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Is it the Child's Fault? Maternal Attributions in Child Abuse and Neglect

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ABSTRACT

Background: Among the parental cognitions explaining maladaptive parenting, attributions about a child's misbehavior seem important. However, there is little research on neglectful parents, and the different patterns of parental attributions associated with child abuse and child neglect are still underexplained. The current study examines parental attributions associated with child abuse and child neglect. **Method:** Mothers ($N = 218$) were asked to evaluate vignettes describing child transgressions, half of which were followed by situational information. Child abuse and child neglect were evaluated through mothers' and professionals' reports. **Results:** Preliminary results indicated that the child's age and maternal socioeconomic status were significantly correlated with attributions and child abuse and neglect scores and thus were controlled in the models. The results from hierarchical regressions indicated that dispositional attributions were associated with higher abuse scores (reported by mothers), even in the presence of situational information. Likewise, dispositional attributions were associated with higher neglect scores (reported by professionals), but the effect was no longer significant in the presence of situational information. **Conclusions:** These findings contribute to the current socio-cognitive approaches to child maltreatment and provide relevant input for understanding the different attributional mechanisms underlying child abuse and neglect.

¿Es Culpa del Niño? Atribuciones Maternas en el Abuso y la Negligencia Infantil

RESUMEN

Antecedentes: Entre las cogniciones parentales que explican la parentalidad desadaptativa, las atribuciones sobre el comportamiento del niño parecen importantes. Sin embargo, hay pocas investigaciones sobre los padres negligentes, y los patrones de atribuciones parentales que se asocian con el abuso y la negligencia siguen sin explicarse. Este estudio examina las atribuciones parentales asociadas con el abuso y la negligencia infantil. **Método:** La muestra estaba compuesta por 218 madres que evaluaron viñetas que describían transgresiones infantiles, la mitad con información situacional. Abuso y negligencia se evaluaron a través de informes de madres y profesionales. **Resultados:** Los resultados indicaron que la edad del niño y el estatus socioeconómico estaban correlacionados con las atribuciones y con el abuso y negligencia, por lo que fueron controlados en los modelos. Los resultados de las regresiones jerárquicas indicaron que las atribuciones disposicionales se asociaron con el abuso (informes de madres), incluso en presencia de información situacional. Las atribuciones disposicionales se asociaron con la negligencia (informes de profesionales), pero no hay efecto en presencia de información situacional. **Conclusiones:** Estos hallazgos corroboran a los actuales enfoques sociocognitivos del maltrato infantil y proporcionan aportaciones relevantes para entender los diferentes mecanismos atribucionales que subyacen al abuso y la negligencia infantil.

Palabras clave:

Cogniciones parentales
Atribuciones parentales
Información situacional
Abuso y negligencia infantil

Socio-cognitive approaches to parenting emphasize the role of thinking in determining parental behaviors towards children (e.g., Sigel & McGillicuddy-DeLisi, 2002). Applied to maladaptive parenting (e.g., Azar et al., 2008; Larrance & Twentyman, 1983), these models suggest that abusive and neglectful parental responses are a product of biased cognitive processing of caregiving-related information, namely dysfunctional attributions about the child's behavior. This study explores parental attributions associated with child abuse and child neglect. Understanding the cognitive processes underlying these two forms of child maltreatment is of utmost importance to inform theoretical models and tailor specific behavioral parental training interventions (e.g., Whitcombe-Dobbs & Tarren-Sweeney, 2019).

Parental attributions seem to play a crucial role in parental practices. When interpreting and evaluating a child's behavior, parents engage in attributional processes making causal inferences about the behavior, which influence how they act towards the child (Milner, 2003). In the parenting context, attributions have been considered stable and memory-based knowledge structures, or event-dependent, dynamic cognitions, driven by the child's behavior. For example, Bugental and colleagues (e.g., Bugental & Happaney, 2004) approached parental attributions based on an attributional style grounded on the power balance in parent-child relationships. Parents who attribute themselves less power in controlling their child's negative behavior are more likely to respond with escalating levels of negative affect and behavior to regain control. Considering attributions as "online" inference processes, Dix et al. (e.g., Dix & Grusec, 1985; Dix et al., 1989) suggested that parents' affective reactions to children's misbehavior vary according to their belief that such behavior is intentional, controllable, or dispositional, and whether it is constrained by developmental or situational factors. In this approach, parental attributions depend on how parents interpret the child's specific instances of failure or misbehavior. When parents see their child's negative behavior as caused by dispositional factors (vs. situational and context-dependent), they act towards their child with more negative affective and behavioral responses (e.g., Dix & Grusec, 1985). Previous studies have also considered (e.g., Slep & O'Leary, 1998) other dimensions of parental attributions, such as intentionality and controllability, suggesting that the risk of harsh parental discipline may increase when parents interpret a child's misbehavior as intentionally provocative and under a high level of child control.

Research has consistently shown that abusive parents present dysfunctional attributions, making more negative attributions about children's misbehavior (e.g., Crouch et al., 2017) and interpreting this behavior as having negative intent (e.g., Azar et al., 2016). A recent meta-analysis about parental cognitions underlying abusive and neglectful parenting (Camilo et al., 2020) also indicates that parents' attributions were moderately associated with physically abusive parental practices.

However, there is little research on attributions in parental neglect (characterized by lax and disengaged parenting). The few studies in this domain report a similar attributional pattern to physical abuse, namely that neglectful mothers tend to attribute a child's negative behavior to internal and stable causes (Hildyard & Wolfe, 2007; Larrance & Twentyman, 1983), motivated by

negative intent (Azar et al., 2017). Notably, a similar attributional pattern in child abuse and child neglect challenges the distinct putative mechanisms underlying child abuse and child neglect advanced by socio-cognitive models (Azar et al., 2008; Milner, 2003). According to these models, abusive parents are expected to interpret a child's misbehavior as more negative, intended, and under the child's control, blaming the child and acting with power-assertive strategies to punish the child. In contrast, neglectful parents are expected to make excessive external attributions, considering a child's negative behavior caused by contextual factors and discarding any child's responsibility, thus minimizing practices of demandingness and control.

Moreover, socio-cognitive parenting models suggest that parents engage in attributional processes mainly when confronted with ambiguous behavior, challenging but age-appropriate behavior (Milner, 2003). In these circumstances, the lack of information justifying the specific situation the child is experiencing leads parents to rely on their pre-existing cognitions. However, in the presence of situational information, parents are expected to integrate it to "explain" the behavior, thus mitigating overly child-centered attributions. Attributional differences between maltreating and non-maltreating parents also seem to depend on parents' ability to integrate situational information. Irwin et al. (2014) showed that situational information (e.g., the child was sick) reduced parents' intentions of using power-assertive disciplinary strategies after a child's transgression, but this effect was smaller for high-risk than for low-risk for child physical abuse mothers. Critically, a single study examining the role of situational information in neglectful mothers' attributions reports the little impact of situational factors on their attributional responses (in contrast with abusive and comparison mothers), suggesting that they are less responsive to environmental cues (Larrance & Twentyman, 1983). Further, the type of child's transgression has been pointed out as an important interaction variable. Specifically, the results of Irwin et al. (2014) describing the effect of situational information on parents' intentions of using power assertion were observed only for serious social violations. Also, the work of Montes et al. (2001) showed that high-risk mothers evaluated conventional and personal transgressions as more wrong than low-risk mothers, but no differences were found for moral transgressions.

Furthermore, parental information processing mechanisms underlying child abuse and child neglect are influenced by factors other than a child's behavior, namely individual and contextual variables. Particularly, the attributional model proposed by Dix et al. (1989) suggested the child's age as an important variable affecting parental attributions, acknowledging the importance of parents' evaluation of the age-appropriateness of the behavior. When the child has limited capacities (developmentally appropriate), parents are expected to hold the child less responsible for their negative behavior. In contrast, for older children (expected to have more knowledge and capabilities to direct and control their negative behavior), parents think of their negative behavior as more intentional and blameworthy.

Likewise, contextual stress may also constitute a potential risk factor for parenting, namely the stress associated with socioeconomic adversity and chaotic family environments. Previous

research has shown that the relationship between attributional biases and parenting is moderated by their experienced level of contextual stress, with parents revealing more negative attributions under stress conditions (e.g., Sturge-Apple et al., 2014).

The first goal of the current study was to extend knowledge about dysfunctional parental attributions associated with child abuse and child neglect. Although the same pattern of attributional biases has been associated with abusive and neglectful parental practices (e.g., Azar et al., 2017; Crouch et al., 2017), little is still known about how these attributional patterns contribute to shaping their different parental responses (i.e., aggressive parental practices in abuse and lax/unresponsive parental practices in neglect).

The second goal was to examine the effect of situational information on dysfunctional attributions associated with child abuse and child neglect. Recent research on parental attributions associated with physical abuse emphasized the impact of situational information in mitigating parental attributions of a child's responsibility and negative intent (Irwin et al., 2014). Still, past results on child neglect suggest that neglectful mothers might be unresponsive and insensitive to environmental cues (Larrance & Twentyman, 1983). Considering the potential impact that a child's age and parental socioeconomic strains may have on parental attributions, both variables were entered into the models. Finally, parents' report of maltreatment might be prone to cognitive distortions and reporting bias, but also shaped by high levels of conscious control in an attempt to avoid social judgments and/or legal consequences (Lau et al., 2006). The reports of professional are also not immune to bias and are often influenced by case features, and by professionals' characteristics (e.g., level of experience) and attitudes (e.g., Benbenishty et al., 2015). These different cognitive, affective, and motivational processes often lead to inconsistencies in the information reported by the different sources (Cooley & Jackson, 2022). For this reason, we obtained measures of child abuse and neglect reported by mothers and professionals

Based on the social information processing model for child abuse and child neglect, we expected: a) mothers scoring higher on child abuse would attribute a child's misbehavior more to dispositional causes and intentional motives, while mothers scoring higher on child neglect would present less dispositional and intentionality attributions, after controlling for the child's age and socioeconomic status; b) in the presence of situational information, mothers scoring higher on abuse would show less dysfunctional attributions, while c) mothers scoring higher on neglect would be less sensitive to situational information.

Method

Participants

A convenience sample of 218 Portuguese mothers participated in this study. Their age ranged from 24-53 years old ($M = 38.52$, $SD = 6.35$), and they had between one and eight children ($M = 2.64$, $SD = 1.41$), with $M_{age} = 9.5$ ($SD = 2.03$). Most mothers were White (69.7%) and did not complete high school (57.8%).

To obtain higher variability in child maltreatment, approximately half of the sample ($n = 108$) was recruited from Child Protection Services (CPS) agencies¹. The remaining mothers ($n = 110$) were recruited in schools and community services for socially vulnerable communities to balance the socio-demographic characteristics of the sample. Mothers were eligible for participation if they had at least one child between 5-13 years old living with the family. Exclusion criteria included mothers with severe intellectual disabilities, lack of native language proficiency, and for the referred group, mothers with a substantiated record of sexual child abuse.

Instruments

Professionals'-Report of Child Abuse and Neglect

Reports of child abuse and child neglect were obtained from professionals through the *Maltreatment Severity Questionnaire* (MSQ; Calheiros et al., 2021). The MSQ includes 21 items (e.g., Coercive/tough discipline methods), each composed of four severity descriptors (e.g., from 1-*They use fear or intimidation as their primary method of discipline* to 4-*They close and isolate the child in compartments with poor light, temperature, ventilation, and space. They tie the child's hands and feet to a chair or table or put her inside a box*). Originally, the MSQ presented a three-factor structure (Physical neglect, Psychological neglect, and Physical and psychological abuse), validated with Portuguese samples of CPS agencies' caseworkers, family intervention professionals, and also teachers. The current study used two separate scores of child abuse (physical and psychological abuse; 4 items; $\alpha = .71$) and child neglect (physical and psychological neglect; 14 items; $\alpha = .87$) obtained in previous studies (Camilo et al., 2021, 2022). Higher scores in the MSQ dimensions are indicative of higher child abuse and child neglect.

Mothers-Reported Child Abuse

The *Conflict Tactics Scale-Parent to Child* (Straus et al., 1998) was used as the mothers-report measure of child abuse. The questionnaire with 22 items (e.g., "Slapped him/her on the face, head or ears") was originally organized into three main dimensions: Non-violent discipline, Psychological aggression, and Physical assault (the latter, composed of Corporal punishment, Physical maltreatment, and Extreme physical maltreatment). Mothers rated statements on a 7-point scale ranging from 0- *never happened* to 7- *more than 20 times in the past year*. The current study used a version of the abuse scale, including the dimensions of Psychological aggression and Corporal punishment (7 items, $\alpha = .72$) obtained in previous studies (Camilo et al., 2021, 2022). Higher scores in the CTS-PC correspond to higher levels of child abuse.

¹ In the Portuguese system, cases are initially referred to CPS agencies which evaluate and intervene on a community basis, with the consent of the family and without court involvement. For this reason, the referred cases tend to constitute less serious maltreatment situations. More serious and more imminent danger situations are dealt with by the judicial system.

Mothers-Reported Child Neglect

The *Multidimensional Neglectful Behavior Scale–Parent Report* (MNBS; Kantor et al., 2003) is a self-report measure of child neglect for parents with children aged between 5-15 years old. A previous version of the MNBS validated for a Portuguese sample (face validity; Neves & Lopes, 2013) was used, composed of 49 items (e.g., “Left your child in places where you weren’t sure he/she was really safe”), divided into four dimensions: Emotional neglect, Cognitive neglect, Supervision neglect, and Physical neglect. Respondents were asked about their parental behavior on a 4-point scale, ranging from 1- *never* to 4- *always*, in two different versions according to the child’s age (5-9 years old: 49 items; 10-13 years old: 47 items). The current study used a global score of child neglect (Camilo et al., 2021, 2022), composed of 28 items ($\alpha = .83$). Higher scores indicated higher child neglect.

Attributional Vignettes

We adapted 24 vignettes from Irwin et al. (2014). Each vignette included a description of a child’s transgression: moral transgressions included serious social violations (e.g., “He/she teased the new kid until the new kid started crying”), conventional transgressions contained mild social violations (e.g., “He/she told the elderly woman who lived next door that she smelled weird”), and personal transgressions comprised minor individual violations (e.g., “He/she only put in the bare minimum effort required to complete their school project”). Half of the vignettes were followed by a sentence providing situational information (e.g., “Your child did not have their homework at school because s/he left it where s/he was working on it last night. Your child had felt sick the night before and had gone to bed early”). Each mother read 12 of the 24 vignettes (including all types of transgressions—4 of each type), half of them presenting only the transgression (6 vignettes), and the other half presenting the transgression and situational information (6 vignettes).

Mothers read each vignette and rate it in the following attributional dimensions on 7-point scales (similar to Hildyard & Wolfe, 2007): the extent to which they thought the cause of the child’s behavior was external vs. internal (1-*completely due to something about the situation* to 7- *completely due to the child*); unstable vs. stable (1-*a one-time thing to 7-will behave this way in the future*); specific vs. global (1-*behaves this way only in this situation* to 7-*will behave this way in most situations*); and uncontrollable vs. controllable (1-*not at all under the child’s control* to 7-*completely under the child’s control*). Mothers were also asked whether the child’s behavior was intentional (1-*not at all intentional*” to 7-*completely intentional*) and whether the child should know how to behave better (1-*should definitely not know better* to 7-*should definitely know better*). Vignettes have been previously used to measure parental negative attributions (e.g., Crouch et al., 2017; Irwin et al., 2014) and showed convergence with parent-child interaction observations (e.g., Haskett et al., 2006).

Family Socioeconomic Status

Mothers were asked to report their highest completed education level, monthly family income, income source, housing, and

neighborhood characteristics, on a 5-point scale. All variables were positively and significantly correlated (all p 's < .01); thus, the scores were averaged into an index of socioeconomic status (SES; $\alpha = .77$) (e.g., Beckerman et al., 2018). Lower scores indicated lower SES.

Procedure

The data presented in the current article represent a selection of measures collected in the context of a broader research program approved by the Ethics Committee of the host institution (EA# 08/2016).

After obtaining the respective permissions, mothers who met the inclusion criteria were contacted by the CPS, family intervention services, and schools and invited to participate in a study about parenting. Those who agreed to participate were invited for two individual sessions at the respective CPS agencies (referred group) or schools and community services (non-referred group). Participants were informed that they would participate in a study examining how mothers perceive, think, and remember information about child-rearing and development and their influence on parental practices. They also authorized the collection of information about their child from professionals.

In the first session, after reading and signing the informed consent, participants provided demographic information. Then the vignettes were read to them, and the questions regarding the dimensions of attributions for each vignette were presented. In a second session, the MNBS and the CTS-PC were administered. After completing both sessions, participants were thanked, debriefed, and compensated with a 10€ gift card. Later, the MSQ was completed with the information available regarding each target-child, by CPS caseworkers (for the referred group) and by the child’s reference teacher/ family intervention professional (for the non-referred group), who are privileged sources of reporting child maltreatment or informing CPS about child needs and parental capacities in the Portuguese context (Comissão Nacional de Promoção dos Direitos e Proteção das Crianças e Jovens, 2022).

Data Analysis

Data analysis was run with IBM SPSS Statistics 27.0. To avoid using single-item measures (for a review, see Allen et al., 2022), factorial analyses of the vignettes were previously conducted. Afterward, the independent variables were standardized. The analysis of normal distribution and potential outliers revealed standardized scores lower than -3.29 (Tabachnick & Fidell, 2012) for the intentionality attributions with and without situational information. However, the analysis of the absolute value of skewness in both variables revealed values < 3, so they were considered non-problematic in terms of distribution (Kline, 2005). Regarding the dependent variables, one outlier (i.e., a standardized individual score < -3.29 or > 3.29 ; Tabachnick & Fidell, 2012) in the neglect dimension of the MSQ was substituted by the subsequent highest score within the particular variable.

Although mothers with a child referred to Child Protection Services and mothers with no reference were included in the study, they were treated as a single sample since abuse and neglect were measured as continuous variables (instead of a group comparison approach). A preliminary exploration of abuse and neglect scores

revealed significant differences between these groups in self-, $t(197) = 2.013, p = .045$, and professionals'-reported abuse, $t(194) = 6.004, p < .001$, and professionals'-reported neglect, $t(194) = 11.115, p < .001$, with mothers from the referred group showing higher scores.

Following descriptive and bivariate analyses, we performed hierarchical multiple regression analyses to analyze the association of maternal attributions on child transgressions (with and without situational information) and child abuse and child neglect (reported by mothers and professionals). Preliminary analyses explored the potential moderator effect of the type of transgression, which was non-significant, and for parsimony, the type of transgression was not included in the regression models. Four hierarchical regression models were conducted for each dependent variable (mothers-reported neglect and professionals-reported neglect; mothers-reported abuse and professionals-reported abuse), controlling for the effect of the child's age and maternal SES. Given the high co-occurrence of both types of maltreatment (Kim et al., 2017), child abuse and child neglect were simultaneously included in the models. For each separate regression analysis, in Step 1, we entered the control variables (i.e., child's age, SES, and the other type of maltreatment); in Step 2, the attributions scores to child's transgressions; and in Step 3, the attributions scores to child's transgressions with situational information. All the regression models were checked for indications of multicollinearity by examining the variance inflation factor (VIF) and tolerance values (VIF values > 10 and tolerance $< .10$ are typically considered problematic; Cohen et al., 2014).

Results

Factorial Analysis of the Attributional Vignettes

Factorial analysis was conducted on the original set of 6 items. Principal component analysis was used as the estimation method due to its usefulness in reducing measured variables into components while keeping as much variance as possible (e.g., Park et al., 2002). The scree test, variance, interpretability, and item loadings were accounted for (DeVellis & Thorpe, 2021). A two-component solution was reached with all items retained with a factor loading $> .50$ (e.g., Matsunaga, 2010), accounting for 74.25% of the variance. Reliability was estimated using Cronbach's Alpha.

The Kaiser-Meyer-Olkin (KMO) measure yielded a value of .70, meaning medium sampling adequacy, and Bartlett's test of sphericity was significant: $\chi^2(15) = 630.38, p < .001$. The labels given to the components were Dispositional attributions ($\alpha = .90$), composed of three items, namely external vs. internal ("completely due to something about the situation" to "completely due to the child"); unstable vs. stable ("a one-time thing" to "will behave this way in the future"); and specific vs. global ("behaves this way only in this situation" to "will behave this way in most situations"); and Intentionality attributions ($\alpha = .63$), composed by three items,

namely uncontrollable vs. controllable ("not at all under the child's control" to "completely under the child's control"); unintentional vs. intentional ("not at all intentional" to "completely intentional"); and whether the child should know how to behave better ("should definitely not know better" to "should definitely know better"). Higher scores indicate more dispositional attributions (assigning the cause of behavior to more internal characteristics of the child rather than to contextual or situational factors) and higher intentionality attributed to the child.

Descriptive Statistics and Bivariate Analyses

Descriptive statistics (i.e., means and standard deviations) and correlational analyses are presented in Table 1. Dispositional attributions were positively correlated with child neglect reported by professionals and with child abuse reported by mothers, and in the presence of situational information, with mothers-reported child abuse only. Intentionality attributions were negatively correlated with child neglect reported by professionals in the presence of situational information. The child's age positively correlated with mothers-reported child neglect and intentionality attributions. Socioeconomic status was negatively correlated with child neglect and child abuse reported by professionals and dispositional attributions, and positively correlated with intentionality attributions with and without situational information. The effect of situational information on each of the attributional dimensions was also examined. Mothers engaged in less dispositional attributions ($M = 2.9, SD = 1.0$) in the presence of situational information than when situational information was not presented ($M = 3.3, SD = 1.2$), $t(216) = 4.63, p < .001$. No significant differences were found for intentionality attributions ($p > .05$).

No significant correlations were found between mothers-reports and professionals-reports of child abuse and neglect.

Multiple Regression Analyses

Regarding self-reported abuse, the analyses summarized in Table 2 revealed that dispositional attributions uniquely predicted abuse ($b = .171, p = .023$), with more dispositional attributions associated with higher abuse scores, even in the presence of situational information ($b = .234, p = .018$). Concerning the abuse reported by professionals, the results revealed that attributions with and without situational information had no significant variance (all p 's $> .05$).

Regarding self-reported neglect, the analyses summarized in Table 3 revealed that attributions with and without situational information had no significant variance (all p 's $> .05$). Considering the neglect reported by professionals, the results indicated that dispositional attributions uniquely predicted neglect ($b = .063, p = .038$), with more dispositional attributions associated with higher neglect. However, in the presence of situational information, the effect was no longer significant (all p 's $> .05$).

Table 1
Summary of Correlations, Means, and Standard Deviations for Study Variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	M (SD)
1. Child's age										9.5 (2.0)
2. SES	-.105									2.9 (0.7)
3. Mothers-reported neglect	.262**	-.007								1.6 (0.4)
4. Professionals-reported neglect	.099	-.431**	.085							1.4 (0.6)
5. Mothers-reported abuse	.032	-.042	.286**	.101						2.00 (1.3)
6. Professionals-reported abuse	.110	-.203**	.045	.474**	.039					1.2 (0.5)
7. Dispositional attributions	.034	-.147*	.062	.168*	.160*	-.007				3.3 (1.2)
8. Intentionality attributions	.174*	.222**	-.003	-.045	-.071	.016	.207*			4.6 (0.9)
9. Dispositional attributions with SI	-.071	-.112	.039	.103	.214**	.026	.535**	.100		2.9 (1.0)
10. Intentionality attributions with SI	.102	.253*	-.040	-.141*	-.105	-.023	-.037	.548**	.130	4.7 (0.9)

Note: SES= socioeconomic status; SI= situational information

* $p < .05$

** $p < .01$

Table 2
Hierarchical Regressions Predicting Mothers- and Professionals-Reported Abuse

Variable	Mothers-reported abuse						Professionals-reported abuse								
	B	SE	β	ΔR^2	ΔF	dfs	B	SE	β	ΔR^2	ΔF	dfs			
Step 1				.090***	6.34	3, 193				.238***	19.89	3, 191			
Child's age	-.070	.091	-.055				.030	.028	.066						
Maternal SES	-.058	.087	-.046				.007	.032	.015						
Neglect	.388	.090	.360***				.219	.032	.484***						
Step 2				.027	2.94	2, 191				.010	1.23	2, 189			
Dispositional attributions	.171	.074	.164*				-.038	.025	-.102						
Intentionality attributions	-.145	.108	-.099				.026	.036	.051						
Step 3				.031*	3.40	2, 189				.001	0.12	2, 187			
Dispositional attributions with SI	.234	.099	.193*				.014	.033	.032						
Intentionality attributions with SI	-.184	.120	-.129				.007	.041	.013						
				$R = .38, F(7, 196) = 4.67***$						$R = .50, F(7, 194) = 8.85***$					
				$R^2 = .15$ (Adjusted $R^2 = .12$)						$R^2 = .25$ (Adjusted $R^2 = .22$)					

Note: SES= socioeconomic status; SI= situational information

* $p < .05$

*** $p < .001$

Table 3
Hierarchical Regressions Predicting Mothers- and Professionals-Reported Neglect

Variable	Mothers-reported neglect						Professionals-reported neglect								
	B	SE	β	ΔR^2	ΔF	dfs	B	SE	β	ΔR^2	ΔF	dfs			
Step 1				.151***	11.44	3, 193				.256***	21.43	3, 187			
Child's age	.092	.024	.258***				.008	.035	.014						
Maternal SES	.012	.024	.034				-.195	.036	-.346***						
Abuse	.101	.024	.286***				.248	.050	.318***						
Step 2				.002	0.28	2, 191				.018	2.33	2, 185			
Dispositional attributions	.010	.021	.034				.063	.030	.139*						
Intentionality attributions	-.020	.030	-.050				-.003	.044	-.004						
Step 3				.000	0.01	2, 189				.005	0.58	2, 183			
Dispositional attributions with SI	.005	.028	.014				-.013	.040	-.024						
Intentionality attributions with SI	-.002	.034	-.004				-.047	.050	-.074						
				$R = .39, F(7, 196) = 4.90***$						$R = .53, F(7, 190) = 10.10***$					
				$R^2 = .15$ (Adjusted $R^2 = .12$)						$R^2 = .28$ (Adjusted $R^2 = .25$)					

Note: SES= socioeconomic status; SI= situational information

* $p < .05$

*** $p < .001$

Discussion

Socio-cognitive approaches to child abuse and neglect suggest that parents' biases or errors in evaluating and interpreting the child's negative behavior influence the way they act towards their children (e.g., Azar et al., 2008; Milner, 2003). Parental attributions, that is, the causes to which parents attribute the child's behavior, play a crucial role in the pathway linking parents' preexisting cognitive schemas and maladaptive parenting, as demonstrated by previous studies (for a review, see Camilo et al., 2020). However, few studies have explored the potential differences in the attributional patterns associated with abusive and neglectful parental practices using multiple informants. Even fewer explored the potential effect of situational information on attributions associated with abuse and neglect.

Overall, the results indicated that dispositional attributions were associated with higher abuse scores (reported by mothers), even in the presence of situational information. Likewise, dispositional attributions were associated with higher neglect scores (reported by professionals), but this association was no longer significant in the presence of situational information.

Dispositional attributions of child behavior, reflecting that the child misbehaved due to their traits that persist over time and are context-independent, may lead parents to overreact and use harsh discipline techniques (e.g., corporal punishment, yelling, verbal criticism) as an attempt to change the behavior. These results align with robust findings in parental attributions (e.g., Sturge-Apple et al., 2014) and child abuse literature (e.g., Irwin et al., 2014). These studies indicate that high-risk of abuse and abusive parents interpret child misbehavior as more negative, especially mothers (compared to fathers) (Rodríguez et al., 2020).

Although contrary to our hypotheses, the results regarding neglect converge with previous research on neglectful mothers (e.g., Hildyard & Wolfe, 2007). The tendency of more neglectful mothers to attribute child misbehavior to internal causes suggests that they assign their children the responsibility for their misbehavior. Likewise, Park et al. (2018) found that mothers' lax parenting (i.e., indulgent and neglectful) was associated with more negative attributions about child misbehavior. Overall, these results suggest that, like in child abuse, child neglect also involves dispositional attributions about the child's misbehavior. However, while parents who use more abusive practices may consider themselves more responsible for correcting their child's misbehavior, parents with more neglectful practices tend to omit their intervention. One possible explanation for these behavioral differences relies on the self-attributions of more abusive and neglectful mothers. While mothers with more abusive practices make self-attributions of control, attributing a child's misbehavior more to their effort and disciplinary ability, mothers with more neglectful practices make external self-attributions based on situational factors outside their control (Calheiros & Rodrigues, 2016).

Considering the total sample, situational information produced the expected mitigating effect on negative attributions, in line with previous studies (e.g., Irwin et al., 2014). However, this effect was found only for dispositional attributions (not intentionality attributions). Contrary to our hypotheses, situational information did not affect dispositional attributions associated with child abuse but mitigated dispositional attributions of more neglectful

mothers. Research on parental stress suggests that people with higher stress levels, such as abusive parents (e.g., Beckerman et al., 2017), are less likely to take situational information into account (e.g., Lupien et al., 2007), which may justify our results. Notably, more abusive parents, attempting to regain control over children's misbehavior, tend to respond in escalating levels of negative affect and hostile behavior, becoming less able to integrate information regarding the specific needs of the child in the situation. Likewise, the significant effect of situational information on neglect contrasts with Larrance and Twentyman's (1983), namely that situational factors had little impact on attributional responses of neglectful mothers compared with abusive and controlling mothers. When parents use situational information and attribute the child less responsibility for the misbehavior, they may also use the situational constraints to disclaim their own responsibility and omit their parental behaviors, given their trending external attributional style (Calheiros & Rodrigues, 2016).

Furthermore, our study revealed interesting findings regarding individual and contextual variables. Mothers made more intentionality attributions to older children, consistent with the idea that older children are expected to have more control over their behavior (Dix et al., 1986). The child's age was associated with neglect reported by mothers, with older children associated with higher neglect scores. It is known that neglect is developmentally anchored, and caregivers are expected to be, during child development, replaced by the children in some dimensions of needs (e.g., supervision needs of school-aged children are different from babies' needs) (Proctor & Dubowitz, 2014). Maternal SES was also associated with attributions. Specifically, mothers' low SES was associated with more dispositional attributions about the child's misbehavior. In contrast, lower SES was associated with lower attribution scores on child's intentionality. On the one hand, research has shown that poverty reduces cognitive capacity (Mani et al., 2013), which is required to integrate contextual information, making low-SES mothers more likely to attribute misbehavior to the child's responsibility. On the other hand, poorer mothers may have lower developmental expectations that lead them to believe that the child does not act intentionally because they are not mature enough, unlike mothers of high-SES, who have earlier age estimates for children's attainment of developmental milestones (for a review see Hoff & Laursen, 2019). Moreover, abuse and neglect reported by professionals were associated with low SES, which was expected since poor children present more risk factors for maltreatment (e.g., Pereira et al., 2012), and might be overrepresented in CPS due to a class bias, although this idea has been rebutted by longitudinal findings (Jonson-Reid et al., 2009).

Like in our previous studies (e.g., Camilo et al., 2021), neglect results were mainly found in professionals' reports, and results for abuse emerged predominantly with the mothers-report measure. On the one hand, neglectful families are more "visible" to the services, given their risk factors associated with poverty, substance abuse, and low educational levels (neglect constitutes the most common form of maltreatment reported to CPS; Stoltenborgh et al., 2013). On the other hand, community acceptance of physical punishment as an appropriate disciplinary practice (e.g., Gershoff et al., 2010) might mitigate the effect of social desirability in mothers' reports of abusive parental practices because they might

not see their practices as maladjusted. Finally, these discrepancies in reports of different informants are particularly frequent in child maltreatment (Cooley & Jackson, 2022).

Despite the contributions of this study to advance research on parental cognitions in the context of child abuse and neglect, some important limitations should be acknowledged and addressed in future studies. First, while we asked mothers to imagine that it was their own child misbehaving, the transgressional scenarios were hypothetical and potentially different from their experiences with their own children. This hypothetical nature of the vignettes might influence parents' child-related cognitions, as shown in previous studies (e.g., Johnston et al., 2017). Second, we asked mothers to rate a set of attributional dimensions on several rating scales instead of using a spontaneous measure such as coded attributions from speech transcripts (e.g., White & Barrowclough, 1998) or an implicit measure like the *Parental Attributions of Child Behavior Task* (PACT; Beckerman et al., 2017), which are known to help to surpass the bias (perception bias, or social desirability bias) associated with self-report measures (for a review see Camilo et al., 2016). Third, given the cross-sectional nature of data collection and the exploratory and correlational methods, it is not possible to establish cause-effect relationships and the pathways underlying parents' cognitive information processing. Finally, there are limitations related to the sample, namely, only composed of mothers, as they are more readily accessible in the services, while some research conducted with mothers and fathers suggests differences between their parental cognitions (e.g., Rodriguez et al., 2020).

In a nutshell, this study contributes to the body of knowledge on the relationship between parental attributions and child maltreatment by examining attributional dimensions underlying child abuse and child neglect. Our findings confirm that dispositional attributions are associated with child maltreatment and that the effect of mitigating information is higher in neglectful parenting than in child abuse. Future research would benefit from using longitudinal designs to establish the pathways of information processing that lead to abusive and neglectful parental practices, including different parental cognitive components (e.g., Camilo et al., 2021). Furthermore, comparing the cognitive information processing between mothers and fathers would also constitute a significant contribution. In addition, individual parental variables, namely those related to depression and anxiety, self-regulation, and parental stress, could be included in the models as control variables or moderators, considering their potential influence on child-related information processing.

The current findings support the social information processing model of child abuse and neglect, emphasizing the potential of socio-cognitive approaches in explaining child maltreatment and understanding the different putative mechanisms underlying child abuse and child neglect. These results also emphasize the need for attribution-focused parenting interventions, addressing somehow different attributional processes in abusive and neglectful parents (Sawrikar & Dadds, 2018). Parental attributions are sensitive to new information, namely own-child-related information, and are likely to change during parent-child interactions (Wilson et al., 2006). Interventions focusing on interactions, like Parent-Child Interaction Therapy (McNeil & Hembree-Kigin, 2010), present an optimal context to work on dysfunctional parental

attributions. Finally, risk assessment protocols and decision-making processes in CPS should acknowledge the importance of using multiple methods (e.g., Schmidt et al., 2015) and sources (Cicchetti & Manly, 2001) to collect information for assessing parental practices.

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