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SEÇÃO: ARTIGO

Parenting styles and behavior problems in children followed by a basic protection service of Brazilian Unified Social Assistance System

Estilos parentais e problemas de comportamento em crianças assistidas em um serviço básico de proteção do Sistema Único de Assistência Social brasileiro

Estilos parentales y problemas de la conducta en niños asistidos en un servicio básico de protección del Sistema Único de Asistencia Social brasileño

Liliane Wielewski

Pobbe Mainardes¹

orcid.org/0009-0002-3089-6867

lilianepobbe@yahoo.com.br

Robson Zazula²

orcid.org/0000-0001-8473-050X

robson.zazula@unila.edu.br

Márcia Cristina Caserta

Gon³

orcid.org/0000-0002-2389-9587

marciagon@sercomtel.com.br

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Abstract: The study aimed to assess the occurrence of problem behavior in children in vulnerable situation and its correlation with parenting styles, socio-demographic characteristics, and gender. This was a cross-sectional study with 37 caregivers of children aged 6 and 11 years of age ($\bar{x}=8,6\pm 1,5$) assisted by a basic protection service of the Unified System of Social Service of a municipality in Paraná state. Both Strengths and Difficulties Questionnaire (SDQ) and the Parental Style Inventory IEP were administered. Correlations between SDQ and IEP subscales ($ps<0,05$) and between hyperactivity/ inattention and age ($p=0,439$; $p<0,01$) were found. Boys presented higher scores of total SDQ score ($t_{(35)}=-2,81$; $p=0,008$) hyperactivity/ inattention ($U=249,0$; $p=0,009$) than girls. Lower socioeconomic condition and status and negative parenting practices are risk factors for childhood problem behavior. Then, intervention programs and public policies directed to their families might reduce the occurrence of problem behavior.

Keywords: behavior disorders, parenting style, risk factors, childhood, social services

Resumo: Objetivou-se avaliar a ocorrência de problemas de comportamento em crianças em situação de vulnerabilidade e sua correlação com estilos parentais, características sociodemográficas e gênero. É um estudo transversal realizado com 37 cuidadores de crianças entre seis e 11 anos de idade ($\bar{x}=8,6\pm 1,5$) assistidas por um serviço básico de proteção social de um município do estado do Paraná. Dados foram coletados por meio do Questionário de Capacidades e Dificuldades (SDQ) e o Inventário de Estilos Parentais (IEP). Correlações entre subescalas do SDQ e IEP ($ps<0,05$) e entre hiperatividade/ falta de atenção e idade ($p=0,439$; $p<0,01$) foram identificadas. Meninos apresentaram escores de SDQ total ($t_{(35)}=-2,81$; $p=0,008$) e de hiperatividade/falta de atenção ($U=249,0$; $p=0,009$) maiores do que as meninas. Condição socioeconômica baixa e práticas parentais negativas são fatores de risco para a apresentação de problemas de comportamento infantil. Consequentemente, programas e políticas públicas de assistência social direcionados às famílias podem reduzir a sua ocorrência.

Palavras-chave: distúrbios do comportamento, estilo parental, fatores de risco, infância, serviços sociais

Resumen: Objetivó evaluar la ocurrencia de problemas de la conducta en niños en situación de vulnerabilidad y su correlación con estilos parentales, características sociodemográficas y género. Es un estudio transversal con 37 cuidadores de niños entre seis y 11 años ($\bar{x}=8,6\pm 1,5$) acompañados en un servicio básico de



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¹ Faculdade de Tecnologia do Vale do Ivaí (FATEC), Ivaiporã, PR, Brazil.

² Universidade Federal da Integração Latino-Americana (UNILA), Foz do Iguaçu, PR, Brazil.

³ Universidade Estadual de Londrina (UEL), Londrina, PR, Brazil.

protección vinculado al Sistema Único de la Asistencia Social en una municipalidad del estado de Paraná. La coleta de datos ocurrió por medio del Cuestionario de Capacidades y Dificultades (SDQ) y el Inventario de Estilos Parentales (IEP). Correlaciones entre subescalas del SDQ y IEP ($p < 0,05$) y entre hiperactividad/ falta de atención y edad fueron identificadas ($p = 0,439$; $p < 0,01$). Niños presentaron escores de SDQ total ($t_{(95)} = -2,81$; $p = 0,008$) y hiperactividad/ falta de atención ($U = 249,0$; $p = 0,009$) mayores que las niñas. Bajas condiciones socioeconómicas y prácticas parentales negativas son factores de riesgo para la presentación de problemas de conducta infantil. Como consecuencia, programas y políticas de asistencia social dirigidas a estas familias pueden reducir su ocurrencia. Consecuentemente, programas e políticas públicas de asistencia social dirigidos a familias pueden reducir a su ocurrencia.

Palabras-clave: trastornos de la conducta, estilos parentales, factores de riesgo, infancia, servicios sociales

The childhood is an important stage on the human development and behavior problems has been one of the most targeted study topics in this field (e.g., Bolsoni-Silva & Marturano, 2007; Bolsoni-Silva & Del Prette, 2003; Fitzsimons et al., 2017; Gomide et al., 2005; Kaiser et al., 2017; Lorence et al., 2019; Mazza et al., 2017; Mesman et al., 2009; Rios & Williams, 2008; Rovaris & Bolsoni-Silva, 2021; Tømmerås & Kjøbli, 2017). The definition of behavior problem is broad and unclear, mostly used as a synonym of disruptive behavior (Bolsoni-Silva & Del Prette, 2003). Additionally, there is also a lack of consensus in the definition of behavior problem due to changes from DSM-IV-TR to DSM-5 (Burt et al., 2018). Generally, behavior problem is understood in terms of one or more of the following target behaviors or clinical complaints: indiscipline, oppositional and defiant behavior, aggressiveness, hyperactivity, self-destructive and self-injurious behaviors, lie, steal, destruction others' properties on purpose, or violation of important rules (American Psychiatric Association [APA], 2013).

The prevalence of behavior problems during childhood is not exact, mostly because of its unclear definition and causal factors (Burt et al., 2018). Highest rates of behavior problems are found in the preschool period, in which children are developing most of their social skills, communication, and self-control behavior (Alink et al., 2006; Hutchison, 2018; Mesman et al., 2009). The frequency of behaviors considered as a problem by parents and/or caregivers trends to decrease

gradually from this period onwards (Burt et al., 2018; Kroneman et al., 2009). Epidemiological and longitudinal studies have shown that male are likely to display behavior problems during childhood rather than females, and the difference between gender trends to level off during adolescence (Hyde, 2014; Kroneman et al., 2009). Rovaris and Bolsoni-Silva (2021) also found that boys were more likely to display behavior problems in comparison with girls, regardless of educational level.

Although the exact influence of causal factors on the child development is unclear, studies have shown that risk and protective factors, cumulative or combined, trends to increase or decrease the likelihood of the occurrence of behavior problems throughout childhood (Evans et al., 2013; Matos, 1983; Oliveira, 1998; Patterson et al., 1998). Risk factors could be understood as specific variables that influence child's environment with undesirable effects, while protective factors could be understood as those related to desirable outcomes in the development (Evans et al., 2013; Gallo et al., 2005; Silva et al., 2008). The early identification and assessment of both of them could contribute to enhance outcomes or prevent the occurrence of behavior problems (Burt et al., 2018). Some of the environmental risk factors related are socioeconomic conditions (Fitzsimons et al., 2017; Kaiser et al., 2017; Mazza et al., 2017; Mejia et al., 2012; Patterson et al., 1998; Rios & Williams, 2008), family variables (Abidin, Jenkins, & McGaughey, 1992; Bouchard & Sonier, 2021; Rios & Williams, 2008; Silva et al., 2008; Tømmerås & Kjøbli, 2017) and parenting styles (Bolsoni-Silva & Marturano, 2007; Bolsoni-Silva & Del Prette, 2003; Lorence et al., 2019; Patterson et al., 1998; Rovaris & Bolsoni-Silva, 2021; Webster-Stratton et al., 2001).

Parenting style is one of the most influential causal factors in the onset of behavior problems. There is a clear relationship among parenting styles, educational practices and behavior problems as families stimulates these behavioral patterns in the child through inconsistent discipline, little positive interaction and monitoring, and insufficient supervision (Bolsoni-Silva & Del Prette,

2003; Lorence et al., 2019; Rovaris & Bolsoni-Silva, 2021). Additionally, Rovaris and Bolsoni-Silva (2021) showed that boys were more likely to display behavior problems and were more likely to be exposed to risk factors, such as negative practices. According to Gomide, Salvo, Pinheiro, and Sabbag (2005), parenting style is an educational practice applied by parents and/or caregivers aiming to educate, socialize, and control their children's behavior. The theoretical model was proposed by Gomide (2006) and aims to assess children's behavior through seven educational practices related to both prosocial and antisocial behaviors. The assessment is based on both frequency and intensity of the interaction between parents and/or caregivers and their child, allowing the observation of a predominant parenting style and the likelihood of occurrence of behavior problems.

Socioeconomic conditions, particularly poverty, low income, and low socioeconomic status are also significant risk factors, which may impact and enhance other risk factors, such as parenting styles, or limit opportunities for positive child's adjustment (Mazza et al., 2017; Fitzsimons et al., 2017; Kaiser et al., 2017; Rios & Williams, 2008; Silva et al., 2008). In Brazil, those children are target population for social assistance policies. The basic protection service, where Strengthening Family Living and Emotional Link Service occurs, is one of the levels of social assistance policy and aims to prevent risk factors and vulnerabilities, promote basic human rights, as well as improve family relationships, parenting style, and the youth's social and life skills (Ministério do Desenvolvimento Social e Combate à Fome, 2009).

Taken together, further investigations are necessary to identify the role of parenting style in the occurrence of behavior problems and the onset of disruptive behaviors in a specific population, such those supported by social assistance policies, such as the Strengthening Family Living and Emotional Link Service. There is also a need to investigate the influence of risk factors on the onset of behavior problems, such as socioeconomic conditions, or parenting styles. Thus, the present study aims evaluate the occurrence of

behavior problems in children assisted by a basic protection service of the Brazilian Unified Social Assistance System of a municipality in Parana state, Brazil, as well as its correlation with parenting styles, sociodemographic characteristics, and gender. We also aimed to compare groups of children based on their gender regarding the occurrence of behavior problems and parenting styles. Firstly, based on similar studies, we hypothesized that social vulnerability could be a risk factor which may increase the likelihood of behavior problems among children. We also hypothesized that parenting styles could influence the likelihood of the occurrence of behavior problems during childhood. Finally, we hypothesized that there could be associations between, parenting style, the occurrence of behavior problems, and sociodemographic variables such as age, and gender among children.

Method

Overview and participants

Participated in the present study 37 caregivers of children (15 girls and 22 boys, respectively 40,5% and 59,5% of the sample), aged between 6 and 11 ($\bar{x} = 8,6 \pm 1,5$). Regarding caregivers, we identified biological mothers ($n = 33$), biological father ($n = 1$), maternal grandmother ($n = 1$), maternal aunt ($n = 1$), and stepmother ($n = 1$), who were aged from 20 to 54 years of age ($\bar{x} = 34,8$). Regards their relationship status, 64,9% ($n = 24$) reported been married or in a stable relationship and 35,1% separated or divorced ($n = 13$). Concerning the caregivers' educational levels, 35,1% ($n = 13$) had attended elementary school, of which 13,5% ($n = 5$) did not complete it; 45,9% had secondary education level, albeit some of them incomplete; and 16,2% ($n = 7$) concluded university education level.

All children were assisted by the Strengthening Family Living and Emotional Link Service, which is a basic protection service of the Unified Social Assistance System linked to both Reference Center for Social Assistance (CRAS for short in Brazilian Portuguese) and Specialized Social Assistance Reference Center (CREAS for short in Brazilian Portuguese) in Lidianopolis Municipality, Brazil.

According to the Brazilian Institute for Geography and Statistics (2021), the municipality has around 3.155 inhabitants, of which 302 are aged between 6 and 11 years old. During the period of data collection, 55 children were assisted in the public community service by a multidisciplinary team composed by social workers, psychologists, pedagogues, and healthcare workers.

The following inclusion criteria were required: a) the participant should be the responsible caregiver of a child aged between 6 and 11 years for at least two years, and b) the child should be a regular participant in the public community service, particularly in the Strengthening Family Living and Emotional Link Service.

Instruments

Strengths and Difficulties Questionnaire (SDQ). SDQ is a brief emotional and behavioral screening questionnaire administered to parents, caregivers, and teachers of children aged about 4-16 years old. SDQ aims to identify possible impacts of children and/or teenagers' behavior on leisure activities, family living, and academic life, according to the perception of their parents, caregivers, and/or teachers (Goodman, 2001). In the present study, a long form of the questionnaire with an impact supplement was administered to parents and/or caregivers, assessing the impact of difficulties on the child's life. The instrument comprises five scales of five items each, described as follows as Emotional symptoms (E1), Conduct problems (E2), Hyperactivity/inattention (E3), Peer relationships problem (E4), and Prosocial behavior (E5). Each item must be answered with a three-point Likert scale, being respectively "not true" (scored zero), "somewhat true" (scored one), and "certainly true" (scored two). The instrument classifies the children's behavior into three different categories: normal, borderline and abnormal. The Brazilian version was translated and validated by Fleitlich, Cortazar, and Goodman (2000), showing fairly high Cronbach's Alpha for internal consistency (around $\alpha = 0.80$) for total score (Saur & Loureiro, 2012).

Parental Style Inventory (IEP). IEP is a questionnaire to evaluate both positive and negative parental practices, which could be answered by both parents and/or caregivers and children. The instrument evaluates two positive practices (i.e., positive monitoring and moral behavior) and five negative practices (i.e., negligence, physical and psychological abuse, lax discipline, inconsistent punishment, and negative monitoring). There are 42 items, six of each practice, assessed by a 3-point Likert scale, being respectively "never" (scored zero), "sometimes" (scored one), and "always" (scored two). The instrument classifies parent's styles into four different categories: risk, regular, good, and great practices. In the present study, the instrument was administered to parents and/or caregivers. IEP was developed and validated for the Brazilian population, and their Cronbach's Alpha values ranged from $\alpha = 0.43$, for maternal positive monitoring, to $\alpha = 0.87$ for paternal physical abuse (Gomide, 2006).

Data collection

Initially, all potential participants were identified through analysis of record files from children who had been followed by the service at that moment, such as enroll and frequency records, and socio-demographic data. From a poll of 55 potential participants, 37 met inclusion criteria and were invited to be part of the study. Their recruitment occurred individually during their regular visits to the service or through active searching strategies, such as phone calls, texts messages, or home visits. In both cases the recruitment was conducted by the first author, a trained Psychologist. When eligibility was identified, the research project was explained to caregivers and, if they accept, written consent was obtained prior to data collection. Then, both SDQ and IEP were individually administered according to their guidelines, by the by the first author and two researcher assistants, who were psychology undergraduate students. For SDQ, caregivers were instructed to answer based on their observation of child's behavior over the last six months, whereas the IEP, ca-

regivers were instructed to answer on the basis of the observation of their own behavior when interacting with their child. Sociodemographic data was also collected. Following data collection, all instruments were scored by two researcher assistants and then analyzed by the first author and her supervisor. The study was conducted from November 2017 to March 2018 and approved by the Ethics Committee of Londrina State University, Brazil (CAAE: 74163617.8.00005231, Ethics approval number 2.364.847).

Statistical analysis

Sociodemographic data were collected and SDQ and IEP were scored according to instruments' guidelines, which included both total score and scores corresponding to subscales for each instrument. Data were summarized using frequencies, means, and standard deviations, according to the level of variance, and also analyzed by exploratory analysis. Participants were also analyzed in groups based on children's gender. The comparisons between groups were performed by independent t-test for normally distributed variables and by Mann-Whitney test for non-normally distributed variables. Partial correlation analyses were performed between SDQ and IEP, using both age and gender of children as co-factor in the analysis. Spearman correlation analysis between both IEP e SDQ and child gender, child age, and parents and/or caregivers' educational level was also performed. For correlations the coefficients

vary from 0 to either -1 or 1, and were interpreted as negligible correlation (0,0 to 0,29 or -0,29), low positive or negative correlation (respectively 0,3 to 0,49 or -0,3 to -0,49), moderate positive or negative correlation (respectively 0,5 to 0,69 or -0,5 to -0,69), high positive or negative correlations (respectively 0,7 to 0,89 and -0,7 to -0,89), very high positive correlations (respectively 0,9 to 1,0 and -0,9 to -1,0; Hinkle et al., 2003). The statistical significance level used was lower or equal 0,05, 2-tailed. The analysis was conducted using SPSS 23v (IBM Corp., 2015).

Results

The average SDQ was 14,8 ($\pm 7,9$) and SDQ subscales, were reported as following: E1: average of 4,5 ($\pm 2,8$); E2: average of 3,9 ($\pm 2,9$); E3: average of 4,5 ($\pm 3,3$); E4: average of 2,0 ($\pm 1,9$); and E5: average of 8,3 ($\pm 2,0$). Regarding IEP, the total score was -0,8 ($\pm 10,1$). Positive parental practices, such as positive monitoring: average of 10,3 ($\pm 1,8$) and moral behavior: average of 9,4 ($\pm 1,8$); and negative parental practices, such as inconsistent punishment: average of 4,0 ($\pm 2,9$); negligence: average of 2,8 ($\pm 1,7$); lax discipline: average of 3,9 ($\pm 3,0$); negative monitoring: average of 6,6 ($\pm 1,7$); and physical abuse: average of 3,3 ($\pm 2,4$). All participants were also classified according to both SDQ and IEP categories, as described in Tables 1 and 2.

Table 1 – Children's SDQ Subscales Scores Outcomes According to Each Assessment Category

Subscales	Normal		Borderline		Abnormal	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Emotional symptoms (E1)	14	37,8	3	8,1	20	54,1
Conduct problems (E2)	12	32,4	7	18,9	18	48,6
Hyperactivity/inattention (E3)	22	59,5	3	8,1	12	32,4
Peer relationships problem (E4)	24	64,9	5	13,5	8	21,6
Prosocial behavior (E5)	33	89,2	1	2,7	3	8,1
Total score	19	40,5	3	8,1	15	40,5

Table 2 – IEP Positive and Negative Parenting Practices Scores According to Each Assessment Category

Practices	Risk		Regular		Good		Great	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Positive Practices								
Positive monitoring	4	10,8	14	37,8	7	18,9	12	32,4
Moral behaviour	6	16,2	10	27,0	12	32,4	9	24,3
Negative Practices								
Inconsistent punishment	15	40,5	8	21,6	4	10,8	10	27,0
Negligence	11	29,7	8	21,6	7	18,9	11	29,7
Lax discipline	20	54,1	3	8,1	8	21,6	6	16,2
Negative monitoring	28	75,7	5	13,5	4	10,8	0	0,0
Physical abuse	14	37,8	6	16,2	9	24,3	8	21,6
Total score	18	48,6	3	8,1	11	29,7	5	13,5

When children were analyzed according to their gender, there were significant differences for hyperactivity/inattention ($U = 249,0; p = 0,009$), and Total score ($t_{(35)} = -2,81; p = 0,008$). Differences at trend level of significance were found for conduct problems ($t_{(35)} = -1,78; p = 0,084$), prosocial behavior

($U = 110,5; p = 0,092$); and negative monitoring for IEP ($U = 220,5; p = 0,086$). Table 3 shows both SDQ and IEP average scores and its standard deviation, as well as statistical comparison between gender groups.

Table 3 – Both SDQ (Total and Its Subscales) and IEP (Total and Parenting Practices) Scores According to Children's Gender

	Boys (<i>n</i> = 22) mean (SD)	Girls (<i>n</i> = 15) mean (SD)	Group comparison
SDQ			
Emotional symptoms (E1)	5,0 (0,6)	3,7 (0,7)	$t_{(35)} = -1,3; p = 0,201$
Conduct problems (E2)	5,6 (0,7)	2,8 (0,7)	$t_{(35)} = -1,78; p = 0,084^{**}$
Hyperactivity/inattention (E3)	5,7 (0,7)	2,8 (0,7)	$U = 249,0; p = 0,009^{*}$
Peer relationships problem (E4)	2,4 (0,4)	1,4 (0,4)	$t_{(35)} = -1,55; p = 0,130$
Prosocial behavior (E5)	8,0 (0,4)	8,8 (0,4)	$U = 110,5; p = 0,092^{**}$
Total score	17,6 (0,6)	10,8 (1,7)	$t_{(35)} = -2,81; p = 0,008^{*}$
IEP			
Positive Practices			
Positive monitoring	10,3 (0,4)	10,3 (0,5)	$t_{(35)} = 0,1; p = 0,921$
Moral behavior	9,1 (0,4)	9,9 (0,4)	$U = 124,5; p = 0,213$
Negative Practices			
Inconsistent punishment	4,4 (0,7)	3,5 (0,7)	$t_{(35)} = -0,91; p = 0,369$
Negligence	3,0 (0,4)	2,5 (0,5)	$t_{(35)} = -0,84; p = 0,410$
Lax discipline	4,3 (0,7)	3,4 (0,8)	$t_{(35)} = -0,85; p = 0,399$
Negative monitoring	6,6 (0,4)	6,5 (0,4)	$U = 180,0; p = 0,658$
Physical abuse	3,9 (0,5)	2,5 (0,6)	$U = 220,5; p = 0,086^{**}$
Total score	-2,7 (2,2)	1,9 (2,5)	$U = 119,5; p = 0,161$

Note. IEP = Parental Style Inventory; SDQ = Strengths and Difficulties Questionnaire.

* $p < 0,05$; ** Trend level of significance of $< 0,1$.

For partial correlation between SDQ and IEP using both children's age and gender as co-factors, there were low positive correlation between prosocial behavior (SDQ) and positive monitoring (IEP) ($r = 0,42, p = 0,012$), conduct problems (SDQ) and negligence (IEP) ($r = 0,43, p = 0,011$), hyperactivity/ inattention (SDQ) and negligence (IEP) ($r = 0,37, p = 0,031$), hyperactivity/ inattention (SDQ) and physical abuse (IEP) ($r = 0,39, p = 0,02$), and total score (SDQ) and physical abuse (IEP) ($r = 0,46, p = 0,006$). There were also low negative corre-

lations between prosocial behavior (SDQ) and lax discipline (IEP) ($r = -0,34, p = 0,046$) and total score (IEP) and conduct problems (IEP) ($r = -0,35, p = 0,039$). At trend level towards significance of $<0,1$, there were low positive correlation between conduct problems (SDQ) and physical abuse (IEP), lax discipline and total SDQ score, and peer relationships problem (SDQ) and physical abuse (IEP). Low negative correlation was also identified between total SDQ score and total IEP score and total SDQ score and moral behavior (IEP) (Table 4).

Table 4 – Partial Correlation Between SDQ (Total and Its Subscales) Scores and IEP (Total and Each Parenting Practices) Scores

IEP	SDQ					Total
	E1	E2	E3	E4	E5	
Positive monitoring	0,03	-0,23	-0,09	-0,24	0,42 [†]	-0,18
Moral behavior	0,03	0,26	0,22	0,32 [§]	0,15	0,28 [§]
Inconsistent punishment	0,13	0,16	0,19	0,04	-0,03	0,20
Negligence	0,27	0,43 [†]	0,37 [†]	0,08	-0,10	0,44 ^{**}
Lax discipline	-0,08	0,48 ^{**}	0,25	0,21	-0,34 [†]	0,31 [§]
Negative monitoring	-0,06	0,02	0,14	-0,26	0,05	-0,02
Physical abuse	0,24	0,31 [§]	0,39 [†]	0,31 [§]	-0,14	0,46 [†]
Total score	-0,10	-0,35 [†]	-0,30 [§]	-0,11	0,27	-0,33 [§]

Notes. E1= Emotional symptoms; E2= Conduct problems; E3= Hyperactivity/inattention; E4 = Peer relationships problems; E5 = Prosocial behavior. [†] $p < 0,01$; [†] $p < 0,05$; [§]Trend level of significance of $<0,1$.

Spearman correlation analysis between both IEP e SDQ and child gender, child age, and parents and/or caregivers' educational level was also performed. Only low significant correlations between gender and both total SDQ score ($p = 0,434; p = 0,007$) and hyperactivity/ inattention (IEP; $p = 0,439; p = 0,007$) were found. Positive correlations at trend level towards significance were found between gender and conduct problems (SDQ; $p = 0,301; p = 0,07$), and age and total IEP score; $p = 0,323; p = 0,051$). Negative correlations at trend level of significance were found between gender and prosocial behavior (SDQ; $p = -0,292; p = 0,079$), gender and physical abuse (IEP; $p = -0,235; p = 0,082$), and gender and inconsistent punishment (IEP; $p = -0,292; p = 0,079$) (See Supplementary Tables 1 and 2).

Discussion

The present study revealed correlations between parenting style and behavior problems as outlined as a second hypothesis. Results also shows that parenting styles and social vulnerability might be linked to behavior problems, which are associated as outlined as first and third hypotheses. In general, over half of the children included in our study presented clinical or borderline profile for difficulties or behavior problems, according to the instruments administered, and most of parents and/or caregivers presented a risk or regular profiles for parenting style. When compared with similar studies, we identified a greater number of parents with low scores for parenting styles, as well as children with more behavior problems, confirming our hypothesis (Evans et al., 2013; Mat-

sukura et al., 2012; Paula et al., 2006; Silva et al., 2008; Tømmerås & Kjøbli, 2017).

As previously discussed, one of the hypotheses was related to socioeconomic condition and status. This hypothesis was proposed due to the main characteristic of the children assisted in this service and its importance as a risk factor in the onset of behavior problems (Assis et al., 2009; Mazza et al., 2017; Mejia et al., 2012; Patterson et al., 1998; Rios & Williams, 2008). According to Assis et al. (2009), the diagnosis of mental health problems in childhood, expressed as behavior problems, is more frequent among children at greatest risk of socioeconomic vulnerability. Children who were below the poverty line tend to show more behavior problems and low social competence when compared with those without that condition. Additionally, according to Mazza et al. (2017), prolonged exposure to childhood poverty conditions increases the risk for both hyperactivity and oppositional behavior, particularly in early adolescence. Borsa et al. (2011) investigated the prevalence of behavior problems among school children in public and private schools in Porto Alegre, Brazil, and found that children with a low-income status had about an eight times higher risk for behavior problems than both middle- and higher-income child. Prolonged exposure to childhood poverty predicted higher levels of behavior problems during adolescence (Maza et al., 2017). Based on literature, our research problem, as well as frequencies of behavior problems found in the present study, it may be possible to suggest that the socioeconomic status might be an important variable in the onset of behavior problems (Assis et al., 2009; Kaiser et al., 2017; Mazza et al., 2017; Patterson et al., 1998; Rios & Williams, 2008), and both antipoverty and social assistance policies targeting supporting those children and their families could reduce the occurrence of behavior problems throughout childhood and adolescence (Mazza et al., 2017).

Fleidich and Goodman (2001) also investigated the prevalence of behavior problems among children and adolescents. According to them, higher rates of behavior problems are more com-

mon in low-income neighborhoods than those with middle- and higher-incomes, which could be accounted for socioeconomic vulnerability. Similar outcomes were found by Matsukura et al. (2012), who identified strong relationships among childhood mental health, socioeconomic status, family environment, and parenting styles. In their study, they administered SDQ and found difficulties in the following domains: behavior problems (77,5% from all participants), emotional symptoms (61,5% from all participants), relationship problems (66,6% from all participants), and hyperactivity/inattention (48,6% from all participants). Although our study did not have a control group from a different socioeconomic group, such as middle- and higher-income families, to compare and confirm the hypotheses related to the socioeconomic condition, it is well established in the literature that poverty, low income, and low socioeconomic status are linked to behavior problems during childhood and adolescence (Kaiser et al., 2017). Additionally, timing of exposure to those conditions might be an important variable in the process (Mazza et al., 2017)

Over half of the children included in the study presented clinical or borderline profile for the total SDQ score, based on their parents and/or caregivers' report. When scores were analyzed based on their subscales, they presented clinical or borderline status for behavior problems in either emotional or conduct problems subscales. Children also presented high scores for both hyperactivity and peer relationship problems. When only subscales were considered, similar outcomes were reported by Cury and Golfe-to (2003), Vitolo et al. (2005), and Fitzsimons et al. (2017). Both studies identified emotional symptoms and conduct problems as the most common difficulties reported, followed by hyperactivity and peer social interaction. In a recent UK cohort study, Fitzsimons et al. (2017) reported significant associations between poverty situation and peer relationship, and poverty and behavioral problems, as well as associations between poor maternal mental health and child mental health in various domains (emotional, peer, conduct, and

hyperactivity), showing the role of socioeconomic vulnerability and poverty on the occurrence of behavior problems.

Differences were also found between gender. As outlined earlier, in our study we found significantly higher scores among boys for hyperactivity and SDQ total score. Higher score among boys for conduct problems at trend level of significance, as well as correlations between total SDQ score and both hyperactivity/ inattention and gender were found, aligned with previous studies (Reynolds et al., 2010; Rovaris & Bolsoni-Silva, 2021). According to Leman e Bjornberg (2010) boys are more likely to display behavior problem during childhood (the age group of our study) particularly externalizing patterns as hyperactivity and conduct problems, when compared with girls. One of the reasons might be negative parenting practices more common among boy's parents rather than girl's parents (Leman & Bjornberg, 2010; Rovais & Bolsoni-Silva, 2021), as found in our study. We did not find significant higher score among boy's parents and/or caregivers in this subscale, but a trend level of significance in the group.

It is important to highlight the outcomes identified in both peer relationship problems and prosocial behavior subscales related to the assessment of the socialization process. Most of the children presented high scores, classified as good or great practices, for peer relationship problems (64,9%), and prosocial behavior (89,2%). Both outcomes are very expressive, in special if compared to other subscales. Additionally, a positive correlation was identified between prosocial behavior (E5 subscale) and positive monitoring (IEP), as well as a negative correlation between prosocial behavior (E5 subscale) and lax discipline (IEP), showing the importance of social assistance policies to reduce behavior problems through the development of alternative behavioral repertoires. According to Mazza et al. (2017), long term social policies targeting children and their families reduce the likelihood of antisocial behavior, as well as conduct problems either during childhood or later in their lifespan. Thus, a possible hypothesis for those outcomes is the effectiveness of the intervention conducted as well as public policies conducted

by the basic protection service to develop and maintain prosocial behavior. One of the targets of this basic protection service is to encourage both socialization and community behavior as well as to strengthen family ties, which is proposed by several studies as a meaningful target to develop and maintain prosocial behavior in childhood, in particular those exposed to risk factors (e.g., Bolsoni-Silva et al., 2008; Juffer et al., 2008; Mazza et al., 2017; Mejia et al., 2012; Rios & Williams, 2008).

Both antisocial and prosocial behaviors were associated with positive and negative parenting styles (Bolsoni-Silva & Marturano, 2007; Gomide et al., 2005; Patterson et al., 1998; Sabbag & Bolsoni-Silva, 2015). In our study, we found a significant negative correlation between IEP total score and E2 subscale (SDQ), as well as positive correlations between E2 subscale (SDQ) and both negligence and lax discipline. Either regular or risk practices for IEP increase the likelihood of behavior problems while either good or great practices decrease the likelihood of behavior problems. E2 subscale is related to aggressiveness and misconduct as an index of antisocial or deviant behaviors, and both parental negligence and lax discipline likely increase the occurrence of conduct problems in any settings (Dias et al., 2014). According to Sidman (2009), antisocial behaviors are learned primarily in family settings through coercive contingencies such as punishment, negative reinforcement, escape, and avoidance behavior. Thus, risk or regular parenting style's practices indicate a higher prevalence of coercive interactions between parents and/ or caregivers and their children and, for instance, a higher probability of behavior problems in the latter group.

Finally, potential strengths of the present are related to its sample and setting. The sample was homogeneous in age and socioeconomic conditions, while the setting was well controlled, particularly if we take into account interventions proposed by the multidisciplinary team of the basic protection service, developing skills in both parents and/ or caregivers and their children. However, there were some limitations, such as sample size and instruments only based on the verbal report. The first one limits generalizations

and some statistical analysis while the latter is related to inconsistencies between what was reported and what really happened. However, the use of inventories and questionnaires as assessment instruments may contribute to understand the whole context, as well as propose some explanatory hypothesis related to the behavioral event (Leme et al., 2009).

Conclusion

Initially, we aimed in this study to evaluate the occurrence of behavior problems in children, as well as its correlation with parenting styles, sociodemographic characteristics, and gender. One of our hypotheses was the role of social vulnerability as a risk factor in the development of problem behavior. Although we did not have a control group to test this hypothesis, we partially confirm it based on previous studies describing the role of social vulnerability and low economic status and described earlier. Additionally, we hypothesized that parenting styles could influence the likelihood of the occurrence of behavior problems during childhood, which was identified through correlations found between IEP subscales and SDQ subscales. Finally, we identified a few correlations between gender and age with both IEP e SDQ subscales, confirming our third hypothesis. Additionally, we found significative differences between boys and girls, as highlighted in previous studies.

Taken together, the present study showed a clear relationship between parenting styles and behavior problems, in particular in the setting where the research was conducted. Additionally, as reported by previous studies, socioeconomic conditions could be an important variable in the onset of behaviors problems due to some variables such as parents' educational level or family factors (Kaiser et al., 2017). In summary, the present study may contribute to improve the planning and execution of psychosocial interventions focused in both parenting styles and behavior problems. When correlations between parenting style and behavior problem were found among children supported in a basic protection

service, as part of a broader social assistance policy, intervention programs focused on skills development, risk factors prevention, as well as basic human rights promotion are necessary. Those intervention could be important to strengthen family ties and decrease the probability of behavior problems among children at greatest risk of socioeconomic vulnerability.

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Liliane Wielewski Pobbe Mainardes

Mestre em Análise do Comportamento Saúde pela Universidade Estadual de Londrina (UEL) em Londrina, PR, Brasil. Psicóloga no Centro de Referência Especializado de Assistência Social (CREAS), em Lidianópolis, PR, Brasil; professora da Faculdade de Tecnologia do Vale do Ivaí (FATEC), em Ivaiporã, PR, Brasil.

Robson Zazula

Doutor em Ciências da Saúde pela Universidade Estadual de Londrina (UEL), em Londrina, PR, Brasil; mestre em Análise do Comportamento Saúde pela Universidade Estadual de Londrina (UEL) em Londrina, PR, Brasil. Professor Adjunto da Universidade Federal da Integração Latino-Americana (UNILA), em Foz do Iguaçu, PR, Brasil.

Márcia Cristina Caserta Gon

Doutora em Psicobiologia pela Universidade de São Paulo (USP) Campus Ribeirão Preto, em Ribeirão Preto, SP, Brasil, com pós-doutorado pelo Paradigma - Centro de Ciência e Tecnologia Comportamental, em São Paulo, SP, Brasil; mestre em Psicobiologia pela Universidade de São Paulo (USP), Campus Ribeirão Preto, em Ribeirão Preto, SP, Brasil. Professora Associada da Universidade Estadual de Londrina (UEL), em Londrina, PR, Brasil.

Endereço para correspondência

Robson Zazula

Instituto Latino-Americano de Ciências da Vida e da Natureza

Universidade Federal da Integração Latino Americana

Av. Tarquínio Joslin dos Santos, 1000, sala G201

Jardim Universitário, 85870-650

Foz do Iguaçu, PR, Brasil

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