

Child-Adolescent Perfectionism Scale - Parent Report: A Pilot Experience

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Abstract

Perfectionism is widely associated with adverse psychological outcomes and mental health problems. This trait can be observed early in infancy, but it is challenging to diagnose in children. The present study aims to adapt and validate a Child-Adolescent Perfectionism Scale Parent Report (CAPS-PR). We used a Portuguese sample ($n = 148$) of dyads parents and their children. After adjusting the CAPS-Short Form (SF) from a self-report to a proxy-report scale, parents answered the adapted CAPS-PR about their children, and the Multidimensional Perfectionism Scale – 13 (MPS) about themselves. Children (Median age: 8 years) responded to the Child-Adolescent Perfectionism Scale-Short Form (CAPS-SF). Convergent validity was assessed using the CAPS-SF and MPS. Confirmatory factor analysis of the CAPS-PR (Parents) supported the same two-factor structure found in the CAPS-SF (Children): Self-Oriented Perfectionism and Socially-Prescribed Perfectionism, and represented a very good fit to the data ($\chi^2/df = 2.495$; CFI = .945; GFI = .922; TLI = .921; RMSEA = .100, $p < .001$). Additionally, the CAPS-PR demonstrated adequate internal consistency (Cronbach's $\alpha \geq .84$). Convergent validity revealed positive correlations between SOP-PR and SOP-SF, and SOP-MPS. Temporal stability was satisfactory in both dimensions of CAPS-PR. In conclusion the CAPS-PR constitutes a valid instrument to analyze perfectionism in children from the parents' perspective.

Keywords: perfectionism; child; scale adaptation; parent report.

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Escala de Perfeccionismo Crianças-Adolescentes - Relatório dos Pais: Uma experiência piloto

Resumo

O perfeccionismo está amplamente associado à perturbação psicológica e a problemas mentais. Este traço pode ser observado precocemente na infância, mas não é fácil de avaliar através da criança. O presente estudo tem como objetivo adaptar e validar a Escala de Perfeccionismo Crianças-Adolescentes Versão Parental (CAPS-PR). Recorremos a uma amostra portuguesa ($n=148$) pares de pais e filhos. Após ajustar adaptação a CAPS-Forma Reduzida da (CAPS-SF) de auto-reporte para um formato de relato de terceiros hetero-reporte, os pais responderam o CAPS-PR sobre seus filhos e a Escala Multidimensional de Perfeccionismo – 13 (MPS) sobre si mesmos. As crianças (Mediana de idade: 8 anos) responderam à Escala de Perfeccionismo Crianças-Adolescentes - Forma Reduzida (CAPS-SF). A validade convergente foi obtida com o CAPS-SF e MPS. A análise fatorial confirmatória do CAPS-PR (Pais) apoiou a mesma estrutura de dois fatores encontrada no CAPS-SF (Crianças): perfeccionismo auto-orientado (SOP) e perfeccionismo socialmente prescrito (SPP) e apresentou com um excelente ajuste aos dados ($\chi^2/df = 2.495$; CFI = .945; GFI = .922; TLI = .921; RMSEA = .100, $p < .001$). adequado. Também, a CAPS-PR demonstrou consistência interna adequada (alfa de Cronbach $\geq .84$). A validade convergente revelou correlações positivas do SOP-PR com SOP-SF e SOP-MPS. A estabilidade temporal foi satisfatória em ambas as dimensões da CAPS-PR. Em modo de conclusão, A CAPS-PR constitui um instrumento válido para analisar o perfeccionismo da criança através dos pais.

Palavras-chave: perfeccionismo; criança; adaptação de escala; versão parental.

INTRODUCTION

Perfectionism is a personality trait characterized by excessive concern over making mistakes, the setting of unattainably high standards, heightened fear of negative social evaluation, and the tendency to be highly critical of oneself and others (Flett & Hewitt, 2002). One of the most well-known multidimensional conceptualizations of perfectionism includes self-orientated perfectionism (SOP) (self-requirements to be perfect); socially prescribed perfectionism (SPP) (perceptions that others require the self to be perfect); and other-orientated perfectionism (OOP) (demands for others to be perfect) (Hewitt et al., 1991). In children and adolescents, there is a growing interest in deepening knowledge about the characteristics and mechanisms of perfectionism, as well as increasing attention to measures designed to assess perfectionism in young people (Flett et al., 2016). Children with high levels of Perfectionism constantly face internal and external perceived pressures, exhibiting negative emotions such as sadness, anger, distress, embarrassment, a negative self-concept, dissatisfaction with themselves, and self-blame (Melero et al., 2020; Oros et al., 2017). Research has reported that child perfectionism is related to low self-esteem and a wide range of psychopathological conditions, such as depression, eating disorders, anxiety disorders, and obsessive-compulsive disorder (Bento et al., 2010; Castro et al., 2004; Hewitt et al., 2002; Lozano et al., 2015; Martinelli et al., 2014).

Although the investigation of adult perfectionism has increased significantly in the last two decades, studies on children and adolescents remain scarce. Being perfectionism a stable personality trait (Vicent et al., 2017), previous research has shown proved that depending on the child temperament, parental influence and social learning, perfectionist cognitions and behaviors present from early age will tend to be reinforced and maintained throughout life (Rasmussen & Troilo, 2016). Experienced clinicians can observe these precursor characteristics of perfectionism in even preschool children. In these cases, it is crucial to recognize the issue as early as possible to initiate counseling for parents to help reduce or change their children's perfectionism.

Given that children of school age cannot easily report on their cognitions, emotions, and behaviors in a sufficient way, researchers use parental and teacher ratings to assess their personality. Thus, some authors used parents to fill out instruments that evaluate personality traits in children (Asendorpf & Van Aken, 2003; Digman, 1990; Müller et al., 2016). The assessment of a child's perfectionism from a parent's perspective can be an essential contribution to the psychological evaluation, both in clinical and research settings. However, there are few instruments for assessing perfectionism in children, and none designed to be answered by parents. Recently,

Wadsworth et al. (2021) explored the psychometric properties of the brief version of the Frost Multidimensional Perfectionism Scale in 114 children aged 8-12 years using a child's and the parent's report (Wadsworth et al., 2021). They found valid results in parents but not in children, reporting their own perfectionism. The authors suggested that the lack of evidence of psychometric robustness of the child report may be due to the developmental limitations in children's understanding of their own perfectionism traits. In contrast, the parent-report of the scale proved to be an economical and valid measure of perfectionism in young children (Wadsworth et al., 2021).

Another widely used scale to study perfectionism in children and adolescents is the Child-Adolescent Perfectionism Scale (CAPS), a 22 items scale differentiating two forms of perfectionism: self-oriented (i.e., exceptionally high personal standards and being driven to achieve these standards) and socially prescribed (i.e., the belief or perception that other people demand perfection from the self) created by Hewitt et al. (1991) and translated and validated into European Portuguese by Bento et al. (2014). In 2016, Flett Hewitt et al. applied the CAPS in different Canadian adolescent samples ($N=1596$; median age 13 years), confirming the psychometric quality and reinforcing the association between perfectionism with stress, distress, and psychiatric symptoms (Flett et al., 2016). In 2019, Vincent et al. published a meta-analysis of the CAPS reliability. This meta-analysis included 56 studies that reported average alpha coefficients of .87, .84, and .83 for the CAPS total score and its two subscales, demonstrating the adequacy of this instrument for research purposes (Vincent et al., 2019). In 2020, the CAPS Portuguese short version was developed and proved similar validity and reliability parameters to the original Portuguese version (Bento et al., 2019).

To date, all studies published using CAPS have evaluated perfectionism in children over ten years old and adolescents. To our knowledge, there are no validated instruments to analyse perfectionism in younger children. For this reason, the objective of the present study is to adapt and analyze the psychometric properties of a parent-report version of the Child-Adolescent Perfectionism Scale-Short Form.

METHOD

Procedure

Permission was obtained from the Ethics Committee of the Faculty of Medicine of the University of Coimbra. Two private primary schools were invited to participate. After the agreement of the school's head teachers, the researchers left the informed

consents and the protocol at the school. The researchers did not directly contact children or parents. The informed consent (IC), including the study objectives and procedures, as well as the questionnaires, was sent to parents by the schoolteachers. After being answered by their parents, the children returned to school and gave the protocol to their teachers. To evaluate the temporal stability, parents were asked to answer again one of the instruments, after 4 to 6 weeks; they received it through their children. Children answered the protocol at school once. Parent and child questionnaires were anonymous; envelopes were provided so that families could seal the completed forms when returning them to school, ensuring confidentiality. At the beginning of the study, the first author paired the children's and parents' forms using an alphanumeric code.

Participants

The convenience sample was composed of parents and their children from two private primary schools in Coimbra.

The adult sample was composed of 148 parents. The mother's sample (83%) had a mean age of 41 years ($SD = 4.02$); (range: 30-53). It comprised 64% of intellectual and scientific and 21% of technical professions. The father's sample (17%) had a Mean age of 42 years ($SD = 4.68$); (range: 28-62). The father's professions were composed of intellectual and scientific (55%), services and sales (22%), and technical (14%).

The mean age of the entire child sample was 7.73 years ($SD = 1.18$) (range: 6-10), and was composed of 81 boys (55%) and 67 (45%) girls. Eighty-five children (3rd and 4th grade; mean age: 8.64 years, $SD = 1.20$; 46 girls and 39 boys), who were able to read and understand, answered the CAPS-SF.

The parents completed a set of measures about perfectionism: the CAPS-PR regarding their son/daughter and the Hewitt and Flett Multidimensional Perfectionism Scale-13 (MPS-13) regarding themselves (Soares et al., 2016). Approximately half of the parent sample ($n = 64$ - 83% mothers; 17% fathers) completed the CAPS-PR twice.

Measures

The parents completed a set of questionnaires to evaluate perfectionism: the CAPS-PR regarding their children and the H&F-Multidimensional Perfectionism Scale-13 regarding themselves. Children answered the CAPS-SF.

Child-Adolescent Perfectionism Scale Short Form (CAPS-SF; Bento et al., 2019)

The authors of the CAPS-SF authorized the use of the scale to carry out this investigation. The CAPS-SF is a 9-item scale composed of two subscales: Self-

Oriented Perfectionism (SOP-SF: 4 items) and Socially Prescribed Perfectionism (SPP-SF: 5 items). Each item uses a 5-point Likert scale, ranging from 1 (*False- Not at all true for me*) to 5 (*Very true for me*). CAPS-SF scores can range from 1 to 45. Higher scores indicate greater Perfectionism for all items. The *Cronbach's alpha* of the CAPS-SF original version was .84, for SOP dimension was .77, and for SPP dimension was .87. In our sample, the *Cronbach's alpha* of the CAPS-SF was .82; for SOP dimension was .72, and for SPP dimension was .81.

The Hewitt & Flett -Multidimensional Perfectionism Scale 13 (MPS; Soares et al., 2016)

The MPS is a 13-item scale composed of three subscales: Self-Oriented Perfectionism (SOP-MPS: 7 items), Socially Prescribed Perfectionism (SPP-MPS: 3 items), and Other-Oriented Perfectionism (OOP-MPS: 4 items). Each item uses a 7-point Likert scale ranging from 1 (*False- Not at all true for me*) to 7 (*Very true for me*). Items 10, 12, and 20 are reverse-coded. MPS-13 scores can range from 1 to 91. Higher scores indicate greater perfectionism. The *Cronbach's alpha* of the original MPS-13 was 0.82, .90 for SOP-MPS, .70 for SPP-MPS, and .71 for OOP-MPS. In our parent sample, the *Cronbach's alpha* was .71.

Adaptation of the Child-Adolescent Perfectionism Scale Short - Parent Report (CAPS-PR)

The researchers adapted the original Portuguese CAPS-SF to enable parents to complete its items in relation to their children. For example: CAPS-SF - item 1: *"I try to be perfect in everything I do"* for CAPS-PR - item 1: *He/She tries to be perfect in everything he/she does"*. Thus, as the original, the preliminary version of CAPS-PR was composed of 9 items, being four SOP items and five SPP items. As the CAPS-SF, the CAPS-PR does not contain any reverse-coded items, and scores can range from 1 to 45. Higher scores indicate greater perfectionism.

The Child-Adolescent Perfectionism Scale Parent Report (CAPS-PR) is a 9-item scale rated each statement on a 5-point *Likert-type* scale ranging from 1 (*false- Not at all true for her/him*) to 5 (*Very true for her/him*). CAPS-PR scores can range from 1 to 45. The items that are part of the CAPS - PR are listed in Table 1.

Table 1*Cronbach's alpha, factor means, and standard deviations of the CAPS-PR.*

Item	CAPS - PR ($\alpha = .846$)			
	Standard Estimates	M	SD	Factor α
<i>Socially Prescribed Perfectionism</i>				
		13.09	4.48	.87
1. He /she thinks that other people always expect him /her to be perfect.	.92	2.68	1.11	.85
2. He /she thinks that people around him /her expect to be great at every- thing.	.89	2.50	1.12	.83
3. He /she feels that the family expect him /her to be perfect.	.69	2.72	1.12	.81
4. He / She feels that people ask too much of him / her.	.60	2.25	1.00	.78
5. He /she feels that here are people in his / her life who expect to be perfect.	.59	2.94	1.15	.75
<i>Self-Oriented Perfectionism</i>				
		13.89	0.27	.84
6. He / She tries to be perfect in everything he / she does.	.79	3.75	0.95	.87
7. He / She wants to be the best at everything he / she does.	.75	3.59	1.03	.82
8. It really bothers him /her if he /she doesn't do his /her best all the time.	.77	3.35	0.02	.80
9. When he / she does something, it has to be perfect.	.70	3.21	1.07	.74

Note: CAPS-PR: Child-Adolescent Perfectionism Scale Parent Report; α = Cronbach alpha; M (SD): Mean (Standard Deviation).

Analytic strategy

Confirmatory factor analyses (CFAs) were conducted to evaluate the fit of the previously described structural model using maximum likelihood estimation in AMOS 26. Latent variables were scaled with a fixed indicator. To assess overall model fit, several goodness-of-fit measures and recommended cut-points were used (Kline, 2005; Marôco, 2018): Chi-Square (χ^2), Normed Chi-Square (χ^2/df), Comparative Fit Index ($\text{CFI} \geq .90$, acceptable, and $\geq .95$, desirable; Tucker-Lewis Index ($\text{TLI} \geq .90$, acceptable, and $\geq .95$, desirable (Hu & Bentler, 1998); Goodness of Fit Index ($\text{GFI} \geq .90$, good, and $\geq .95$, desirable; Jöreskog & Sörbom, 2001); Root Mean Square Error of Approximation ($\text{RMSEA} \leq .07$, good fit if $\text{GFI} \geq .92$; (Hair et al., 2019) with a 95% confidence interval. To analyse criterion validity, Pearson correlation coefficients between CAPS-PR (parents) and CAPS-SF (children) were calculated. In this analysis, the magnitude sizes were classified as small ($r =$ from .10 to .29), moderate ($r =$ from .30 to .50), and large ($r =$ from .50 to .90) (Espírito Santo & Daniel, 2017). Temporal stability of CAPS-PR was analysed by the test-retest Pearson correlations and paired samples t -test comparing means between test and retest. Independent samples t -tests were used to compare CAPS-PR and CAPS-SF mean scores by gender and age groups.

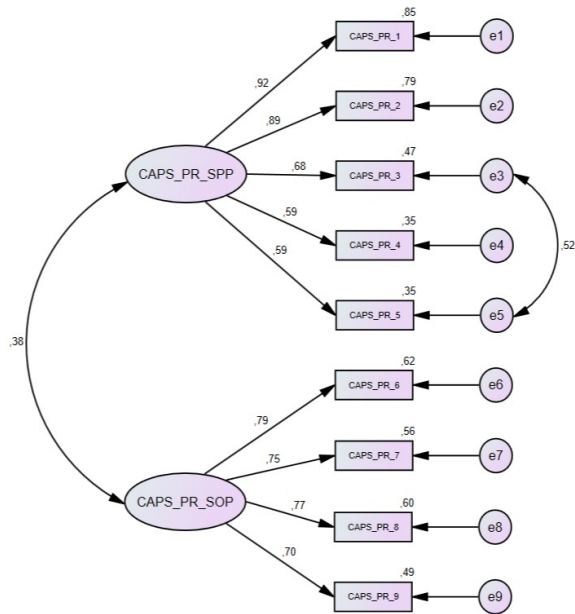
RESULTS

Confirmatory factor analysis

Analysis for normal distribution did not reveal any severe bias, as all variables presented acceptable values of skewness and kurtosis ($SK < |3|$ and $Ku < |8-10|$) and $VIF < 5$ (Kline, 2005), which excludes the existence of multicollinearity. Also, from the analysis of multivariate outliers using Mahalanobis distance statistic (D2), some cases indicated the presence of outliers and were therefore excluded.

The model, composed of two factors as found for the CAPS-Short Form (CAPS-SF), was tested. After correlating two pairs of errors, with a Modification Index higher than 12.00, corresponding to items 8 (He /she feels that the family expect him /her to be perfect.) and 5 (He /she feels that here are people in his / her life who expect to be perfect.), both from F1 (Socially Prescribed Perfectionism) (Figure 1), it presented an acceptable fit ($\chi^2/df = 2.495$; CFI = .945; GFI = .922; TLI = .921; RMSEA = .100, $p < .001$).

Figure 1
Standardized loadings and correlations for the two-factor model according to the modification indices and theoretical considerations.



Note: CAPS_PR_: Child-Adolescent Perfectionism Scale Parent Report Items; CAPS_PR_SOP: Child-Adolescent Perfectionism Scale Parent Report Self-Oriented Perfectionism Factor; CAPS_PR_SPP: Child-Adolescent Perfectionism Scale Parent Report Socially Prescribed Perfectionism Factor.

The Pearson correlation between the CAPS-PR total and dimensional scores were of $r(148) = .75, p < .01$ for Self-Oriented; and $r(148) = .88, p < .001$ for Socially Prescribed; the correlation between Self-Oriented and for Socially Prescribed was $r(148) = .33, p < .01$.

Internal consistency

Table 1 presents the internal consistency of the CAPS-PR, including the total score and the subscale scores. *Cronbach's alpha* of the CAPS-PR was of $\alpha = .85$; for SOP dimension was .84, and for SPP dimension was .87.

Temporal Stability of the CAPS-PR

Temporal stability was analysed by the test-retest correlation method (Pearson correlation). Sixty-four parents answered the scale four to six weeks later. For the Total CAPS-PR, the correlation coefficient was $r(64) = .79, p < .001$. For SPP-PR dimension it was of $r(64) = .72, p < .001$; and for SOP it was of $r(64) = .78, p < .001$. There was not observed mean differences between both moments for CAPS-PR: ($M = 27.38, SD = 6.5$) vs. ($M = 26.95, SD = 7.32$), $t(64) = 0.73, p = .47, d = 0.01$, IC 95% [-0.74 – 1.58]; SPP-PR: ($M = 13.52, SD = 4.58$) vs. ($M = 13.45, SD = 4.87$), $t(64) = 0.14, p = .89, d = -0.06$, IC 95% [-0.83 – 0.95]; neither SOP-PR: ($M = 13.86, SD = 3.31$) vs. ($M = 13.50, SD = 3.71$), $t(64) = 1.22, p = .23, d = 0.14$, IC 95% [-3.56 – -2.05].

Criterion Validity

The Pearson correlation between CAPS-PR, CAPS-SF as filled by children and parents' MPS dimensions was explored. (Table 2).

Table 2

Correlations between perfectionism dimensions.

	SPP_PR	SOP_SF	SPP_SF	SOP_MPS	SPP_MPS	OOP_MPS
SOP_PR	.333**	.246*	-.180	.420**	.160	.429
SPP_PR		.204	.127	.472**	.376**	.158
SOP_SF			.467**	.157	.216*	.571
SPP_SF				.041	.206	.118
SOP_MPS					.363**	.216
SPP_MPS						.154

Note: SOP = Self-Oriented Perfectionism; SPP = Socially Prescribed Perfectionism; OOP = Other-Oriented Perfectionism; PR = Parent Report; SF = Self-Report; MPS = Multidimensional Perfectionism Scale. $p < .05$ (*); $p < .01$ (**)

Table 2 shows that CAPS-PR revealed a significant small correlation with SOP-SF $r(85) = .27, p = .01$; a large correlation with SOP-MPS $r(148) = .55, p < .001$; and a medium correlation with SPP-MPS, $r(148) = .35; p < .001$. SOP-PR showed small correlations with SOP-SF $r(85) = .25; p = .03$; and medium correlation with SOP-MPS $r(148) = .42; p < .001$. SPP-PR revealed medium correlations with SOP-MPS $r(148) = .47; p < .001$; and SPP-MPS $r(148) = .38; p = .001$.

Mean and Standard Deviations of the CAPS-PR and CAPS-SF

The descriptive item and subscale means, standard deviations were calculated in the CAPS-PR (Parents) and CAPS-SF (Children). No significant mean differences were observed by gender for SOP-PR: Girls: ($M = 13.91, SD = 3.71$) vs. Boys: ($M = 13.81, SD = 2.794$); $t(131.60) = 0.18, p = .86, d = 0.11$ or for SPP-PR: Girls: ($M = 13.45, SD = 4.74$) vs. Boys: ($M = 12.68, SD = 4.18$); $t(147) = 1.07, p = .29, d = 0.16$. No significant mean differences were observed by age groups for SOP-PR: Younger: ($M = 13.94, SD = 3.25$) vs. Older: ($M = 13.79, SD = 3.15$); $t(71) = 0.19, p = .85, d = 0.05$ or for SPP-PR: Younger: ($M = 12.97, SD = 4.57$) vs. Older: ($M = 12.33, SD = 4.34$); $t(71) = 0.61, p = .54, d = 0.14$.

No significant mean differences were observed by gender for SOP-SF: Girls: ($M = 10.00, SD = 3.64$) vs. Boys: ($M = 13.05, SD = 3.73$); $t(74.544) = 1.15, p = .25, d = 0.14$ or for SPP-PR: Girls: ($M = 16.09, SD = 5.05$) vs. Boys: ($M = 14.92, SD = 4.84$); $t(1.06) = 76.68, p = .29, d = 0.14$.

DISCUSSION

The perfectionism construct has been intensively investigated in terms of its structure, characteristics, and consequences for physical and mental health. The manner in which it should be assessed has also been the subject of scrutiny and debate (Stornæs et al., 2019). Perfectionism is often shared among family members (Cook & Kearney, 2009). To better understand the transmission and development of perfectionism and also to prevent its potential harmful effects as early as possible, it is essential to develop and validate methods of assessing it in children.

Despite the extensive number of self-assessment perfectionism scales for children, adolescents, and adults, to our knowledge, there are no instruments available for the evaluation of perfectionism in pre-literate children, which can be done using parents' perceptions. As parents observe their child over long periods of time and in many contexts (McConaughy, 1993), mental health professionals tend to view them as optimal informants regarding behavioral and conduct problems (Dollinger, 1992; Edelbrock et al., 1986).

The present study investigated the psychometric properties of the Child-Adolescent Perfectionism Scale Parent-Report (CAPS-PR). The CAPS-PR presented good reliability and construct validity. Its items demonstrated adequate internal consistency and were organized into a factorial structure consistent with Flett's perfectionism theory and the original CAPS, characterized by high factor loadings and very good fit indexes. The CAPS-PR maintained the same number of items, maintaining adequate psychometric characteristics with internal consistency values, which were comparable with the internal consistencies for the subscales of the CAPS-SF (Bento et al., 2019).

Regarding Temporal Stability, since the test and re-test mean scores did not significantly differ and were highly correlated, CAPS-PR appears to provide stable measurements over time, which is consistent with the trait-like nature of personality characteristics (Almeida & Freire, 2008; Dagnall et al., 2023).

Several reasons can explain the correlations between self-oriented perfectionism scores in CAPS-PR and CAPS-SF. The first is the genetic aspect. This factor represents the first link from parent to child. Tozzi et al. (2004) found that shared genetic factors significantly related to domains of perfectionism (Tozzi et al., 2004). Indeed, some authors looked for a genetic link between perfectionism and some mental problems, like eating disorders (Bachner-Melman et al., 2007, anxiety, and depression (Bachner-Melman et al., 2007). The second aspect is the Social Learning Model proposed by Flett and Hewitt (2002), which focuses on the role of imitation of the perfectionism that presumably resides in parents (Flett & Hewitt, 2002). In this model, parents who are perfectionistic set perfectionistic standards for their children and become over-involved and controlling in the progress toward those standards. When parents engage in these behaviors, they may convey to the child that they must be perfect to receive their love and that failure is intolerable, resulting in the child's distress. Consequently, children with perfectionistic parents will tend to imitate their parents' attitudes and behaviours (Flett & Hewitt, 2002). Additionally, our findings align with the research by Hewitt et al. (2022), who developed and validated the Other-Oriented Perfectionism Scale Subscale-Junior Form using parent-child dyads. In this research, children completed the CAPS and the Other-Oriented Perfectionism Scale Subscale-Junior Form, and parents answered questions about their child's perfectionism. They verified that SOP dimension in children was correlated with parent ratings of SOP, but the same dimension was not correlated with parent ratings of SPP. Also, the SPP dimension in children had no association with other parent ratings dimensions of perfectionism (Hewitt et al., 2022). The correlations between the Multidimensional Perfectionism Scale (MPS) and the dimensions of CAPS-PR show that parents, recognizing their perfectionism, can recognize their children even before the children become self-aware of them.

The low mean age of the sample (8.64 years), in which egocentric thinking predominates, may partially explain the absence of significant correlations between SPP-PR and SPP-SF. At this developmental stage, children may recognize SOP more easily and accurately than SPP (Flett & Hewitt, 2002). Regarding SPP, Flett et al. propose the Social Expectations Model to hypothesize that perfectionism is influenced and shaped by environmental pressures throughout development, particularly during adolescence, a critical period for understanding the socially imposed aspects of perfectionism (Flett & Hewitt, 2002).

The absence of mean differences between genders in CAPS-PR dimensions was observed previously by some authors using the CAPS (Bento et al., 2017; Kaur & Kaur, 2012; Sand et al., 2021; Soreni et al., 2014), and can help strengthen scale quality. Approximately half of our sample of children answered the CAPS-SF, and we did not find mean differences in the CAPS-PR dimensions between the older group (who answered the CAPS-SF too) vs. the younger group of children. Unfortunately, we did not find any literature using pre-literate samples to support these results, but with our results, we can assert that, in this sample, the younger ones have the parent-reported perfectionism level adequate to them.

The CAPS-PR can provide useful information in clinical settings. For clinical purposes, health professionals can advise parents to change some perfectionist attitudes and to educate their small son/daughter, reducing negative perfectionist beliefs. The correspondence between the CAPS-PR and CAPS-SF scales enables both parents and children to respond to similar dimensions of perfectionism. As children appear to be more able to assess their own behaviour as they increase in age (Edelbrock et al., 1986), CAPS-PR may be useful to monitor the evolution of child perfectionism. Both in cross-sectional and longitudinal research, the CAPS-PR (parent responders about their son/daughter) and MPS (parents) may be used to enhance understanding of the intergenerational transmission of perfectionism.

Despite the promising results, this research has some possible limitations. The sample used was adequate, but small. A larger sample could increase the robustness of our results. All the participants were from a single geographic area, which limits the generalizability of the results. Therefore, it is important to replicate our results in other countries and cultural contexts. This psychometric study should be viewed as exploratory. We intend to apply the CAPS-PR in other populations (child development and child psychiatric services) and within a longitudinal framework in which the same children and parents are followed over time. This will help further evaluate both the scale's psychometric properties and the nature of the construct it assesses.

Identifying perfectionism early in childhood may help prevent future psychological difficulties in children and adolescents. The CAPS-PR shows promise for use in both research and clinical practice

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