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**This is the author's manuscript**

*Original Citation:*

*Availability:*

This version is available <http://hdl.handle.net/2318/1668111> since 2018-05-14T10:55:02Z

*Published version:*

DOI:10.1016/j.infbeh.2017.05.011

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# **The evaluation of behavioural problems in the first three years of life: comparing parents and early childhood educators**

## **ABSTRACT**

The study investigates the degree of agreement between mothers, fathers and educators in the evaluation of early childhood behavioural problems, through the CBCL 1½–5. Data analysis indicates a good level of agreement between mothers and fathers, along with a significant divergence between parents and educators.

## **Keywords**

Parents-educators agreement

CBCL

Externalizing and internalizing behavioral problems

Infancy

Clinical studies highlight how behavioural problems at pre-school age remain stable over time, or transform into more serious psychopathologies in later years (Campbell, 1997; Winsleret *al.*, 2000). Prevention and intervention programs require in-depth assessment, which in this age group is based above all on scale ratings obtained from parents and reference adults (Achenbach & Edelbrock, 1984). Therefore, the systematic examination of areas of agreement and disagreement between said privileged informers is fundamental. Literature indicates that agreement levels between parents and teachers on the perception of behavioural problems in children vary from low to moderate, and that parents usually report a greater number of behavioural problems (Graves, Blake & Kim, 2012; Korsch & Petermann, 2014). Available data mainly refers to children over the age of 3 years, therefore investigations should be extended to samples of younger children, to bolster intervention in early childhood.

Our sample consists of 132 children who attend a nursery school, aged 18-36 months (M=25.9; SD= 5.36; 53% male and 47% female). Subjects were selected from 5 nursery schools in a large Italian city, in areas representing a diversified socio-economic basin. Mothers are aged between 20 and 49 (M=36.5; SD= 4.72) and fathers between 24 and 62 years (M=39.57; SD= 6). In the majority of cases, both parents have a medium-high qualification and medium-high levels of employment. There are 42 professional caregivers (each educator filled in the questionnaire for several children), aged between 28 and 62 years (M=41.28; SD= 10.89), almost all with a high school diploma.

The instrument used is the *Child Behavior Checklist/1½-5* (Achenbach & Rescorla, 2000), filled in for each child by both parents (the parents completed the questionnaires independently of one another) and the professional caregiver (Caregiver-Teacher Report Form; C-TRF/1½-5). The profile which emerges from the questionnaire consists of a Total Scale, a scale of Internalizing problems and Externalizing problems. Our study also considers the 6 syndrome scales included in both forms of the CBCL (Emotionally Reactive-ER, Anxious/Depressed-

AD, Somatic Complaints-SC, Withdrawal-W, Attention Problems-AP and Aggressive Behaviour-AB), as well as the Other Problems-OP scale.

The areas of agreement and disagreement between parents and educators for each scale was assessed by Pearson's correlation coefficient and T test. Mothers' and fathers' ratings are positively associated across all CBCL scales, with highest levels referable to the AB and externalizing behaviour scales [Tab. 1, column 2], in line with studies on older children, with greater levels of agreement between parents in the case of externalizing problems (Baker & Heller, 1996; Duhiget *al.*, 2000), probably because said problems are easier to observe and are more difficult to manage within the family context.

Although mothers' and fathers' ratings are still correlated, mothers tend to perceive children as more problematic compared to their partners, as demonstrated by the mean scores [Tab. 1, columns 5-6]. Indeed, T test analysis shows that mothers indicate higher scores than fathers, on the total scale ( $t=-2.031$ ;  $p< .05$ ) as well as on internalizing ( $t=-2.069$ ;  $p< .05$ ), externalizing ( $t=-2.302$ ;  $p< .05$ ), AD ( $t=-2.676$ ;  $p< .01$ ), ER ( $t=-2.808$ ;  $p< .01$ ) and AB scales ( $t=-1.752$ ;  $p< .05$ ). Therefore, mothers tend to identify pathological trends to a greater extent than fathers, as demonstrated in previous research (Seiffge-Krenke & Kollmar, 1998). This may be caused by the fact that mothers spend more time with their children and therefore have a greater knowledge of their problems. The observed gap may also be attributable to more intense maternal worry over the impact of such problems on everyday activities.

No significant correlations emerged from educator and parents answers [Tab. 1, column 3-4]; the mean scores [Tab. 1, column 5-6-7] and T-test analysis highlight how overall educators tends to attribute significantly lower scores on child behaviour evaluation, both compared to mothers (Total scale:  $t= 3.507$ ;  $p< .01$ ; Externalizing:  $t=4.808$ ;  $p< .001$ ; SC:  $t= 6.328$ ;  $p< .001$ ; AP:  $t=2.238$ ;  $p< .05$ ; AB:  $t=5.744$ ;  $p<.001$ ; OP:  $t= 3.951$ ;  $p< .001$ ) and fathers (Total scale:

t=2.811; p< .001; Externalizing: t=3.78; p< .001; SC: t = 7.517; p < .001; AB: t = 4.579; p<.001; OP: t = 3.612; p < .01).An exception can be seen in the social withdrawal scale, where educators attribute higher scores compared to both parents(mother-educator: t= -2.392; p<.05; father-educator: t= -3.453; p<.01). Therefore, parents signal a greater number of externalizing issues, compared to educators, who tend rather to emphasize difficulties linked to inhibition and social withdrawal.

Tab. 1. Mother-father-educator ratings: Pearson's correlation and means scores

CBCL SCALES	Correlations			Mothers Mean	Fathers Mean	Educators Mean
	Mother-father	Mother-educator	Father-educator			
ER	,728**	-,071	,127	,3408	,2816	,3269
AD	,504**	,172	-,007	,3738	,2799	,3413
SC	,578**	,038	,042	,2054	,2021	,0632
W	,447**	,023	,051	,1723	,1534	,2515
AP	,652**	,112	,095	,6000	,5778	,4796
AB	,764**	,051	,073	,6103	,5557	,3472
OP	,490**	,092	,085	,3229	,2934	,2167
INTERNALIZING	,560**	,079	,077	,2732	,2206	,2417
EXTERNALIZING	,771**	,043	,052	,6010	,5529	,3792
TOTAL SCALE	,607**	-,008	,111	,3921	,3467	,2742

\*\*p < .001

We have also analyzed the degree of agreement regarding the children assessed as “at risk”, that is children for whom at least one informant had assigned scores higher than CBCL clinical cut-offs, with reference to the total scale, as well as scales for internalizing and externalizing symptoms [tab. 2]. The percentage of children co-identified as at risk by all three informants (both parents and educator had assigned score scores higher than CBCL clinical cut-offs) is very small, in line with other research (Grietens *et al.*, 2004).

A comparison of percentage agreement between two evaluators demonstrates that mother-father agreement is always greater than agreement between the educator and either one of the parents. Both mothers' and fathers' agreement with educators is greater for internalizing

symptoms, unlike the results of many studies which reported greater agreement between parents and educators on externalizing behaviours (Cai *et al.*, 2004; Grietens *et al.*, 2004; Rescorla *et al.*, 2014). This discrepancy may be attributable to the age of sample children, such as in the study by Winsler e Wallace (2002), highlighting the effect of age on degree of agreement among informers: in their sample, convergence over internalizing behaviours is greater for younger children (3 years old) than for older children (4 years old). Externalizing behaviours (biting, pulling, kicking) can be perceived as more "normative" in infancy by educators compared to colleagues who normally teach older children. In contrast, aggression and opposition constitute a problem from an early age for parents, due to consequences on family routine management, and because they are an attack on the authority of their role. This may explain the fact that in this age group, as demonstrated by the T test, both mothers and fathers report externalizing issues in their children more frequently compared to educators.

*Tab.2. Percentages of informants agreement*

	% agreement for children at risk (score > cut off)	% agreement (score < cut off)	% total agreement
<b>Internalizing symptoms</b>			
<i>Mother-father-educator</i>	2.3%	65.9%	<b>68.2%</b>
<i>Mother-father</i>	13.7%	76.1%	<b>89.8%</b>
<i>Mother-educator</i>	6.1%	65.3%	<b>71.4%</b>
<i>Father-educator</i>	4.5%	68.2%	<b>72.7%</b>
<b>Externalizing symptoms</b>			
<i>Mother-father-educator</i>	3.3%	57.8%	<b>61.1%</b>
<i>Mother-father</i>	12.1%	81.5%	<b>93.6%</b>
<i>Mother-educator</i>	6.5%	58.7%	<b>65.2%</b>
<i>Father-educator</i>	5.4%	61.3%	<b>66.7%</b>
<b>Total scale</b>			
<i>Mother-father-educator</i>	4.2%	52.8%	<b>57%</b>

<i>Mother-father</i>	12.5%	77.9%	<b>90.4%</b>
<i>Mother – educator</i>	6.5%	51.9%	<b>58.4%</b>
<i>Father – educator</i>	6.4%	61.5%	<b>67.9%</b>

Lastly, we highlighted issues which were most frequently reported (namely indicated as “very true or often true” of the child) by parents and educators, and therefore worthy of greater attention, through analyzing single items of the CBCL. The 5 problem behaviours most frequently highlighted by parents and educators [Tab. 3] reflect the different roles of adults, in line with previous studies (Caiet *al.*, 2004). On the one hand, there is an observable concordance in the indication of issues which affect compliance with rules, both at home and at nursery [item 8], or the guarantee of safety for the child [item 72]. On the other hand however, remaining items indicated by educators regard learning and routine management issues such as attention [item 5] as well as scarce behavioural and emotive self-regulation [item 20 and 33], whereas those indicated by parents are more linked to emotional issues and day-to-day domestic life [item 59, 96, 22, 30].

*Table 3 Problematic behaviours most frequently indicated by mothers, fathers and educators*

<b>MOTHER</b>		<b>FATHER</b>		<b>EDUCATOR</b>	
CBCL ITEM	% “very true or often true”	CBCL ITEM	% “very true or often true”	CBCL ITEM	% “very true or often true”
8 Can't stand waiting; wants everything now	34.8	8 Can't stand waiting; wants everything now	46.2	5 Can't concentrate; can't pay attention for long	16.2
59 Quickly shifts from one activity to another	29.5	72 Shows too little fear of getting hurt	29	72 Shows too little fear of getting hurt	15.2
96 Wants a lot of attention	28	59 Quickly shifts from one activity to another	28.5	8 Can't stand waiting; wants everything now	13.5
72 Shows too little fear of getting hurt	26.5	96 Wants a lot of attention	23.7	20 Disobedient	13.5
22 Doesn't want to sleep alone	23.5	30 Easily jealous	22.3	33 Feelings get hurt easily	13.5

It is possible to conclude that parents and educators evaluate the presence of behavioural problems in children very differently. This gap may prevent the timely identification of problem areas. There may be several explanations for this discrepancy. On the one hand, in family and day care there are different developmental tasks, which may lead to the emergence of specific difficulties in children. Furthermore, there may be differences in the interactional styles of parents and educators, thus eliciting different behaviours in children. On the other hand, family and professional caregivers may offer divergent evaluations of the same behaviours due to different decision parameters in the identification of behaviours as problematic, given their specific roles and responsibilities (Cai *et al.*, 2004; Graves, Blake & Kim, 2012), for example the educators might be more sensitive to identify social withdrawal problems because they feel particularly in charge of the child's socialization. Furthermore, in virtue of their experience in observing groups of children, as well as greater knowledge on normative development, educators may be more capable of telling the difference between behavioural problems normally correlated with the age, and clinical disorders. Parents, on the other hand, may have a more acute awareness of issues due to the greater amount of time they spend with children, but may also be affected by distorted perception caused by "parenting stress", intrinsic to the parenting role (Abidin, 1992; Cooper *et al.*, 2009; Scarzello & Prino, 2015) as well as frustration at their inability to change the situation (Orylska *et al.*, 2016). Therefore, it may be appropriate to increase occasions for parent presence at nursery school, insofar as there is a greater degree of parent-educator agreement when parents have adequate opportunities for observing their child within educational contexts (Diamond & Squires, 1993). Longitudinal studies would also be useful in evaluating whether or not parent-educator agreement/disagreement remains stable over time. Lastly, for the purposes of planning effective educational and clinical actions, every child could be assessed by two different educators, in order to understand whether the correlations between educators is similar to that found between parents. Furthermore parent and



educator evaluations should be integrated with a cross-context observational methodology, implemented by external observers, to understand whether children do actually behave differently in both life contexts, or whether the difference lies solely in how they are perceived by adults, and also to analyze the reliability of familiar and professional caregivers evaluation, mostly for cases at risk. Such considerations do confirm that discrepancies between evaluators can provide useful indications on the causes of problematic behaviours, and that each evaluator provides a unique and important contribution to increasing evaluation reliability (Graves, Blake & Kim, 2012; Orylska *et al.*, 2016).

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