number of steps to confirm neglect.

First, accusations of neglect are investigated, and a social worker evaluates the family by visiting the home. This social worker is equipped with a decisional tree in order to examine certain aspects in detail according to each case presented. As quickly as possible, within a maximum of 24 to 48 hours following a report of child neglect, the social worker must decide whether there are sufficient indications to refer the case to a second step for evaluation. In this case, a more in-depth evaluation is carried out. The social worker has a maximum of 12 days (ideally fewer) to clearly document the case, and the type of maltreatment (neglect, physical abuse, sexual abuse, etc.) and the degree of urgency. Meetings are set up with the child, parents and any other persons deemed important. At this point, parents are questioned about the allegations of maltreatment and told the possible legal consequences of the investigation. A decision is made based on: (a) objectified facts, (b) the vulnerability of the child where its development is compromised, and (c) the quality of parental skills. If the hypothesis of neglect is retained, the child's protection becomes the responsibility of the Direction of Youth Protection.

Voluntary measures may also be proposed to the parents (e.g., starting a 6-month intervention program for family members), or legal actions can be taken (e.g., placing the child with a foster family without approval of the biological family). Children in this study were identified by the CJMCQ from families in which neglect was confirmed, with the consent of parents. As described earlier, the Direction of Youth Protection uses a standardized method to evaluate child's abuse. However, one must always keep in mind that the information given during the evaluation has been obtained following the voluntary testimony of parents and that it is not possible to guarantee with certainty that the type of maltreatment identified with the children of the current study is the only one at issue.

Group 2 (control group) includes 41 children including 26 boys and 15 girls with an average age of 9.39 years old. They were recruited in five elementary schools of the Chemin du Roy School Board in La Mauricie (Quebec, Canada), with the School Board's cooperation. These control children were paired with the neglected ones according to gender, age, and IQ (Table 1). Children with intellectual disability were excluded based on their IQ results. Sexually abused children, mental retardation, brain injury, neurological disorder, autism or pervasive developmental disorder were excluded. Socioeconomic status was calculated using the Hollingshead Index of Socioeconomic Status (SES) in order to control the poverty's effect on the child cognitive development. Given the significant differences between the groups regarding these two variables (IQ and SES), they will be placed as covariables in the comparison analyses of the groups.

Tests

Control test: Intelligence. IQ was estimated using four subtests of the Canadian Wechsler Intelligence Scale for Children, 3rd edition with the method developed by Kaufman, Kaufman, Balgopal, and McLean (1996) and whose psychometric value has been demonstrated. This shortened version is made up of two verbal subtests (Similarities and Vocabulary) and two nonverbal subtests (Picture completion and Block design). The average IQ is 100 with a standard deviation of 15 (Wechsler, 1991).

Instruments measuring behavioral and emotional problems. The ASEBA (CBCL and TRF; Achenbach, & Rescorla, 1991) is a questionnaire frequently used in both research and clinical settings for investigating internalized and externalized behavioral problems

in children. The ASEBA evaluates behavioral and emotional problems found in children based on the Syndrome Scales: Anxious/depressed, withdrawn/depressed, somatic complaints, social problems, thought problems, attention problems, rule-breaking behavior, and aggressive behavior. In addition to providing the scores of each of these traditional scales (Syndrome Scales), it allows the documentation of certain problems listed based on the DSM-IV Oriented Scales: Affective problems, anxiety problems, somatic problems, attention/hyperactivity problems, oppositional defiant problems, conduct problems, sluggish cognitive tempo, obsessive-compulsive problems, and posttraumatic stress problems.

The DSM oriented scales were constructed by experts from many cultures who identified ASEBA items that they judged to be very consistent with particular DSM-IV diagnostic categories.The questionnaire contains 113 items, and there is a version for the child's parent and his teacher. For each item that describes specific behavioral or emotional problems, the parent or teacher must weigh the different expressions proposed based on a 3-point Likert scale (0 [*none*]; 1 [*sometimes*]; 2 [*often*]). The correction program used in this study was the ADM (Assistant Data Manager) system (Achenbach, 2007). The raw results were converted into a T-*score*. A t-*score* between 65 and 70 is considered borderline versus a T-*score* greater than 70 meaning a possible behavioral or emotional problem (Achenbach & Rescorla, 2006). This instrument has good methodological properties (Achenbach & Rescorla, 2006).

Procedures

The research project was approved by the Ethics Committee of the University of Québec in Trois-Rivières. Parents signed an informed consent form before the children were assigned to the research professional. After the consent is obtained, a research professional met with biological parents in the family and with teachers in the school setting of the children in order to evaluate behavioral and emotional problems using ASEBA. The children have been assigned to the research professional by the researchers without knowing which group they belonged to (blind to condition).

Statistical Analysis

Statistical analyzes were performed on each of the demographic variables and IQ, using chi-square or ANOVA, as was a continuous variable (e.g., IQ) or dichotomous variable (e.g., gender). These analyzes were intended to ensure the homogeneity of the two groups on these variables before comparing them on emotional and behavioral scales. Subsequently, two multivariate analyses with covariance (MANCOVAs) were first carried out using all the Syndrome Scales (anxious/depressed, withdrawn/depressed, somatic complaints, social problems, thought problems, attention problems, rule-breaking behavior and aggressive behavior) based on the scores from the parents' questionnaires, and then on the scores of the teachers' questionnaires, taking into account IQ and Hollingshead Index of SES as covariables. Next, two MANCOVAs were carried out using the DSM-IV Oriented Scales (affective problems, anxiety problems, somatic problems, attention/hyperactivity problems, oppositional defiant problems, conduct problems, sluggish cognitive tempo, obsessive-compulsive problems, and posttraumatic stress problems), taking into account the Hollingshead Index of SES as a covariable, one with the scores of the questionnaires completed by the parents and the other with the questionnaires completed by the teachers.

Partial Eta Square (η_p^2) was reported to describe effect sizes for significant differences (Small < 0.06; Medium $= 0.12$; Large > 0.16).

Results

Syndrome Scales (Parent's Report Form)

The MANCOVA showed no effect of the IQ ($F(8,71) = 0.49$, *ns*) or SES ($F(8,71) = 0.63$, *ns*) covariables and no group effect ($F(8,78) = 1.31$, *ns*) on all Syndrome Scales (anxious/depressed, withdrawn/depressed, somatic complaints, social problems, thought problems, attention problems, rule-breaking behavior, and aggressive behavior) as reported by the parents. The averages and standard deviations obtained by each of the two groups on all of the scales are in Table 2.

Syndrome Scales (Teacher's Report Form)

The MANCOVA showed no effect of the IQ ($F(8,71) = 0.87$, *ns*) and SES ($F(8,71) = 1.17$, *ns*) covariables, but revealed a significant difference between the two groups ($F(8,71) = 2.78$, $p < 0.01$) for all Syndrome Scales (anxious/depressed, withdrawn/depressed, somatic complaints, social problems, thought problems, attention problems, rule-breaking behavior, and aggressive behavior) from the perspective of the teachers. The averages and standard deviations obtained by each of the two groups on all of the scales are in Table 3. Follow-up univariate analyses showed the groups differed on withdrawn/depressed (medium effect sizes), social problems (medium effect sizes), thought problems (medium effect sizes), attention problems (medium effect sizes), rule-breaking behavior (medium effect sizes) and aggressive behavior (medium effect sizes), suggesting that neglected children have more problems associated with internalized and externalized signs than children in the control group, according to their teachers.

Table 2
Parent syndrome scale scores for neglected children and nonmaltreated children

Traditional scales Version completed by the parent	Neglect mean (*SD*)	Controls mean (*SD*)	Statistic	Partial Eta^2
IQ			$F(8, 71) = 0.49$	.05
SES			$F(8, 71) = 0.63$	.07
Group effect			$F(8, 71) = 1.31$	.13
Anxious/Depressed	57.24 (9.05)	55.73 (5.73)	$F(1, 78) = 0.71$	.01
Withdrawn/Depressed	59.44 (7.23)	57.95 (6.70)	$F(1, 78) = 0.68$	.01
Somatic complaints	54.76 (6.09)	57.10 (6.34)	$F(1, 78) = 3.41$	.04
Social problems	60.46 (8.10)	58.12 (5.89)	$F(1, 78) = 1.50$	.02
Thought problems	56.76 (6.63)	57.24 (7.40)	$F(1, 78) = 0.03$	.00
Attention problems	56.78 (6.68)	54.22 (3.48)	$F(1, 78) = 2.83$	.04
Rule-breaking behavior	60.07 (7.97)	57.07 (6.88)	$F(1, 78) = 2.46$	.03
Aggressive behavior	62.73 (9.94)	59.44 (7.27)	$F(1, 78) = 2.85$	.04

Table 3
Teacher syndrome scale scores for neglected children and nonmaltreated children

Traditional scales Version completed by the teacher	Neglect mean (*SD*)	Controls mean (*SD*)	Statistic	Partial Eta^2
IQ			$F(8,71) = 0.87$	.09
SES			$F(8,71) = 1.17$	.12
Group effect			$F(8,71) = 2.78^{**}$	.24
Anxious/Depressed	56.98 (7.29)	55.41 (6.21)	$F(1,78) = 2.35$	.03
Withdrawn/Depressed	61.00 (8.73)	55.12 (5.68)	$F(1,78) = 13.61^{***}$	.15
Somatic complaints	53.93 (5.87)	52.22 (4.89)	$F(1,78) = 1.67$	.02
Social problems	61.63 (7.92)	57.32 (6.50)	$F(1,78) = 7.90^{**}$	.09
Thought problems	57.15 (8.70)	52.73 (4.88)	$F(1,78) = 10.65^{**}$	.12
Attention problems	60.44 (9.06)	54.05 (4.77)	$F(1,78) = 13.21^{***}$	.15
Rule-breaking behavior	60.49 (9.13)	54.73 (5.88)	$F(1,78) = 9.05^{**}$	.10
Aggressive behavior	63.71 (12.14)	56.34 (7.21)	$F(1,78) = 9.50^{**}$	.11

$^{**}p < .01$. $^{***}p < .001$.

DSM-IV Oriented Scales (Parent's Report Form)

The MANCOVA showed no effect of the IQ ($F(9,70) = 0.36$, *ns*) and SES ($F(9,70) = 1.28$, *ns*) covariables and no group effect ($F(9,70) = 1.71$, *ns*) for all DSM-IV Oriented Scales (affective problems, anxiety problems, somatic problems, attention/hyperactivity problems, oppositional defiant problems, conduct problems, sluggish cognitive tempo, obsessive-compulsive problems, and posttraumatic stress problems), based on the parent's perspective. The averages and standard deviations obtained by each of the two groups on all of the scales are in Table 4. Univariate analyses showed the groups differ on attention/hyperactivity (small effect sizes) and conduct problems (small effect sizes), suggesting that the neglected children had more symptoms associated with these symptoms of psychopathologies than children in the control group.

DSM-IV Oriented Scales (Teacher's Report Form)

The MANCOVA showed no effect of the IQ ($F(9,70) = 0.83$, *ns*) and SES ($F(9,70) = 0.85$, *ns*) covariables, but revealed a significant difference between the two groups ($F(9,70) = 2.17$, $p < 0.05$), for all DSM-IV Oriented Scales (affective problems, anxiety problems, somatic problems, attention/hyperactivity problems, oppositional defiant problems, conduct problems, sluggish cognitive tempo, obsessive-compulsive problems, and posttraumatic stress problems) based on the teachers. The averages and standard deviations obtained by each of the two groups on all of the scales are in Table 5. Follow-up univariate analyses showed the groups differ on affective problems (medium effect sizes), attention/hyperactivity problems (medium effect sizes), oppositional defiant problems (medium effect sizes), conduct problems (medium effect sizes), sluggish cognitive tempo (medium effect sizes), obsessive-compulsive problems (medium effect sizes), and posttraumatic stress problems (medium effect sizes). Thus, the neglected children showed more clinical signs associated with these problems than children in the control group.

Table 4
Parent DSM oriented scales scores for neglected children and nonmaltreated children

DSM-IV scales Version completed by the parent	Neglect mean (*SD*)	Controls mean (*SD*)	Statistic	Partial Eta^2
IQ			$F(9,70) = 0.36$	.04
SES			$F(9,70) = 1.28$	.14
Group effect			$F(9,70) = 1.71$	.18
Affective problems	56.02 (7.27)	57.51 (6.25)	$F(1,78) = 0.81$	.01
Anxiety problems	57.32 (8.34)	56.44 (6.26)	$F(1,78) = 0.07$	.00
Somatic problems	54.71 (6.20)	56.95 (6.57)	$F(1,78) = 3.35$	.04
Attention deficit/ hyperactivity problems	55.41 (6.05)	52.76 (3.57)	$F(1,78) = 4.80^*$	.06
Oppositional defiant problems	60.61 (8.50)	58.63 (7.41)	$F(1,78) = 1.88$	.02
Conduct problems	61.20 (8.70)	57.15 (6.94)	$F(1,78) = 4.10^*$	.05
Sluggish cognitive tempo	55.88 (7.20)	54.71 (6.48)	$F(1,78) = 0.20$	.00
Obsessive-compulsive problems	55.44 (8.54)	54.78 (5.57)	$F(1,78) = 0.01$	.00
Posttraumatic stress problems	59.17 (9.49)	58.56 (6.76)	$F(1,78) = 0.09$	.00

$^*p < 0.05$.

Discussion

The main goal of this study was to document emotional problems (internalized symptoms) and behavioral problems (externalized symptoms) of neglected children on the Syndrome Scales and DSM-IV Oriented Scales (ASEBA) based on the points of view of the two respondents (biological parents and teacher), in comparison to a control group. The results confirmed that neglected children had more internalized problems than children in the control group, which is in line with the results of previous studies that have clearly demonstrated this fact. Moreover, the results of this study support the suggestion that neglect is also associated with externalized behaviors, a feature which seems to be less documented in the literature (Bousha & Twentyman, 1984; Crittenden, 1992; Erickson et al., 1989; Haskett & Kistner, 1991; Hildyard & Wolfe, 2002; Hoffman-Plotkin & Twentyman, 1984; Shields, & Cicchetti, 1998). Furthermore, externalized behaviors are better observed in a school setting than by family members.

As a matter of fact, the children had different emotional and behavioral profiles depending on the points of view of the respondents. Parents did not identify any problems in the Syndrome Scales, whereas they pointed out externalized symptoms associated with conduct or attention/hyperactivity problems (DSM-IV Oriented Scales), in comparison with children in the control group. In this way, parents tend to see their children as relatively normal in comparison to the perception of teachers, beside behaviors that needs more parental management and are more disturbing for them.

On the other hand, based on the point of view of teachers, neglected children had more symptoms on the Syndrome Scales, in particular internalized problems (withdrawn/depressed, social and thought problems), externalized problems

Table 5
Teacher DSM oriented scales scores for neglected children and nonmaltreated children

DSM-IV scales Version completed by the teacher	Neglect (1) mean (*SD*)	Controls (2) mean (*SD*)	Statistic	Partial Eta^2
IQ			$F(9,70) = 0.83$	.10
SES			$F(9,70) = 0.85$	.10
Group effect			$F(9,70) = 2.17^{*}$	.22
Affective problems	58.63 (6.23)	54.71 (5.78)	$F(1,78) = 7.59^{**}$	.09
Anxiety problems	57.44 (7.87)	55.12 (6.19)	$F(1,78) = 3.19$	.04
Somatic problems	53.20 (5.65)	52.00 (4.65)	$F(1,78) = 0.54$	.01
Attention deficit/hyperactivity problems	60.90 (10.41)	54.46 (4.59)	$F(1,78) = 10.36^{**}$	.12
Oppositional defiant problems	60.46 (9.22)	55.00 (6.03)	$F(1,78) = 8.60^{**}$	.10
Conduct problems	61.46 (10.41)	55.10 (7.11)	$F(1,78) = 8.82^{**}$	.10
Sluggish cognitive tempo	58.34 (7.03)	53.68 (4.93)	$F(1,78) = 11.21^{**}$	.13
Obsessive-compulsive problems	57.54 (8.89)	56.02 (6.80)	$F(1,78) = 2.31$	.03
Posttraumatic stress problems	61.41 (9.21)	56.00 (6.64)	$F(1,78) = 9.82^{**}$	.11

$^{*}p < 0.05$. $^{**}p < 0.01$.

(rule-breaking behavior, aggressiveness) and symptoms linked to affective problems, attention/hyperactivity problems, oppositional defiant problems, conduct problems, sluggish cognitive tempo, obsessive-compulsive problems, and posttraumatic stress problems, than the control group. Consistent with the effects of attachment dysregulation, emotional, behavioral, and social problems of neglected children are confirmed by results. The theory of attachment, as presented in the introduction, is certainly one of the explanatory models that can clinically help to understand the affective and behavioral manifestations of the current study's neglected children by keeping in mind that neglect is considered as relational trauma. This enables the drawing of connections between internalized symptoms (withdrawn/depressed, social problems, obsessive-compulsive, and posttraumatic stress problems) and externalized symptoms (rule-breaking behaviors, aggressiveness, oppositional defiant, and conduct problems) that could be associated to the difficulty of neglected children to modulate their affects and behaviors. In addition, this theory could explain the attentional difficulties observed in the cohort of neglected children (e.g., hyperactivity of hypothalamic-pituitary-adrenal axis, which leads to attention/hyperactivity problems and sluggish cognitive tempo symptoms).

Also, using two kinds of respondents allows describing the affect and behavior of the child in different living environments (family and school). In fact, in this study, neglectful parents saw their children differently than teachers did, an element which also contributes to explaining certain contradictory facts seen in the scientific literature on neglect with regard to internalized and externalized behaviors. It must be emphasized that few studies have shown interest in describing the impact of the neglect by using more than one type

of respondent. However, few authors listed have noted a difference between the answers provided by the parents and teachers (Culp, Howell, McDonald Culp, Blankemeyer, 2001). Other authors have emphasized that maltreating parent's may have biased perceptions of their children's behaviors (Jourdan-Ionescu & Palacio-Quintin, 1997) as their perceptions could be tainted by subjectivity and be biased by multiple factors, including stress, conflicts, and lack of parenting skills (Reid et al., 1987). Moreover, maltreating parents are more insensitive and unresponsive to their children's feelings (Lyons-Ruth et al., 1989). For these reasons, certain authors proposed that the teacher's perception is more objective (Lacharité, 1999). These findings underscore the importance of using the widest range of measure in order to arrive at a more complete profile of the child's affect and behavior. Clinically, perceptions of different raters are essential to a successful treatment plan because different raters may be observing different behaviors.

Overall, results of this study confirm the importance of using a wide variety of scales, in particular the DSM Oriented Scales, to get a complete profile of the neglected children. Until very recently, the questionnaires used in previous studies did not allow a diagnostic clinical analysis based on the psychiatric model of the DSM-IV, but it is now possible with the ADM (Achenbach, 2007) of the ASEBA (CBCL and TRF; Achenbach & Rescorla, 1991). It seems to be an interesting route because it would provide healthcare practitioners with profiles based on the diagnostic criteria of DSM-IV, thus contributing to set-up treatments adapted to the child's psychological situation and prevent development of psychopathologies.

Finally, the results of this study support the idea put forth by Cicchetti (2004) who stipulated that neglect has negative effects on the child's development beyond the simple fact of living in a poor socioeconomic environment. Indeed, covariance analysis showed that neglected children were different from those in the control group with regard to emotional and behavioral problems, even after having controlled the socioeconomic level. This supports the fact that these internalized and externalized behaviors were associated with neglect and not poverty.

Limitations and Future Research

Cautions in interpreting the data need to be taken into account in this study, in particular the purity of the neglected group versus other types of maltreatment. The cooperation of caseworkers and the administrative and legal structure that governs the identification of types of maltreatment have definitely been a great help in targeting neglected children in this case. However, it is impossible to be 100% certain that neglected children have never been exposed to other types of abuse or violence. It is important to consider that not every child has been exposed to the same context of neglect (e.g., severity, chronicity) and that each child has its own temperament or personality (e.g., ego resilience or ego control); those can explain the divergences of responses among neglected children.

Future researches should obtain precisions about the chronicity or severity of neglect in order to specify the behavioral and emotional profiles of neglected children to consider the persistence of those symptoms in time. Furthermore, other factors, especially social desirability in parents, could have influenced the results without the specific reasons being known. The perceptions of the child himself, growing in those context, should give us a better comprehension of the impacts of neglect, specially for internalized problems that could have been underestimate. The use of self-reported questionnaires (e.g., Beck Youth Inventories, California Child Q-Set) or of a semistructured interview (e.g., Anxiety Disorders Interview Schedule for Children, Child Attachment Interview) with children

themselves would perhaps enable a more objective documentation of the psychological (attachment-personality) and behavioral functioning of the latter and the elimination of a bias, notably in the cases in which a parent or teacher could have underestimated a child's distress. The current study examined the emotional and behavioral profiles of neglected children. It is important to intervene early in the development of the child in view of the fact that the neglected children demonstrate many internalized and externalized problems and are at high risk for psychopathologies (e.g., anxiety, depression, ADHD, SCT, oppositional, and conduct problems).

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