

Association between fears and behavior/ emotional problems in toddlers and preschoolers

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Abstract

Fears are natural during development, but they can become a problem if they are excessive or recurring, associated with internalizing problems, such as anxiety. Although there has been literature exploring childhood fears for over a decade, there is still a lack of research using only preschoolers' samples and association with externalizing problems. This study investigated young children's fears and their associations with behavior problems. Seventy parents/guardians of children aged between two and five filled out 1) Fear Survey Schedule for Infants and Preschoolers (FSSIP); 2) Child Behavior Checklist (CBCL)/1,5-5. The most frequent fear was getting a shot from a nurse or doctor, and girls presented significantly higher fear than boys. Significant correlations were found between fears and internalizing

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problems, especially in emotionally reactive, anxious/depressed, affective problems, anxiety problems, and sleep problems. Effect size increased in all correlations and was stronger when the high-intensity fear score was considered. The association between fears and emotional/behavioral problems exists even at early ages and in non-referred samples. Parents and health professionals should be aware of children's difficulties even at early ages, especially when children have intense fears.

Keywords

Fears. Preschoolers. Toddlers. Internalizing. Externalizing.

Associação entre medos e problemas emocionais/comportamentais entre crianças pequenas e pré-escolares

Resumo

Medos são esperados durante o desenvolvimento, mas podem ser um problema se excessivos e/ou recorrentes, sendo associados com problemas internalizantes, como ansiedade. Apesar de a literatura explorar medos infantis por mais de uma década, há uma lacuna com relação aos estudos utilizando apenas pré-escolares na amostra e à associação com problemas externalizantes. Este estudo objetivou investigar medos de crianças pequenas e sua associação com problemas comportamentais. Setenta pais/responsáveis por crianças com idades entre dois e cinco anos preencheram: 1) FSSIP; 2) *Child Behavior Checklist* (CBCL)/1,5-5. O medo mais frequente foi receber injeção de enfermeiro ou médico e meninas apresentaram mais medos do que meninos. Correlações significativas foram encontradas entre medos e problemas internalizantes, especialmente nas escalas reatividade emocional, ansiedade/depressão, problemas afetivos, problemas ansiosos e problemas do sono. Em todas as correlações, a magnitude do efeito foi maior quando a pontuação intensidade do medo foi considerada. A associação entre medos e problemas emocionais/comportamentais existe mesmo entre crianças pequenas/pré-escolares e entre amostras não clínicas. Pais e profissionais de saúde devem estar atentos às dificuldades infantis mesmo em idades precoces, especialmente quando as crianças apresentam medos intensos.

Palavras-chave

Medos. Pré-escolares. Crianças pequenas. Internalização. Externalização.

Asociación entre miedos y problemas emocionales/conductuales entre niños pequeños y preescolares

Resumen

Los miedos son esperados durante el desarrollo, pero pueden convertirse en un problema si son excesivos y recurrentes, asociándose a problemas de interiorización, como la ansiedad. Aunque la literatura explora los miedos infantiles por diez años, todavía faltan estudios que utilicen solo muestras de niños en edad preescolar y la asociación con problemas de externalización. Este estudio tuvo como objetivo investigar los miedos de los niños pequeños y su asociación con problemas de conducta. Setenta padres/tutores de niños de dos a cinco años completaron: 1) FSSIP; 2) *Child Behavior Checklist* (CBCL)/1,5-5. El miedo más frecuente era recibir una inyección de una enfermera o un médico y las chicas tenían más miedos que los chicos. Se encontraron correlaciones significativas entre los miedos y los problemas de internalización, especialmente en las escalas de reactividad emocional, ansiedad/depresión, problemas afectivos, problemas ansiosos y del sueño. En todas las correlaciones, la magnitud del efecto fue mayor cuando se consideró la puntuación de intensidad del miedo. La asociación entre miedos y problemas emocionales/conductuales existe incluso entre niños pequeños/preescolares y entre muestras no clínicas. Los padres y profesionales de la salud deben ser conscientes de las dificultades de los niños incluso en edad temprana, especialmente cuando tienen miedos intensos.

Palabras clave

Miedos. Preescolares. Niños pequeños. Internalización. Externalización.

INTRODUCTION

Fear can be defined as a feeling of insecurity about a person, a situation (real or imagined), or an object (QUEIROZ; GUIMARÃES, 2014), part of normal development and the basic human emotions. It has biological and physiological reactions with overt and covert characteristics, with external responses (DAVIS *et al.*, 2009).

The development of fear is associated with individual cognitive and emotional maturation, and it can be perceived in young children as something

familiar and innate in life, part of adaptive functions that protect the physical and psychological integrity of the individual (SANTA CATARINA *et al.*, 2020). Despite being innate, fears content, manifestation, and children's understanding of this emotion are influenced by parental mediation and social relations and children's (SANTA CATARINA *et al.*, 2020).

During childhood, there are times when children present more intense fears, with the content of fears changing during development (BOKHORST *et al.*, 2008). Despite most children reporting being afraid of medical procedures (e.g., dental care, doctors, and needles) (MCLENON; ROGERS, 2018; YON *et al.*, 2020), animals, imaginary/magical creatures, separation from their parents, and the dark (AHMAD, 2019; VERAKSA *et al.*, 2016), the content of fears changes with age, in which younger children frequently show socially mediated fears, such as being alone, the dark, and imaginary creatures. Preschoolers usually report more realistic fears, fear of death and the death of parents and animals (KONKABAYEVA *et al.*, 2016). Younger children frequently report more fears than older children (MCLENON; ROGERS, 2018; REINHARD *et al.*, 2021).

The literature also shows that gender matters regarding a fear's intensity. Girls show significantly more fears than boys (MCLENON; ROGERS, 2018; OLLENDICK; MURIS, 2015; SALCUNI *et al.*, 2015). Such differences could be due to parental rearing practices, which differ for girls and boys, as well as the willingness of girls to report fears more readily than boys. This seems to be part of gender stereotyping at young ages, indicating that parents send and receive subtle messages regarding gender and what is expected and accepted for each gender (SALCUNI *et al.*, 2015).

Scales have been created since the 1960s to assess young children's fears and frequently use parental reports. These scales have been widely used for scientific and clinical purposes, presenting good psychometric results even at young ages (OLLENDICK, 1983). Despite that, the subject is still underexplored among Brazilian samples of preschoolers. Since cultural differences impact the manifestation and content of children's fears (KAYYAL; WIDEN, 2021), it is necessary to evaluate it to confirm if the results found in other countries are valid. It is also essential to notice that despite fears being expected during development, they can become a problem if they are excessive or recurring, one of the most common causes of seeking mental health services (KONKABAYEVA *et al.*, 2016).

Fears and behavioral problems

Emotional and behavioral problems are alterations in an individual's repertoire that impair social and psychological development (NORTHERNER; TRETACOSTA; MCLEAR, 2015). They can be more readily noticed when they occur with excessive or deficient frequency and intensity according to socio-cultural parameters so that behaviors negatively impact several areas, such as the social, educational, and relational ones (BOLSONI-SILVA; DEL PRETTE, 2003). Such problems can be categorized as internalizing and externalizing; internalizing problems refer to individual behaviors, introspective at a personal level; and externalizing problems refer to behaviors manifested in interpersonal relationships and the environment (ACHENBACH *et al.*, 2016). This division has been widely used since its proposal by Achenbach in 1966 and is currently even presented in diagnostic manuals, such as the Diagnostic and Statistical Manual of Mental Disorders (DS) (ACHENBACH *et al.*, 2016).

Studies have found associations between intense fears and internalizing problems (HUSKY *et al.*, 2021), especially on the emotionally reactive, anxious/depressed, and somatic complaints subscales of the Child Behavior Checklist – CBCL (KUSHNIR *et al.*, 2015; KUSHNIR; SADEH, 2009). Several studies show a significant association between fears and anxiety problems (BROEREN *et al.*, 2019; KONKABAYEVA *et al.*, 2016; YON *et al.*, 2020). Therefore, children with intense worries are more likely to meet the diagnostic criteria for anxiety disorders (KONKABAYEVA *et al.*, 2016, MURIS *et al.*, 2017; POP-JORDANOVA *et al.*, 2019; SAWYERS *et al.*, 2019).

Although fears in clinic-referred samples are reported (RAFIHI-FERREIRA, *et al.*, 2019), less data is available for non-referred samples of young people, with most studies using a selection with only scholarly children (HUSKY *et al.*, 2021; KUSHNIR; SADEH, 2009; POP-JORDANOVA *et al.*, 2019). Since there is a possible relationship between childhood fears and the development of emotional/behavior problems, especially anxiety problems, it is crucial to evaluate the subject in early phases of development, such as the toddler and preschooler phases.

It is also noteworthy that the association between fears and externalizing problems is only recently emerging, with Husky *et al.* (2021) finding an association between scholarly children's fears and externalization problems, which is related to conduct problems and attention deficit hyperactivity disorder (ADHD) symptoms. Notwithstanding, we found no study evaluating that problem using preschoolers or Brazilian samples, indicating a gap in that regard.

Although childhood fears have been explored for over a decade in countries such as the United States (LEWIS *et al.*, 2015; SAWYERS *et al.*, 2019) and Israel (KUSHNIR; SADEH, 2009; KUSHNIR *et al.*, 2015), this subject is currently receiving increasing attention in different cultures, such as the Netherlands (MURIS *et al.*, 2017), Kazakhstan (KONKABAYEVA *et al.*, 2016), Jordan (AHMAD, 2019), China (YON *et al.*, 2020), Europe (HUSKY *et al.*, 2021), and Brazil (RAFIHI-FERREIRA *et al.*, 2019; RAFIHI-FERREIRA *et al.*, 2018). Despite that, gaps can still be found in the literature on the subject, with a lack of studies using only preschoolers and non-clinical that analyze the gender differences on specific fears and association with externalizing problems, especially considering Brazilian samples.

This study aimed to 1) evaluate the most frequent and most intense fears using the parental report of Brazilian non-referred preschoolers using the Brazilian-Portuguese version of the FSSIP; 2) evaluate differences regarding age and gender in fears scores on FSSIP; 3) evaluate the association between fears and emotional/behavior problems using FSSIP and the Child Behavior Checklist (CBCL/1,5-5); 4) evaluate differences on behavioral problems regarding the intensity of fears (low, medium, and high). We hypothesize that H1) the most reported fears will be medical procedures, animals, imaginary/magical creatures, separation from their parents, and the dark; H2) girls and younger children will present higher scores on the fears scale; H3) there will be a positive association between fears and behavioral/emotional problems; H4) children with higher scores on FSSIP will also be reported more behavioral/emotional problems.

METHOD

Participants

Study participants initially consisted of 101 children. As reported by parents, children referred for mental health services in the previous six months ($n = 15$) and participants whose questionnaires had at least 10% of unfilled responses ($n = 16$) were excluded. No participants gave up the study during data collection. The final sample after exclusion criteria included 70 children (42 girls – 60%) aged between two and five years ($M = 3,77$, standard deviation (SD) = 0,87) who were enrolled in a São Paulo, Brazil preschool facility. The mothers provided data mainly ($n = 59-84,3\%$). Sample characteristics of the children and their parents are presented in Table 1.

Table 1 ■ Sample characteristics

	<i>n</i>	%
Child gender		
Male	28	40,0
Female	42	60,0
Marital status		
Married	48	69,0
Not married	22	31,0
Guardian's education		
Elementary school	19	27,1
High school	35	50,0
Higher education	16	22,9
Family income (in number of minimum wages)*		
Mean (with \pm)	2,9 \pm 3,1	
Range	0,5-24,1	
Child age (years)		
Two to three	28	40,0
Four to five	42	60,0
Mean (with +/- SD)	3,77 \pm 0,87	
Range	2-5	
Guardian's age (years)		
Mean \pm SD	35,6 \pm 8,0	
Range	20-80	

*1 minimum wage in the year this study was conducted: R\$ = 998.00.

Source: Elaborated by the authors.

Instruments

Based on the Fear Survey Schedule for Children-Revised (OLLENDICK, 1983), FSSIP assesses fears in preschool children. Parents respond to 92 items

that describe young children's worries on a Likert scale ranging from 0 (no), 1 (some), or 2 (much); the higher the score, the greater the intensity of the fear. Fear score (FS) is calculated by summing all 92 items, whereas the high-intensity fears score (Hifs) is calculated by summing up the number of fears that received a 2 rating. The FSSIP, developed by Warren, Olledick, and Simmens (2008), has shown high internal consistency and good convergent and discriminant validity with English-speaking caregivers. The Brazilian version was validated by Rocha *et al.* (2021), with Cronbach's alpha = 0,948 and good convergent validity.

Child Behavior Checklist for ages 1,5-5 (CBCL/1.5-5): Achenbach and Rescorla (2001) developed it to obtain standardized measures of emotional/behavioral problems in preschool children based on parental reports. The CBCL is widely used and possesses well-established psychometric properties (ACHENBACH; RESCORLA, 2001). Validity and reliability data have been reported regarding its Brazilian version (PIRES *et al.*, 2014; MOTA, 2015), with values of internal consistency (Cronbach's alpha) ranging from 0,69 (somatic problems) to 0,94 (total problems) (PIRES *et al.*, 2014). The CBCL 1,5-5 contains 99 items in which parents indicate if the statement is not true (0), is somewhat or sometimes true (1), or is very true or often true (2) at the present or within the past two months. It yields three broad-band scores (total problems, internalizing problems, and externalizing problems) and seven narrow-band scores (emotionally reactive, depressed/anxious, withdrawn, somatic, sleep problems, attention, and aggression). It also gives scores on 5 DSM-oriented scales: affective problems, anxiety problems, autism spectrum problems, attention deficit/hyperactivity problems, and oppositional defiant problems.

Identification Form: was elaborated to determine the sociodemographic sample profile on the categories: children's data, respondent's data, health, relationship, and living situation (children's age and sex, parental age, marital status, educational level, and family income).

Procedure

This study was approved by the Research Ethics Committee (approval number: 2.541.684). Procedures were conducted under the approval of the Research Ethics Committee. All participants agreed to the Informed Consent Term. Data were collected at a preschool facility in São Paulo, Brazil, by the first author under the supervision of the last author, a licensed clinical psychologist. Parents who signed up for participation in the research were aware

that the results of their child's assessments would be used for the research proposal. The forms were filled out in the following order: identification form, CBCL/1,5-5, and FSSIP, in a session that lasted approximately 40 minutes. The researcher explained the instrument's completion and inquired whether parents preferred to respond with or without assistance. Even in cases in which the informant chose to respond without help, the researcher remained in the room to assist if there were any questions.

Data analyses

Analyses were performed in Jamovi (1.6.15), and a significance level of 0,05 was accepted for all comparisons. Descriptive studies are presented as appropriate to evaluate H1 and sample characterization. Normality was verified using the Kolmogorov–Smirnov, and the distribution was non-parametric for all variables, except FS, *internalizing problems*, *externalizing problems*, and *total problems*. Independent-samples Student's T-tests were conducted to analyze differences in FS regarding gender and age of the child, and Mann-Whitney U tests were conducted to examine differences in HIFS regarding gender and age of the child to assess H2. Also, to evaluate H2, Fischer's exact test was applied to determine the frequency of each fear between boys and girls.

To evaluate H3, the Pearson correlation test was used to verify the FS and internalizing problems, externalizing problems, and total problems. The Spearman correlation test was used to verify the association among FS, HIFS, age group, and CBCL scores. Finally, to evaluate H4, fears were classified as low, medium, or high, following the sample distribution: values that were more than 1 SD below the mean were considered low, values that were more than 1 SD above the mean were considered high, and values between the two groups were considered medium. Independent-samples Kruskal-Wallis and analysis of variance (Anova) tests were used (according to normality tests) to verify if there were differences in the CBCL scores among children with low, medium, and high fear scores.

RESULTS

Fear scores (H1)

Considering that FSSIP has 92 items rated on a zero to two Likert scale, 184 would be the maximum total score (if all items were scored 2 – “a lot”). Our sample scores ranged from one to 114, with 53,19 being the average and

26,33, the SD. Besides the total scores, the most and least frequent fears were examined. For this analysis, item scores were converted to zero vs. one or two to obtain its absence vs. presence, not its intensity. The most frequent fears reported by more than 2/3rds of the sample are shown in Table 2.

Table 2 ■ FSSIP – most frequent fears (% > 66.6%)

Content	Children who are afraid		Intensity – some		Intensity – a lot	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
21. Getting a shot from the nurse or doctor	60	85,7	25	35,7	35	50,0
43. Children playing rough	55	78,5	36	51,4	19	27,1
34. Fire/getting burned	53	75,7	25	35,7	28	40,0
37. Thunderstorms	53	75,7	33	47,1	20	28,6
03. Getting scolded by a parent	52	74,3	34	48,6	18	25,7
06. Ghosts or spooky things	51	72,8	29	41,4	22	31,4
31. Separating from a parent	51	72,8	20	28,6	31	44,2
64. Getting punished	51	72,8	33	47,1	18	25,7
62. Being alone	50	71,5	27	38,6	23	32,9
73. Being corrected by a parent	50	71,5	37	52,9	13	18,6
35. Getting a cut or injury	47	67,1	25	35,7	22	31,4
60. Going to bed in the dark	47	67,1	22	31,4	25	35,7

Source: Elaborated by the authors.

Fears and gender (H2)

Independent-samples Student's T-test indicated girls present more fears than boys $t(68) = -2,62$; $p = 0,011$, with a mean difference of 6,17. The effect size was medium, $d = 0,639$. However, this wasn't true when the numbers of Hifs were compared to $U = 436$; $p = 0,069$. Considering the gender differences in the FSSIP comparisons, Fisher's exact test was used to verify which items were scored differently for boys and girls. For these analyses, the absence of fears was computed as zero, and the presence of fear (score of one or two) was computed as one. Differences in the distribution ($p \leq 0,05$) were found

for 13 items in Table 3. For all listed items, caregivers reported that girls presented fear more frequently than boys.

Table 3 ■ Frequency of fears with gender differences

FSSIP Item	Boys (n = 28)	Girls (n = 42)	p
7. Sharp objects	7 (25%)	21 (50%)	0,048
9. Death or dead people	4 (14,3%)	21 (50%)	0,002
19. Meeting someone for the first time	4 (14,3%)	16 (38,1%)	0,035
30. Bats or birds	7 (25%)	22 (52,4%)	0,028
32. Guns	9 (32,1%)	27 (64,3%)	0,014
41. Being hit by a car or truck	13 (46,4%)	32 (76,2%)	0,021
43. Children playing rough	18 (64,3%)	37 (88,1%)	0,035
49. Strange-looking people	14 (50%)	32 (76,2%)	0,039
56. Deep water or the ocean	6 (21,4%)	21 (50%)	0,024
61. Getting carsick	2 (7,1%)	15 (35,7%)	0,009
65. Messy or dirty hands	7 (25%)	27 (64,3%)	0,002
69. Doing something new	4 (14,3%)	17 (40,5%)	0,032
70. Germs or getting a serious illness	5 (17,9%)	19 (45,2%)	0,022

Source: Elaborated by the authors.

Fears and Age (H2)

Two groups were formed for these analyses: 2 to 3 years old (toddlers) (n = 28 – 40%) and four to five years old (preschoolers) (n = 42-60%). No differences among age groups were found for FS, $t(68) = 0,416$, $p = 0,678$. No differences were found among age groups and HS, $U = 553$; $p = 0,679$. Since no differences were found, Fisher's exact test wasn't applied.

Association between fears and emotional/behavioral problems (H3)

According to the variable's normality, Spearman's and Pearson's correlation tests were conducted with the 15 CBCL/1,5-5 scales and the two FSSIP scores. Effect sizes were between low and moderate ($r = 0,275$ to $0,576$). All

correlations are positive, indicating that higher scores on FSSIP are correlated to higher scores on CBCL/6-18 scales. Results are presented in Table 4.

Table 4 ■ Correlation between CBCL/1.5-5 scales and FSSIP scores

CBCL/1.5-5 scale	FS ¹	High-intensity fears score (Hifs) ²
Emotionally reactive	0,364***	0,444***
Anxious/depressed	0,351**	0,460***
Somatic complaints	0,070	0,144
Withdrawn	0,224	0,247 [†]
Sleep problems	0,323**	0,401***
Attention problems	0,178	0,296 [†]
Aggressive behavior	0,304 [†]	0,410***
Internalizing problems ³	0,367**	0,482***
Externalizing problems ³	0,288 [†]	0,429***
Total problems ³	0,421***	0,548***
Diagnostic and Statistical Manual of Mental Disorders (DSM) – affective problems	0,350**	0,452***
DSM – anxiety problems	0,414***	0,546***
DSM – autism spectrum problems	0,293 [†]	0,330**
DSM – attention deficit/hyperactivity problems	0,231	0,367**
DSM – oppositional defiant problems	0,172	0,275**

¹ Total fear score, ² score for intense fears, ³ Pearson test results; * $p < 0,05$; ** $p < 0,01$; *** $p < 0,001$.

Source: Elaborated by the authors.

Differences in behavioral problems regarding the intensity of fears (H4)

Independent samples of Kruskal-Wallis tests were conducted to verify if there were differences in the problem scores of children with low, medium, and high fear levels. Differences were found in four of the 15 CBCL scales. Children with higher fears presented more behavioral problems than children with low fears on the following scales: emotional reactivity problems (H(2) =

8,57; $p = 0,014$; $\epsilon^2 = 0,124$), with a mean increase of 6,4 point ($W = 3,86$; $p = 0,018$); anxious/depressive problems ($H(2) = 5,97$; $p = 0,049$; $\epsilon^2 = 0,086$), with a mean increase of 6,2 points ($W = 3,86$; $p = 0,018$); affective problems ($H(2) = 6,83$; $p = 0,033$; $\epsilon^2 = 0,099$), with a mean increase of 6 points ($W = 3,25$; $p = 0,049$); and anxiety problems ($H(2) = 9,24$; $p = 0,010$; $\epsilon^2 = 0,134$), with a mean increase of 10 points ($W = 4,47$; $p = 0,004$). Effect sizes for these results are small. Anova was used to verify differences on CBCL/1,5-5 broad-band scores finding that children with higher fears presented more problems than children with low fears on the following scales: internalizing problems ($F(2) = 6,81$; $p = 0,004$), with a mean increase of 11,69 points ($p_{tukey} = 0,008$), and total problems ($F(2) = 6,49$; $p = 0,005$), with a mean increase of 11 points ($p_{tukey} = 0,006$). Descriptive results according to the level of fears on each CBCL/1,5-5 scales.

DISCUSSION

Our aims were to 1) evaluate the most frequent and most intense fears using the parental report of Brazilian non-referred preschoolers using the Brazilian-Portuguese version of the FSSIP; 2) evaluate differences regarding age and gender on fears scores on FSSIP; 3) evaluate the association between fears and emotional/behavior problems using FSSIP and the CBCL/1,5-5; 4) evaluate differences on behavioral problems regarding the intensity of fears. The results supported our initial hypotheses H3 and H4 and partially H1 and H2 since some of the most frequent fears were not expected. There were no differences in age but significant differences in gender (as hypothesized).

Regarding H1, the most frequent fear in our sample (item 21: getting a shot from the nurse or doctor) was expected since the relation between fears and medical procedures is extensively documented (MCLENON; ROGERS, 2018; YON *et al.*, 2020). Several items confirmed that separation from loved ones, loud noises, and darkness are common fears for this age group and in Brazil, as reported by international research (AHMAD, 2019; VERAKSA *et al.*, 2016). It is also noteworthy that some of the most frequent fears were related to parental practices (e.g., getting scolded by a parent and being corrected by a parent), which could be specific to Brazilian parenting cultural practice, but further studies are required to investigate the relationship between parental practices and childhood fears.

Regarding gender differences, girls were perceived as having more fears than boys. This result was expected since several studies have shown this

pattern (MCLENON; ROGERS, 2018; OLLENDICK; MURIS, 2015; SALCUNI *et al.*, 2015), and discussion on differences in parental practices and the willingness to report fear displayed by girls have been suggested (AHMAD, 2019; MURIS *et al.*, 2005). Our results contribute to understanding this phenomenon in Brazilian toddlers and preschoolers, indicating that the effect of parental practices and gender stereotypes hypothesized by Salcuni *et al.* (2015) can be noticed in children's fears at very young ages. However, the age pattern reported by other researchers, with younger children displaying more fears than older children (KUSHNIR; SADEH, 2009; MCLENON; ROGERS, 2018; REINHARD *et al.*, 2021) was not found in our sample. This is likely because our study compared toddlers with preschoolers, while the other studies (KUSHNIR; SADEH, 2009; REINHARD *et al.*, 2021) used school children (between six and 11 years old) samples and subdivided them for the comparisons. To endorse that hypothesis, we can argue that fears still unfold in this toddler and preschool age group (KONKABAYEVA *et al.*, 2016; WARREN; OLLENDICK; SIMMENS, 2008).

Among the strengths of this study, it begins to document the relationship between behavioral problems and children's fears in a young and non-referred sample. Results support H3 and H4, indicating that children whose parents report more emotional/behavioral problems are those who will also display more fear (either in intensity or frequency), even at early ages, and in a sample where parents do not report any significant mental health problems.

More specific to the results found on each scale, association and distribution differences were found for anxiety (KONKABAYEVA *et al.*, 2016, MURIS *et al.*, 2017; POP-JORDANOVA *et al.*, 2019; RAFIHI-FERREIRA *et al.*, 2019; SAWYERS, *et al.*, 2019), and internalizing problems (HUSKY *et al.*, 2021; KUSHNIR *et al.*, 2015; KUSHNIR; SADEH, 2009; OLLENDICK; MURIS, 2015) were expected since previous studies also indicated that children with more fears present more of these problems. Fear is a manifestation of anxiety, which is a component of internalizing problems (ACHENBACH *et al.*, 2016). While fears are part of the internalizing problems domain, internalizing problems function as a predictor of fears in children (RAFIHI-FERREIRA *et al.*, 2019), which indicates a potential bidirectional relationship: fears intensify other internalizing symptoms while being influenced by it. It is also important to note that excessive fears manifestation can be perceived by parents as a behavior problem, for example, as anxiety symptoms and emotional reactivity, and our results seem to indicate this relation, but further studies are necessary to evaluate differences and similarities on parental perception on this subject.

Our findings also demonstrated a relationship between affective problems (depressive problems) and fears. Most studies show correlations between fear and anxiety but not with depression. In turn, affective problems are part of the internalizing problems subscale. They often are presented as, or associated with, nervousness, dependent behavior, sleep problems, and sadness (ACHENBACH *et al.*, 2016), which are symptoms related to anxiety and fear. It is also important to mention that there are problems listed on the CBCL's affective problems scale, such as crying, being too tired without a good reason, showing little interest, and not eating well, that might also be related to anxiety disorders.

In this way, we can hypothesize that fear may be influenced by affective disorders or might be related to its development and to problems with anxiety. Regarding sleep problems, the associations aligned with other studies, indicating moderate relationships between fears and sleep problems, especially regarding night-time fears (RAFIHI-FERREIRA *et al.*, 2019).

It is also essential to notice the associations found between fears and some of the externalizing problem scales. To our knowledge, only Husky *et al.* (2021) found a similar association, and only with scholar children, associations with externalizing problems, ADHD symptoms, as the results of this study. It is hypothesized that excessive fear can often influence the child's concentration, taking the focus away from other activities or even influencing their ability to cope with situations, contributing to aggressive behaviors. Fear can also make children more responsive to the environment, causing the associations found with externalization and oppositional defiant problem scales. It is crucial to take into consideration that our finding refers to non-clinical levels of problems and that these results indicate that children whose parents report more fears may also tend to report more emotional/behavioral issues, in general. Future studies on the subject are necessary to examine this hypothesis.

FINAL REMARKS

We suggest that our results are important because they show that the association between fears, especially high-intensity fears, and emotional/behavioral problems exist even at an early age and in a non-referred sample. This result may suggest that fears and internalizing problems are closely related and that parents and professionals should be attentive to children's difficulties at an early age, especially when children often have intense fears, since, as in the original FSSIP validation study (WARREN; OLLENDICK; SIMMENS, 2008),

our data show that they are more strongly associated with emotional/behavioral problems.

Although our study confirms the association between fears and some emotional/behavioral problems in toddlers and preschoolers, it is necessary to consider its limitations. The Brazilian version of the FISSIP, used to assess children's fears, was in the process of validation in Brazil during this study; thus, the parameters used for the classification of fears (low, medium, and high fears) are those found for the present sample. Still, it should be noted that the translation of the instrument into Brazilian Portuguese followed the recommended practices and that the internal consistency estimates of these measures were generally adequate in our Brazilian sample (ROCHA *et al.*, 2021).

In addition, our sample was small, and, *a priori*, sample size analyses were not conducted. We worked with a convenience sample obtained from only one preschool located in the city of São Paulo, Brazil. Although the school has a diverse profile of students, it is not possible to generalize the results found for the Brazilian population of non-referred children, requiring further studies to confirm the findings and expand the understanding of the relationship between early childhood fears and emotional/behavioral problems by using larger samples, children's perspective, specific fears content, and the possible relationship with parental practices.

In conclusion, this study focused on the phenomenology of childhood fears and behavioral/emotional problems by demonstrating important correlations between fears presented in early childhood and emotional/behavioral problems reported by parents, especially regarding anxiety problems, affective problems, and sleep problems.

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