

## **Meta-Analysis on Parent-Teacher Agreement on Preschoolers' Emotional and Behavioural Problems**

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### **Abstract**

Based on a meta-analysis, this study aimed to examine cross-informant agreement between parents and teachers about Internalizing, Externalizing and Total Problems in preschool children using community and clinical samples and to test the effects of the type of sample, the measure used for assessments, and child sex on agreement between informants. The meta-analysis involved 23 studies assessing cross-informant agreement for preschool children. Informants were parents and teachers. The level of cross-informant agreement tended to be low. Meta-regression analyses showed that the child's sex, the type of sample, and the measure used for assessments did not predict the level of cross-informant agreement on emotional and behavioural problems. The findings were in line with previous research results. Furthermore, the studied variables did not contribute to the prediction of agreement, suggesting the development of further studies that focus on other variables that may interfere with agreement in informants' reports and will contribute to explaining different ratings of Internalizing and Externalizing problems in preschool-aged children.

**Keywords:** cross-informant agreement, Internalizing problems, Externalizing problems, meta-analysis, preschool age.

## Introduction

There are no definitive tests that support the identification of disorders such as depression, anxiety, or disruptive behaviour in children; consequently, the presence of such conditions is generally determined by obtaining reports from various informants, such as parents and teachers. Differences in the reports of emotional and behavioural problems, here considered synonyms of Internalizing problems (IP) and Externalizing problems (EP), obtained from different informants are very common. These differences tend to be low to moderate, indicating a modest agreement, which is well established in the literature [1-12].

There are several reasons for why informants may differ in their reports about child and adolescent psychopathology [6]. First, child behaviour may be situation-specific, with problems occurring only in certain settings. Second, different informants may observe diverse behaviours because they interact with the child in different contexts (such as school vs home) [1]. Even in the same context, informants may elicit different behaviours in the child by interacting differently with that child, and informants can even attribute different meanings to an emotional or behavioural expression. Finally, informants may differ in how problematic they consider a given behaviour to be, leading to low correspondence about difficulties [13]. Therefore, identifying the specific contexts in which children display concerns may facilitate treatment planning and boost treatment efficacy [14]. Informant discrepancies may provide important information rather than reflecting just measurement error or reporting biases [15]. There are currently no definitive guidelines that describe how to interpret discrepant reports with reliability. As a result, assessments conducted by clinicians and researchers may vary depending on the choice of informants, the extent of agreement between different pairs of informants, and the degree to which information is weighted across informants when disagreements exist [16].

The most common pairs of informants used to rate emotional and behavioural problems in preschool-aged children are parents (mother, father or both) and teachers. Using reports of informants in different contexts can provide a more comprehensive picture of a child's problems [17].

Rescorla and colleagues [18] analysed cross-informant agreement between parents and teachers/caregivers for 7380 children aged between 1½ and 5 years old in 13 different societies using data obtained from the Child Behavior Checklist for Ages 1½-5 (CBCL 1½-5) and the Caregiver-Teacher Report Form for Ages ½-5 (C-TRF) [19]. The main findings indicated that Total problems (TP) scores derived from parents' ratings were significantly higher than TP scores derived from caregiver/teacher ratings in all societies, but the extent of the difference varied somewhat across societies. Across the 13 societies, cross-

informant correlations for scale scores were on average .29 for TP, .25 for IP, and .35 for EP. Agreement was significantly higher for EP than for IP in eight of the 13 societies. Societies were very similar with respect to which problems received high versus low ratings from parents and caregivers/teachers on average, but dyadic cross-informant levels varied widely across children in every society. A limitation of this study was that clinical samples were not included. Additionally, it did not address the heterogeneity in or the effect of the instrument used on agreement.

Several meta-analyses have addressed cross-informant agreement about child emotional and behavioural problems [6, 20], but these studies included children from a wide range of ages up to 18 years. It is well established in the literature that children from early ages and adolescents, for example, face different developmental challenges, which may interfere with their expression of IP and EP. Thus, it would be appropriate to have different meta-analyses on the topic focused on specific and narrower age ranges.

The present meta-analysis aimed to provide information on the mean cross-informant agreement between informants when assessing preschool children, as well as to study variables that might predict the levels of agreement. Considering that parents and teachers are typically the selected informants to provide information regarding IP and EP, this is the pair of informants that was chosen to be included in this study. Moreover, and since previous meta-analyses focused on a wide range of ages, only studies with preschool-aged children were included. Furthermore, the limitations of Rescorla and colleagues' study [18] and of clinical samples were also considered. Our first and main goal was to examine cross-informant agreement between parents and teachers on IP, EP and TP in preschool-aged children. Based on the existing literature, we hypothesized that the results would indicate modest consistency in the rating of children's problems. We expected better agreement for EP than for IP, as the former are more visible to informants [21, 22]. The second objective of this study was to test the effects of the type of sample, the measure used for assessments, and child sex on agreement between informants. We hypothesized that the level of agreement would be higher for clinical than for population samples because clinical populations tend to have higher levels of problems [23, 24]. Moreover, we expected higher agreement for boys than for girls according to prior research [25, 26].

## Method

### Literature search

Potential studies to be included in the present study were identified by searching the literature from January 2000 to December 2017. Five electronic information databases (PsycArticles, Psychology and Behavioral Sciences Collection, ERIC, Academic Search Complete and PubMed) were used to identify published articles on the topic. The search strategy included the following terms: 1) “Child Psychopathology” AND “Agreement” AND a) “Parents Report”, b) “Teachers Report”, c) “Behavioral Problems”, d) “Emotional Problems”, e) “Externalizing Problems”, f) “Internalizing Problems”; 2) “Child Psychopathology” AND “Parent-Teacher Agreement” AND a) “Behavioral Problems”, b) “Emotional Problems”, c) “Externalizing Problems”, d) “Internalizing Problems”; 3) “Child Psychopathology” AND “Cross-Informant” AND a) “Parents Report”, b) “Teachers Report”, c) “Behavioral Problems”, d) “Emotional Problems”, e) “Externalizing Problems”, f) “Internalizing Problems”; 4) “Child Psychopathology” AND “Discrepancies” AND a) “Parents Report”, b) “Teachers Report”, c) “Behavioral Problems”, d) “Emotional Problems”, e) “Externalizing Problems”, f) “Internalizing Problems”. These search term combinations were used to identify articles addressing cross-informant agreement on IP, EP and TP in preschool age children across familial and school contexts. After identifying relevant articles, we also searched for articles by examining the references of the selected articles. In addition, two experts in the area of cross-informant agreement and in preschool children were contacted to suggest other studies that should be considered for inclusion in the present work.

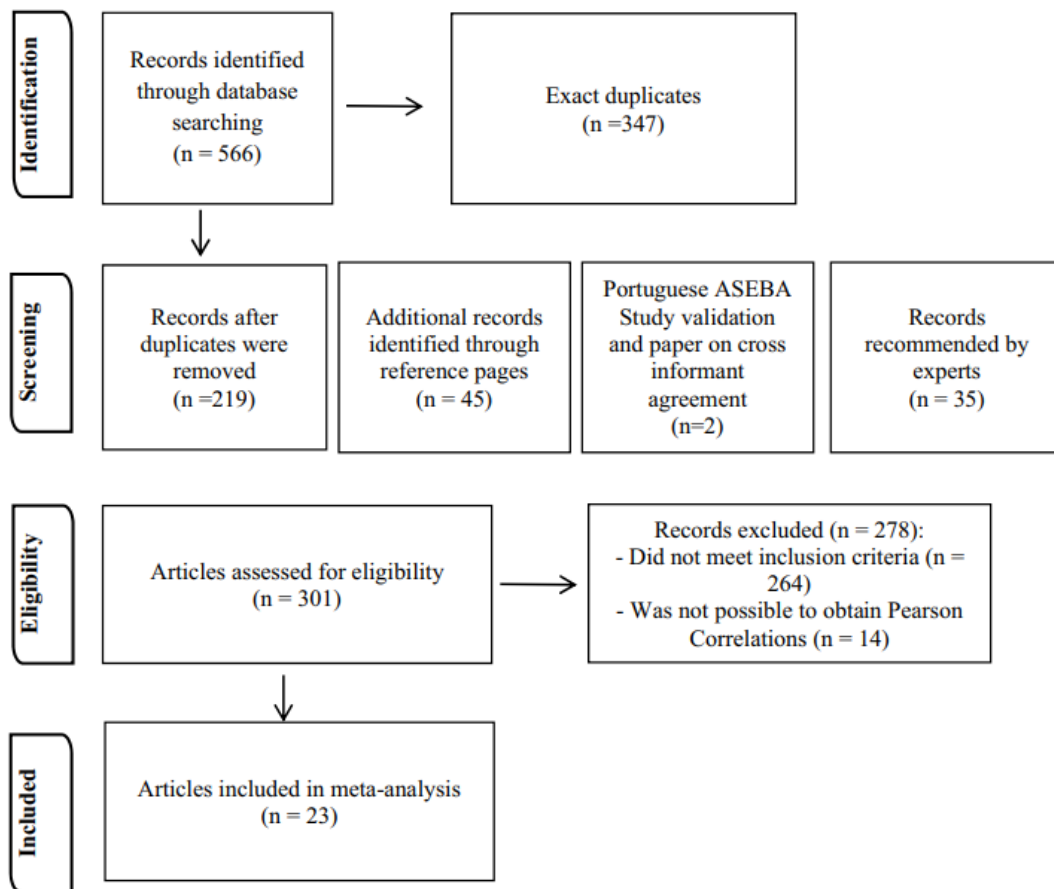
### Inclusion criteria

All the published empirical studies were searched and reviewed against the following inclusion criteria: a) the children lived with their biological parents; b) the children attended preschool; c) informants in the familial context were the mother, father or both; d) the informant at school was the child’s teacher; and e) cross-informant agreement was reported.

As shown in Figure 1, the preliminary search included 566 articles, but 347 were exact duplicates. All the remaining studies were examined. Based on references of the articles selected to be included in the meta-analysis, 45 additional articles were identified. Publications from our team, one of them published in the Portuguese Achenbach System of Empirically Based Assessment (ASEBA) manual for preschool children, and one more recent study on cross-informant agreement between parents and teachers were also included. Two experts in the area also recommended 35 more studies. Of the 301 studies assessed for

eligibility, 264 were excluded because they did not meet the inclusion criteria. Data were extracted from the remaining 37 studies. All authors were asked to provide additional data, namely, Pearson correlation coefficients, but the authors of 14 studies did not respond, and those studies were removed from the meta-analysis. Thus, in total, 278 studies were removed, and 23 studies were included in the analyses. The 23 studies ultimately included in this meta-analysis are listed in Table 1.

**Figure 1.** Search Flowchart



**Table 1.** Studies Included in the Meta-analysis

<b>Authors</b>	<b>Measures</b>	<b>Sample (N; Male)</b>
<b>Verhulst and Akkerhuis [53]</b>	Parents: CBCL 4-18 Teachers: TRF	Community (271; 128)
<b>Gagnon, Vitaro and Tremblay [36]</b>	Parents: PBQ Teachers: PBQ	Community (1924; 1024)
<b>Vitaro, Gagnon and Tremblay [39]</b>	Parents: PBQ Teachers: PBQ	Community (379; 215)
<b>Rescorla et al. [18]*</b>	Parents: CBCL 1½-5 Teachers: CTRF	Community (1192; 608)
<b>Winsler and Wallace [40]</b>	Parents: PKBS Teachers: PKBS	Community (47; 22)
<b>Morrel, Dubowitz, Kerr and Black [51]</b>	Parents: CBCL 4-18 Teachers: TRF	Community (206; 111)
<b>Doctoroff and Arnold [46]</b>	Parents: ECBI Teachers: CBP	Community (79; 43)
<b>Grietens et al. [37]</b>	Parents: CBCL 4-18 Teachers: TRF	Community (424; 212)
<b>Frigerio, Cozzi, Pastore, Molteni, Borgatti and Montiroso [54]*</b>	Parents: CBCL 1½-5 Teachers: CTRF	Community (526; 274)
<b>Jusiene, Raižienė, Barkauskienė, Bielauskaitė and Dervinytė-Bongarzoni [55]*</b>	Parents: CBCL 1½-5 Teachers: CTRF	Community (648; 338)
<b>Kerr, Lunkenheimer and Olson [38]</b>	Parents: CBCL 2-3 Teachers: CTRF	Community (177; 92)
<b>Tick, van der Ende, Koot and Verhulst [56]*</b>	Parents: CBCL 1½-5 Teachers: CTRF	Community (381; 184)
<b>Poch, Ballabriga, Sans, Hidalgo, Solà and Doménech-Llaberia [52]</b>	Parents: ECI-4 Teachers: ECI-4	Community (204; 108)

<b>Guðmundsson and Bjarnadóttir [57]*</b>	Parents: CBCL 1½-5 Teachers: CTRF	Community (170; 78)
<b>Kanne, Abbacchi and Constantino [48]</b>	Parents: CBCL 1½-5 Teachers: CTRF	Community (325; 299)
<b>Kristensen, Henriksen and Bilenberg [49]</b>	Parents: CBCL 1½-5 Teachers: CTRF	Community (609; 300)
<b>Liu, Cheng H and Leung [21]</b>	Parents: CBCL 1½-5 Teachers: CTRF	Community (876; 462)
<b>Müller, Achtergarde and Furniss [22]</b>	Parents: CBCL 1½-5 Teachers: CTRF	Clinical (124; 89)
<b>Berg-Nielsen, Solheim, Belsky and Wichstrom [25]</b>	Parents: CBCL 1½-5 Teachers: CTRF	Community (732; 491)
<b>Harvey, Fischer, Weieneth, Hurwitz and Sayer [47]</b>	Parents: BASC-PRS Teachers: BASC-TRS	Community (196; 113)
<b>Achenbach et al. [2]</b>	Parents: CBCL 1½-5 Teachers: CTRF	Clinical (139; 88) Community (781; 414)
<b>Markovic et al. [50]</b>	Parents: CBCL 1½-5 Teachers: CTRF	Community (512; 234)
<b>Carneiro, Dias, Pinto, Baião, Mesquita and Soares [3]</b>	Parents: CBCL 1½-5 Teachers: CTRF	Clinical (40; 23) Community (132; 66)

### Data extraction and coding

Data were extracted from the studies by one researcher and confirmed with the authors of the original studies to be sure they were correct. Moreover, when the information that was needed to compute the meta-analysis was not available, additional data were requested. All the authors from the 23 studies confirmed or provided the requested additional data. This procedure was undertaken to ensure that the correct data were used to perform all the analyses.

Outcomes representing mean estimates of cross-informant correspondence were presented as Pearson *r* correlation coefficients. In addition to mean estimates of cross-informant correspondence for the type of sample (clinical vs community), the measure used to assess psychopathology (ASEBA form vs other

measures) and child sex (male vs female) were also coded. These three variables were used in this study as predictors of the level of cross-informant agreement.

### Data analyses

Published  $r$ s, or those provided by the authors, were used to estimate the precision of the mean for all included studies using Comprehensive Meta-Analysis, version 3 [33]. Correlation coefficients ( $r$ s) were converted to  $Z_r$ . The means and confidence intervals of  $Z_r$ s were transformed back to the correlation coefficient. A random-effects model was used because it controls for variation in the analyses when studies do not have the same methodology and design, both within and between studies. Studies with large sample sizes were examined as possible outliers. Multiple effect sizes were considered non-independent because they were extracted from the same participants. Next, heterogeneity was assessed by computing tau, which is sensitive to the unit of measurement and acts as the standard deviation of the summary effect, and  $I^2$ , which provides an index of the proportion of observed variability that is attributable to heterogeneity among the data points, reflecting the differences among studies. In each study, all the information about IP, EP and TP was extracted for males, females and mixed samples [33].

## Results

### Mean correlation and outlier analyses

The meta-analysis included 9854 participants (from 25 sample populations) from 23 studies that reported the correlation between parental and teacher reports on IP, EP and TP. The correlation coefficients ranged from -.41 to .54, with a mean  $r$  of .28 (95% CI [.25, .30];  $p < .001$ ). The meta-analytic model fit statistics were  $Q = 835.07$ ,  $p < .001$ . For IP, the correlation coefficients ranged from -.41 to .44, with a mean  $r$  of .21 (95% CI [.18, .24];  $p < .001$ ). The meta-analytic model fit statistics were  $Q = 185.99$ ,  $p < .001$ . For EP, the correlation coefficients ranged from .22 to .54, with a mean  $r$  of .36 (95% CI [.33, .39];  $p < .001$ ). The meta-analytic model fit statistics were  $Q = 208.18$ ,  $p < .001$ . Finally, for TP, the correlation coefficients ranged from -.05 to .52, with a mean  $r$  of .26 (95% CI [.23, .30];  $p < .001$ ). The meta-analytic model fit statistics were  $Q = 199.83$ ,  $p < .001$ . According to the guidelines proposed by Cohen [28], the  $r$  of IP represents a small effect. However, the mean  $r$ , the  $r$  of EP and the  $r$  of TP represent medium effects.

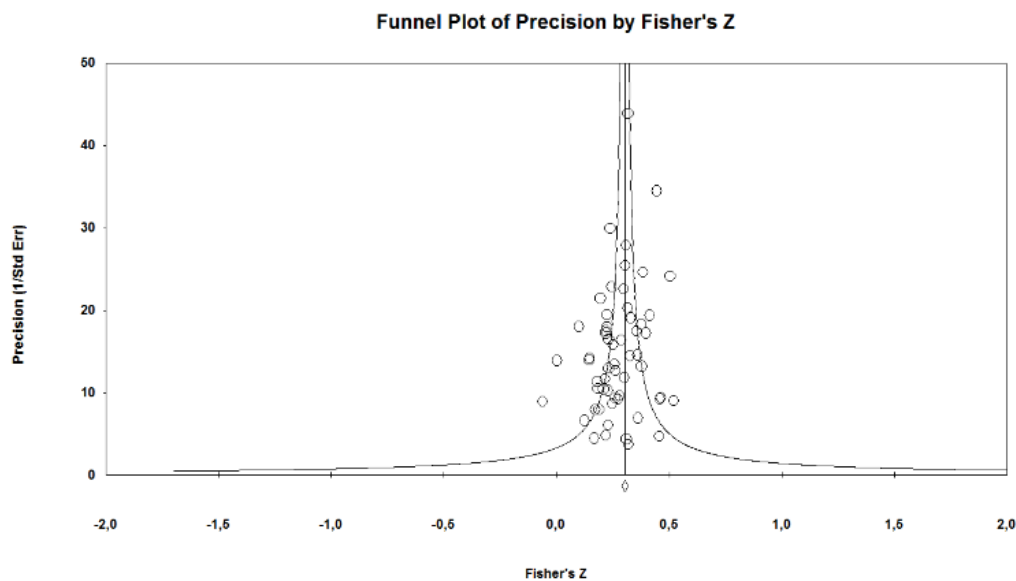
We found large variance in the results for IP, EP and TP (overall  $I^2 = 64.73$ ; IP  $I^2 = 71.50$ ; EP  $I^2 = 74.54$ ; TP  $I^2 = 74.48$ ), suggesting heterogeneity in effect sizes among studies. The percentage of total variability that was attributable to heterogeneity among data included in the meta-analysis was



approximately 64% to 76% for reports of IP, EP, and TP. Additionally, the removal of any individual study from the analysis did not affect relations between magnitudes of cross-informant correspondence and covariates. In line with this, there were variations among effect sizes that were beyond the sampling error. Therefore, a random-effects model was then used.

The possibility of publication bias in the effect sizes was assessed. A funnel plot (Figure 2) was used to graphically examine this issue. The plot is a scatter plot of effect sizes against their precision (1/Std Error). There was no publication bias, given that results emerged in the shape of an inverted funnel with no asymmetries in terms of cross-informant agreement. However, it should be noted that some effect sizes were more dispersed than others. When the results of those studies were removed, the mean  $r$  did not change significantly.

**Figure 2.** Publication bias in the effect sizes



### Meta-regression

The type of sample (community vs clinical) did not affect the correlation between parental reports and teacher reports of IP ( $\beta = .05$ ;  $p = .418$ ;  $Q = .66$ ;  $p = .418$ ;  $I^2 = 71.98$ ;  $Q = 185.60$ ;  $p < .001$ ), EP ( $\beta = -.01$ ;  $p = .863$ ;  $Q = .03$ ;  $p = .863$ ;  $I^2 = 74.99$ ;  $Q = 207.89$ ;  $p < .001$ ) or TP ( $\beta = .01$ ;  $p = .969$ ;  $Q = .00$ ;  $p = .969$ ;  $I^2 = 74.89$ ;  $Q = 199.12$ ;  $p < .001$ ).

With respect to the measure used to assess IP and EP, it is important to state that all measures were reported by the authors to present good psychometric properties. The use of ASEBA forms (Child Behavior

Checklist for Ages 4-18 (CBCL 4-18), Teacher Report Form for Ages 4-18 (TRF), CBCL 1½-5 and CTRF) vs other measures was compared because 17 studies used these measures, and only six studies used other measures to assess children's emotional and behavioural problems. The results showed that there was no significant effect for IP ( $\beta = .02$ ;  $p = .728$ ;  $Q = .12$ ;  $p = .728$ ;  $I^2 = 72.04$ ;  $Q = 185.99$ ;  $p < .001$ ), EP ( $\beta = .04$ ;  $p = .478$ ;  $Q = .50$ ;  $p = .478$ ;  $I^2 = 75.02$ ;  $Q = 208.16$ ;  $p < .001$ ) or TP ( $\beta = -.03$ ;  $p = .616$ ;  $Q = .25$ ;  $p = .616$ ;  $I^2 = 74.37$   $Q = 195.08$ ;  $p < .001$ ).

Finally, child sex did not affect the correlation between parental reports and kindergarten teacher reports of child IP ( $\beta = -.02$ ;  $p = .641$ ;  $Q = .22$ ;  $p = .641$ ;  $I^2 = 60.95$ ;  $Q = 87.06$ ;  $p < .001$ ), EP ( $\beta = .06$ ;  $p = .207$ ;  $Q = 1.59$ ;  $p = .207$ ;  $I^2 = 68.63$ ;  $Q = 108.39$ ;  $p < .001$ ) or TP ( $\beta = .01$ ;  $p = .916$ ;  $Q = .01$ ;  $p = .916$ ;  $I^2 = 68.83$ ;  $Q = 102.68$ ;  $p < .001$ ).

## Discussion

There is not a definite measure that allows the assessment of clinical conditions related to psychopathological maladjustment. Therefore, collecting information from different informants in different contexts is the best method to obtain a comprehensive picture of emotional and behavioural problems in preschool-aged children. However, the literature indicates that cross-informant agreement tends to be low to moderate [6].

In the present study, our first goal was to determine the level of agreement between ratings of parents and ratings of teachers about psychopathological symptoms (IP, EP and TP) in preschool-aged children. As expected, the agreement between parents and teachers was low to moderate. In fact, our overall cross-informant  $r$  of .28 exactly replicated findings from the meta-analyses of Achenbach et al. [20] and de Los Reyes et al. [6], which were conducted three decades apart with entirely different candidate study populations.

Even though the cross-informant agreement was modest, there was better agreement on EP than on IP, which is consistent with previous literature [3, 17, 18, 21, 22, 25, 35, 36, 37, 38, 39, 40]. The higher level of cross-informant agreement for EP than for IP may be because EP are directly observable and consequently more obvious to report [17]. With respect to the differences between parents' reports and teachers' reports, it is important to consider that children might be more likely to disclose their emotional problems to their parents than to their teachers. Although teachers can observe fear/anxiety reactions in young children, they also need to attend to many children in the classroom, and they may pay less attention

to IP than to EP [25]. It is also important to point out that these children's difficulty in expressing feelings may hide the presence of IP. Moreover, when children are not able to share their feelings, which causes psychological distress, they might express their feelings by externalizing them. This addresses the hypotheses that, in some cases, IP may be disguised by the expression of inadequate behaviours.

Interestingly, Rescorla and colleagues' study [18], which included many of the samples used in the present meta-analysis, found a larger societal effect for IP than for EP. That is, parents and teachers/caregivers varied more across societies in their reports on IP than on EP. This suggests that there may be more consistency across societies regarding what constitutes EP (e.g., aggression) than regarding what constitutes IP (e.g., anxiety and depression).

The second goal of our study was to examine whether differences in the type of sample, the measure of assessment, or child sex contribute to a higher or lower agreement between informants. Our results showed no significant effects of these variables on cross-informant agreement. We expected to find higher cross-informant agreement when children were included in clinical samples, since the severity of symptoms would be greater than in population samples and perhaps more evident [25]. However, the results found in this study do not indicate that cross-informant agreement in preschoolers' was influenced by clinical status. However, this finding needs to be discussed in a cautious manner, since only three clinical samples were included, and a meta-analysis with more clinical samples could obtain different results.

ASEBA forms are widely used to assess psychopathological problems in children from 18 months to 18 years of age. The results indicated that agreement was not significantly different for IP, EP or TP when ASEBA forms rather than other questionnaires were used. This finding indicates that all questionnaires used in the studies included in the meta-analysis assess emotional and behavioural problems in preschool-aged children in a similar way and that they all might be similar in terms of construct, validity and accuracy. However, only six studies used questionnaires that were not ASEBA forms, and a meta-analysis with a more diverse set of measures might lead to different results.

Finally, child sex did not significantly affect agreement between parents and teachers on IP, EP or TP. According to earlier studies, higher cross-informant agreement is expected for boys than girls [17, 25, 26]. For example, in the literature, it is hypothesized that boys tend to be perceived as more aggressive and non-compliant and less attentive than girls, which may be due to their more physical ways to deal with difficulties [41 – 43]. One can hypothesize that our results can be due to most of the included samples in

the meta-regression are from community, thus the symptoms presented by girls and boys did not differ significantly in terms of cross-informant agreement.

Overall, our meta-analysis replicates findings from previous studies, confirming that cross-informant agreement using parent and teacher reports is relatively low. Across the samples (boys, girls, and mixed samples), it is possible to observe that there is heterogeneity in the results. Therefore, there is a large percentage of variance that needs to be explained. Our results also show that the potential predictors examined (the type of sample, the measure used for assessment and child sex) were not significant. However, it is still important to extend the understanding of which variables influence the average and quality of agreement between parents and teachers, as well as the risk factors that seem to contribute to the presence of IP and EP in preschool children in three main dimensions – environment, parent and child [44]. Many studies have explored these questions but not with enough consistency to include additional candidate predictors in our meta-analysis, which means that additional studies need to be conducted using some variables that have already been studied. These additional studies will contribute to a deeper knowledge of the variables that are more relevant. In this study, the heterogeneity in the results highlights that there are many reasons other than population vs clinical sample, the type of measure used for assessments and sex that explain cross-informant agreement. The literature has focused on using informants' (e.g., psychopathological symptoms) or the context's characteristics (e.g., the number of children in the classroom) to explain differences in cross-informant agreement. However, differences may also be due to the way that informants understand emotions and behaviours in a context as a function of a demand in a specific moment. Indeed, the attributional bias that informants may have, due to several factors, may play a large role in the differences observed when reporting problems and competencies in preschool-aged children.

One of the main advantages of the present meta-analysis is that articles from several societies, different types of samples, and different instruments were included, allowing us to highlight that cross-informant agreement (teachers and parents) on emotional and behavioural problems of preschool-aged children is low to moderate across a wide range of conditions. These results underscore results from other studies that indicated that IP and EP can be assessed with accuracy across cultures.

Zahner and Daskalakis [45] considered that cross-informant agreement is higher when informants better know the child. Another study [25] proposed that variables that influence cross-informant agreement on psychological problems in preschool children can be divided into three categories: child characteristics

(e.g., the type and severity of problem, age and sex), parent characteristics (e.g., depression, stress, deviant personality, interest in eliciting mental health services and will to avoid stigmatizing children), and teacher characteristics (e.g., education, the length of time they know the child, prior experience with children, the kind of relationship with children and conflict with the child). More research is still needed in this area, given that variables affecting cross-informant agreement between parents and teachers have not been widely studied in preschool children. It would be relevant to better examine the possible influence of parents, teachers and school context on cross-informant agreement in different societies and cultures. Many studies are conducted in community samples; thus, it would also be pertinent to conduct the same studies regarding cross-informant agreement using clinical samples.

### **Practical implications**

Psychological assessment in clinical practice with preschool-aged children involves several decision-making processes, such as choosing the informants that best could contribute to the comprehension of the child's problem. Frequently, clinicians must address cross-informant discrepancies. Studies of cross-informant agreement, including this meta-analysis, highlight the importance of collecting data from different key informants, of keeping in mind that discrepancies often occur, and of focusing on understanding the reasons for those inconsistent results (e.g., parental psychopathology, school context variables). It is important that the clinician does not focus on searching for the "absolute truth" or in knowing if one of the informants is hiding information or indicating problems when they do not exist. It is important to keep in mind that flexible hypotheses must be made to understand the problem and that they can change throughout the assessment and intervention processes. When information from different informants overlaps, it may indicate that the problem or competency is consistent through contexts and demands, but when there are differences, it is important to understand what does contribute to them. In some cases, the discrepancies may be justified by what also justifies the problem, such as different perceptions about the problem, the definition of what is problematic or normative, or even expectations about the child's competencies. Considering the variables that most influence cross-informant agreement regarding children's emotional and behavioural problems would allow clinicians and researchers to choose informants more effectively and to understand the usefulness of their specific contributions to the assessment process, though sometimes attributional bias of the informant must be considered and explored to better understand the problem.

## Summary

This meta-analysis focused on agreement between informants regarding emotional and behavioural problems in preschool-aged children. Previous meta-analyses on the theme included studies with participants with a wide range of ages; however, there is a lack of meta-analyses that focus on specific developmental periods, such as preschool age. The results showed that the level of cross-informant agreement between parents and teachers tends to be low. The meta-regression analyses showed that the child's sex, the type of sample, and the measure used for assessments did not predict the level of cross-informant agreement on emotional and behavioural problems. Future studies should focus on other variables that may interfere with informants' reports and contribute to explaining different ratings of IP and EP in preschool-aged children.

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