

## **Impact of Risk Factors on Indicators of Behavioral Problems according to Parents' and Children's Reports**

**Deisy Ribas Emerich**

**Jéssica de Assis Silva**

**Edwiges Ferreira de Mattos Silveiras**

Programa de Pós-Graduação em Psicologia Clínica  
Instituto de Psicologia, Universidade de São Paulo (USP)  
São Paulo, SP, Brazil.

**Marina Monzani da Rocha**

Programa de Pós-graduação em Distúrbios do Desenvolvimento  
Centro de Ciências Biológicas e da Saúde  
Universidade Presbiteriana Mackenzie  
São Paulo, SP, Brazil.

### **Abstract**

*Multiple informants in the evaluation process and the identification of the relationship between risk factors and children's behavioral problems could help mental health professionals planning necessary strategies for preventing and managing behavioral problems. This study examined the relationship between risk factors and behavioral problems in a group of 25 Brazilian children and their parents. Parents evaluated their children's problems (CBCL), their own problems (ASR), and the Family Adversity Index. Children provided information about themselves through a semi-structured interview (SCICA). Elevated family adversity indexes correlated positively with high scores for Internalizing Problems (CBCL) and Total Self-Report Problems (SCICA). The marital discord factor was associated with the presence of externalizing, internalizing and total problems. These results reinforces the need of multiple informants, suggest that several factors are associated with the presence of childhood psychopathology, and that public policies are needed to reduce risk factors, in order to promote mental health in childhood.*

**Key Words:** Risk Factors; Mental Health; Childhood; SCICA; CBCL.

### **1. Introduction**

Behavioral problems can be understood as "behavioral deficits and/or excesses that hinder children's access to new contingencies of reinforcement, which, in turn, facilitate the acquisition of repertoires that are important for learning" (Bolsoni-Silva & Del Prette, 2003, p. 246). Studies conducted in Europe have estimated problems prevalence ranging from 9% to 20% among children (Gritti et al., 2014). In developing countries prevalence rates are even higher (Ginige et al, 2014). For instance, in Brazil, Bordin and Paula (2007) reports 13.5%-35.2% of children with high level of behavioral problems based on parents' information.

Behavioral problems may result from the interference of genetic, acquired biological and/or environmental "risk factors". A risk factor is defined as something that, when present, increases the likelihood of problems arising, or increases the vulnerability of a person or group to a particular disease or health problem (Mendes, 2012). Some risk factors of considerable impact on childhood development involve the parents. Families with impoverished family management, low level of education, unemployment and marital conflict, for example, tend to be less functional, more negative and less consistent, which may facilitate anti-social behaviors among its members (Silveiras & Souza, 2008).

In order to evaluate the impact of family variables on behavior problems, Rutter (1981) described five factors that, alone or together, can contribute to the manifestation of delinquent behaviors. Such factors are: excessive number of children in the family, very low parental income, presence of marital discord, excessive number of people living in the same house and family psychopathology (Rutter, 1981). The combination of these factors has been termed by the author as the Family Adversity Index (FAI) and, as it can be assumed, there is a proportional relationship between the number of factors present in a particular family and the respective children's propensity to display behavior problems.

It is known that externalizing behaviors with antisocial components frequently arise in contexts marked by adversity. A child may present a variety of psychological problems when the relationship between the child and their parents involves violent socialization practices, exposure to aggressive adult models, lack of affection and conflict between parents (Blanz, Schmidt, & Günther, 1991; Vuchinich, Bank, & Patterson, 1992).

A study conducted in Brazil have shown that offenders adolescents have higher numbers of factors considered to be adverse to development, involving family adversity and low correlation between self-perception and parental perception of behavioral problems, in comparison with non-offenders adolescents (Silva, Farias, Silveiras, & Arantes, 2008). According to the authors, this difference was not due to income or to the living conditions of these young people, but rather to the factors that, together with other variables, further interfered directly in the quality of the affective relationships.

With regard to internalizing complaints, presence of parental psychopathology, especially in mothers, is one of the main factors contributing to the elevated probability of occurrence. Indeed, maternal depression is a risk factor that has been widely researched. According to Leve, Kim and Pears (2005), maternal depression, family income and severe discipline tend to predict internalizing problems in children. When considering Brazilian data, Alvarenga, Oliveira and Lins (2012) corroborates with these findings showing that children whose mothers had depression indicators achieved higher scores of internalizing problems than those with mothers without depression indicators (Alvarenga, Oliveira, & Lins, 2012). The impact of mothers' mental health conditions on the behavioral problems of their children is so impressive that high levels of depression, anxiety and stress during the prenatal period increases the likelihood of children presenting internalizing problems in adolescence (Betts, Williams, Najman, & Alati, 2014).

The use of parental report on their children behavior in forms, such as the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001), is understandable considering they are in a prime position to provide information on the general development of the child - behavior, temperament and functioning in the family environment (Carter, Godoy, Marakovitz, & Briggs-Gowan, 2009). However, parental report may have some biases, such as: their verbal descriptions can be influenced by notions about ideals for the society in which they live; they might not have extensive experience with other children, who give a smaller comparative basis; the understanding of a concept may vary from one parent to another (Kagan, Snidman, McManis, Woodward & Hardway, 2002). It is also worth stressing that there may be situations, as stated above, in which the parents themselves may play a role that represents risk factors for the assessed child (Alvarenga, Oliveira, & Lins, 2012; Blanz Schmidt, & Gunther, 1991; Leve, Kim, & Pears, 2005; Vuchinich, Bank, & Patterson, 1992; Rutter, 1981). Moreover, one should consider the variable "eligibility for treatment", in the cases where parents seek psychological help in public health care services; where there may be an incidence of parents evidencing more negative aspects of the child's behavior in an effort to secure a place in order to receive care (Mash & Hensley, 2010).

From the above it can be concluded that although the parental report is extremely valuable, it is interesting to obtain data from other informants - such as the child self-report. The account of the child obtained through a clinical interview can also provide valuable information for understanding problems and possible management strategies, as they are in the unique position of being observers of themselves and their own social environment (Mash & Hensley, 2010). From the interaction with the child, the professional may obtain information on the perception that it has on its own difficulties, competencies and life in general; can directly observe their behavior, understand the expression of feelings and styles of interaction; and get additional data on the preceding stimuli and the consequences of specific problematic behaviors the child presents (McConaughy, 2005).

The potentials of the clinical interview with the child led McConaughy and Achenbach (2001) to develop an empirically based clinical interview protocol, the Semi-Structured Clinical Interview for Children and Adolescents (SCICA). The use of interview protocols in research is limited due to factors such as the cost and time consumed (Mash & Hensley, 2010).

However, the inclusion of both the professional's observation of the child behavior and the child's report as assessment tools fundamentally contributes to the identification of problems (Knook et al., 2011). Considering that the inclusion of multiple informants in the assessment process and the identification of the relationship between risk factors and children's behavioral problems allows the professional to better plan intervention and prevention strategies, the objective of this study was to identify the relationship between the Family Adversity Index (FAI) and behavioral problems in a group of children referred to psychology care, according to the parental report (CBCL) and the clinical interview carried out with the child (SCICA).

## 2. Method

### 2.1. Sample

Participants were 25 children of both genders, who were referred to the Psychology University Clinic at the Universidade de São Paulo due to behavioral, emotional or learning difficulties. Ages ranged from 7 to 11 years ( $M = 8.7$ ;  $SD = 1.28$ ). Their parents or caregivers also participated in the study. The inclusion criteria were: child age between 7 and 11 years, agreeing to participate and signing the Consent Form; parent or caregiver declaring that spends at least 4 hours per day with the child, agreeing to participate and signing the Informed Consent Form. Exclusion criteria were: children presenting a percentile for the Raven Infant test (Raven, Raven, & Court, 1988) below 50, and/or presence of physical disabilities or medical history of epilepsy, since the medication for this disease may slow thinking and verbal expression.

### 2.2. Instruments

**Child Behavior Checklist for ages 6 to 18 - CBCL/6-18 (Achenbach & Rescorla, 2001):** a comprehensive behavioral problems form on which parents report about their children behaviors. It consists of 138 items, of which 20 assess the child's competencies (divided in 3 scales: Activities, Social and School) and 118 the child's behavioral problems (divided in 8 scales empirical syndrome-scales: Anxious/Depressed, Withdrawn/Depressed, Somatic Complaints, Social Problems, Thought Problems, Attention Problems, Rule-Breaking Behavior and Aggressive Behavior). The combined competencies scales provide a score in the Total Competence Scale, while combinations of behavioral problems scales are addressed as Internalizing Problems, Externalization Problems and Total Problems. Items that are very consistent with DSM-5 syndromes are arranged on DSM-oriented problems scales: Affective Problems, Anxiety Problems, Somatic Problems, Attention Deficit/Hyperactivity Problems, Oppositional Defiant Problems and Conduct Problems. Besides, studies have shown that Obsessive Compulsive Problems, Posttraumatic Stress Problems and Sluggish Cognitive Tempo can be assessed using the information provided. For all scales, raw scores are transformed into T-scores that indicate deviance from the norm (normal vs. clinical range). The Brazilian version of the CBCL/6-18 was revised by Bordin, Silveira, Rocha, Teixeira e Paula, in 2010 (Bordin et al., 2013) and it has evidence of good reliability, discriminative capacity and confirmation of its factor structure (Rocha et al., 2012).

**Semi-structured Clinical Interview for Children and Adolescents - SCICA (McConaughy & Achenbach, 2001):** consists of a semi-structured clinical interview aimed at evaluating children and adolescents aged 6 to 18 years. The protocol comprises questions and tasks that represent a sample of the child functioning in nine broad areas: (1) Activities, school, employment (ages 12-18); (2) Friends; (3) Family relationships; (4) Fantasies; (5) Self-perception, feelings; (6) Problems reported by the Parent/Teacher; (7) Performance Test - Math Test and Reading Comprehension Test (optional); (8) Abnormalities in fine and gross motor function (optional – ages 6-11); and (9) Somatic complaints, alcohol, drugs, problems with the law (ages 12-18). The estimated duration of the interview is 90 minutes.

After the session, the interviewer quantitatively evaluates, according to a four-point scale, the behavior of the child in two forms: Observation Form (OB) and Self-Report Form (SR). The OB contains items describing behavioral and emotional problems that can be observed during the interview, such as "Doesn't sit still, restless, or hyperactive," "Lacks self-confidence or makes self-deprecating remarks" and "Talks too much". The SR contains descriptions of problems reported by the child/adolescent, like "Reports being suspicious", "Reports being disobedient at home," and "Reports being unable to concentrate or pay attention for long". It is interesting to note that in each form there are 50 items extracted and adapted from the CBCL/6-18.

The evaluations carried out in the OB are grouped into five scales: (1) Anxious (2) Withdrawn/ Depressed (3) Language/Motor Problems, (4) Attention Problems and (5) Self-Control Problems. The score obtained in the SR is grouped into three scales: (1) Anxious/Depressed (2) Aggressive/Rule-Breaking and (3) Somatic Complaints (for adolescents aged 12-18 years). The sum of the scales Anxious (OB) and Anxious/Depressed (SR) creates the Internalizing Problems scale, and the sum of the Aggressive/Rule-Breaking (SR), Attention Problems (OB) and Self-Control Problems (OB) generates the Externalizing Problems scale. In addition, the sum of all items OB and SR problems results in the Total Observation Problems and the Total Self-Reported problems.

The Brazilian version was translated, submitted to back-translation and revised by Emerich, Rocha and Silveiras in 2010.

**Adult Self-Report for ages 18 to 59 - ASR (Achenbach & Rescorla, 2003):** intended for adults to evaluate their own behavior in terms of adaptive functioning scales and emotional/behavioral problems. With a structure that is similar to the CBCL, the ASR evaluates problems in 8 syndrome-scales: Anxious/Depressed, Withdrawn, Somatic Complaints, Thought Problems, Attention Problems, Aggressive Behavior, Rule-Breaking Behavior, and Intrusive Behavior. It also groups all these scales into three broadband scales: Internalizing Problems, Externalizing Problems and Total Problems. The Brazilian version was translated by Rocha and Silveiras (2010), back-translated by a specialist and approved for use by the instrument's authors.

**Family Adversity Index form (FAI):** five items considered to be harmful to children's development: (1) too many people living in the same house; (2) presence of marital discord; (3) excessive number of children; (4) low monthly income; and (5) the existence of psychopathology in the family (Rutter, 1981). Following Silva Farias, Silveiras and Arantes (2008) suggestion, alcoholism, drug addiction, schizophrenia and other mental disorders were the conditions considered as cases of psychopathology in the family.

The calculation of this index is given as follows: 0.2 points were attributed to each adversity item, totaling a maximum score of one point and a minimum of no points. For variables such as too many children, too many people in the family and low monthly income, the average provided by SEADE (2006) for the city where the family resides (São Paulo) plus one standard deviation was defined as the cut point. The greater the number of the variables presented, the greater the degree of family adversity.

### 2.3. Procedures

Parents/caregivers of children enrolled in the Psychology University Clinic of University of São Paulo, after signing up for these services and before they had started therapeutic work, were contacted by telephone. During this call, the objective of the research was explained and, if they had interest in participating, a time to meet was scheduled for the assessment protocol.

Clinical interviews (SCICA) with children were held in only one meeting, with an average duration of 90 minutes. Before the interview, demographic and socioeconomic data were collected, and the Informed Consent Form and the Consent Form were signed. While the psychologist performed the clinical interview, the primary caregiver was asked to fill out the CBCL/6-18 and the ASR. For the majority of participants, a research assistant was available to help filling out the forms, however, in some cases, the forms were self-administered. In that case, after the interview session, any questions about completing the forms could be clarified with the researcher.

The psychologist conducted the clinical interview with the child using the SCICA protocol. The Raven's Colored Progressive Matrices for children was applied during the interview to verify if the child felt in the exclusion criteria. The clinical interviews were filmed; in order to the researcher better evaluate the verbal and non verbal behaviors emitted by the children during the interaction time on the SCICA OB and SR forms.

### 2.4. Data Analysis

Spearman's correlations were utilized to establish an association between the scales of the three indexes (CBCL, SCICA and ASR) and the FAI (highlighting the factors "marital discord" and the "existence of psychopathology in the family"). All statistical analyses were performed using SPSS 19.0 (*Statistical Package for Social Sciences*), with a p value  $\leq 0.05$  being applied as the significance level.

## 3. Results and Discussion

Based on the data from the Living Conditions Survey, conducted by SEADE in 2006, the factor "Too many children" was considered to be present when the family had more than 3.45 children (value in reference to the average of 1.9 children plus one standard deviation of 1.55).

The factor "Too many people in the same house" was considered to be present when more than 5.63 people were residing in the same household (value refers to the average of 3.24 members plus one standard deviation of 2.39). The factor "Low monthly income" was considered to be present when family income was lower than the R\$ 12,719.28 (amount representing the average income of R\$ 1,808.00 plus a standard deviation of R\$ 8,169.09 and deflated by the minimum wage since 2006). From the 25 participants evaluated, only one (4%) of them did not show any of the factors included in the FAI. Ten participants (40%) presented one risk factor, eight participants (32%) had two risk factors, and six participants (24%) had three risk factors. None of the participants presented four or five risk factors. On average, in each house lived 3.8 people (SD = 0.88), with 1.9 children (SD = 0.70). Such averages were very similar to those described by SEADE (2006) for the population of Sao Paulo.

Whereas the presence of each item of adversity corresponds to 0.2 points, the mean of the FAI for the sample was 0.4 points, with a standard deviation of 0.18. Rutter (1981), when establishing the FAI, highlighted the likelihood that the larger the index, the larger would also be the risk of incidence of childhood disorders. In order to investigate whether this hypothesis is confirmed for the sample in this study, association analyses were performed between the adversity indexes and the children's scores in the syndrome and broad-band scales of the CBCL and SCICA. The measure of the association used in the analysis was the Spearman's correlation coefficient.

**Table 1: Spearman's correlation coefficients (rho) between evaluations of behavioral problems, based on the application of the CBCL and the FAI**

SCALES	<i>Rho</i>	<i>p</i> Value
Competencies		
Activities	0.162	0.439
Social	-0.226	0.278
School	0.162	0.460
Total Competencies	-0.026	0.907
Syndromes Scales		
Anxious/Depressed	0.417*	0.038
Withdrawn/Depressed	0.231	0.267
Somatic Complaints	0.141	0.502
Social Problems	0.469*	0.018
Thought Problems	0.269	0.193
Attention Problems	0.087	0.679
Rule-Breaking Behavior	0.234	0.260
Aggressive Behavior	0.297	0.150
DSM-Oriented Scales		
Affective Problems	0.423*	0.035
Anxiety Problems	0.604**	0.001
Somatic Problems	0.023	0.914
Attention Deficit and Hyperactivity Disorder Problems	0.055	0.793
Oppositional Defiant Problems	0.290	0.159
Conduct Problems	0.316	0.124
Other scales		
Sluggish Cognitive Tempo	0.346	0.090
Obsessive-Compulsive Problems	0.318	0.122
Posttraumatic Stress Problems	0.360	0.077
Broad-Band Scales		
Internalizing Problems	0.415*	0.039
Externalizing Problems	0.280	0.174
Total Problems	0.362	0.075

**Note.** Significant correlations are marked with \* ( $p \leq 0.05$ ) or \*\* ( $p \leq 0.01$ ).

Based on the analysis of Table 1, we can see a significant positive correlation between internalizing complaints and the presence of family adversity. Among the syndrome scales, it is observed that the more adversity factors are present, the higher the scores on CBCL Anxious/Depressed and Social Problems scales.

Marturano, Toller and Elias (2005) also identified correlations between the presence of internalizing complaints in the CBCL and adverse events; however the measurement of the adversity was not the FAI, but rather the Adverse Event Scale (AES; Santos, 1999). These authors observed that in boys and girls, internalizing problems were correlated with adverse events related mainly to the "family" aspect, especially the parental couple such as: marriage of a parent, mental health problem of father/mother, one of the parents abandoned the family or birth of a sibling. In this sense, one may create the hypothesis that the risk factors "presence of marital discord" and "presence of psychopathology in the family", declared by 11 (44.0%) and 9 (36.0%) parents in the present study, respectively, might explain the correlation found for this sample. In order to verify whether this hypothesis was correct, Spearman's correlation analysis was conducted between the factors and the above scales.

In these analyses it was observed that, in fact, Social Problems are correlated with the factor "presence of marital discord", but the same was not true for the Anxious/Depressed. It is noteworthy that in addition to correlating with the Social Problems scale, the factor "presence of marital discord" was positively correlated with another CBCL syndrome scale (Aggressive Behavior), with four of the six DSM-Oriented scales (Affective Problems, Anxiety Problems, Oppositional Defiant Problems and Conduct Problems). Incidentally, this risk factor was also correlated with two of the broad-band scales, Externalizing and Total Problems. Similar data were also found by Rohenkohl and Castro (2012) in a study on which the levels of conflict of mother-father dyads were positively and significantly correlated with "internalizing and externalizing dimensions as well as the total score of the CBCL" (Rohenkohl & Castro 2012, p. 446).

Instruments, such as the Conflict Tactics Scale - CTS (Straus, 1979), could better clarify the specific importance of this risk factor (presence of marital discord) on the results, since it evaluates family violence. Typical post-traumatic stress and anxiety behaviors (Ximenes, Oliveira, & Assis, 2009), as well as child aggressive behavior (Maldonado & Williams, 2005), may indicate not only the marital discord as a risk factor, but also the presence of situations of violence in the household, requiring an appropriate intervention protocol for this type of situation.

Unlike the risk factor "presence of marital discord", the report of psychopathology in the family was only associated with Anxious/Depressed. Furthermore, when we consider the broad-band scales, this factor was correlated with the scores on the Internalizing Problems, converging with the finding of Marturano, Toller and Elias (2005).

Parental mental health problems may influence marital relations and the family environment as a whole. Whiffen, Kerr and Kallos-Lilly (2005) report that depressed mothers have poorer quality in the marital relationship and show less care and support for their children. Low and Stocker (2005) found that the marital conflict of the parents with depressive mood were directly linked to the hostility of these parents towards their children, which in turn was associated with internalizing and externalizing problems in the children. In the sample of this study, ten of the caregivers interviewed reached clinical scores in the ASR Internalizing Scale, and six on the Anxious/Depressed scale. Pearson correlation analyses were performed assuming 95% confidence intervals, in order to verify if these scores were correlated with children CBCL scores. The analyses show that there is a positive correlation between these ASR scales and CBCL Internalizing and Anxious/Depressed scales. That is, when there is an indication that the mother has more problems in these areas, she also tends to perceive more of these problems in her children. This result is convergent with that found by Murray, Pella, De Pascalis, Arteché et al. (2014), who found that higher scores on the CBCL in the children of anxious mothers.

Taking into account the influence of the informant on the assessment of problems, the children also participated directly in the process through a semi-structured interview, SCICA. The correlation between SCICA scores and FAI is shown below.

**Table 2: Spearman's correlation coefficients (rho) between evaluations of behavioral problems, based on the application of the SCICA and the FAI**

SCALES	<i>Rho</i>	<i>p</i> Value
Syndromes Scales		
Anxious	0.226	0.278
Anxious/Depressed	0.372	0.067
Withdrawn/Depressed	0.401*	0.047
Language/Motor Problems	0.236	0.256
Aggressive/Rule-Breaking	0.333	0.104
Attention Problems	-0.172	0.410
Self-Control Problems	0.076	0.718
DSM-Oriented Scales		
Affective Problems	0.229	0.271
Anxiety Problems	0.375	0.065
Somatic Problems <sup>a</sup>		
Attention Deficit/Hyperactivity Problems	-0.335	0.102
Oppositional Defiant Problems	0.335	0.101
Conduct Problems	0.100	0.633
Broad-Band Scales		
Internalizing Problems	0.313	0.128
Externalizing Problems	0.112	0.595
Total Observation Problems	0.148	0.479
Total Self-Reported Problems	0.409*	0.042

**Note.** Significant correlations are marked with \* ( $p \leq 0.05$ ) or \*\* ( $p \leq 0.01$ ).

<sup>a</sup> Not applicable to the age group of this study. Applicable only for the adolescents group (12 to 18 years of age).

Looking at Table 2, we note that only two SCICA scales were related with the FAI: Withdrawn/Depressed and Total Self-Reported Problems. As stated above, the risk factors and the behavior problems maintain an intimate relationship in this sense, as it was observed that when several risk factors are shown to be present, the more the children tend to report difficulties in several areas during the clinical interview, which is reflected in the total score of self-reported problems.

As done with for the CBCL/6-18, we conducted analyses of the risk factors in an isolated manner, in order to identify whether any specific factor would maintain the respective relationship with the scores of the SCICA. Again, the "presence of marital discord" factor demonstrated itself to be relevant by positively correlating with both the internalizing problems scales (Anxious/Depressed; Affective Problems), and with those that evaluate externalizing problems (Aggressive/Rule-Breaking; Oppositional Defiant Problems). Moreover, this factor also correlated with the Internalization Problems Scale and the Total Scale Self-Reported Problems. Overall, we can see that there is a multiplicity of family factors related to the appearance of internalizing and externalizing problems, although it is impossible to accurately say exactly which factor is a precursor to the children's problems, with the mental health conditions of the caregiver and the presence of marital conflict having a significant weight on these relationships.

This is a state-of-art work in Brazil, considering the use of multiple informants in a risk factor study, and especially the use of the child as an informant. It demonstrates that the discussion on the validity of the child's report in comparison with the assessment of behavior problems goes beyond situations involving sexual abuse or domestic violence, for example, but rather the contribution involving a range of behavioral problems, contributing itself to the planning and execution of its intervention.

Low income was attributed as being the main risk factor present in the sample, according to the Family Adversity Index (FAI). The value used for the family considered to represent low-income reflects the social inequality that is inherent in the Brazilian reality. Although the average family income of São Paulo is approximately R\$ 1,808.00, the large standard deviation found in the study by SEADE (2006) on the living conditions of the São Paulo population has made it so that the cut-off value is quite high for establishing a family as being in the low income bracket. For the sample, only one family did not present this risk factor.

It would be interesting to replicate the study comparing high and low income families, or even analyze the presence of each of the three factors: marital discord, low income, and the presence/absence of psychopathology in parents in studies involving comparison groups for each of these variables; while providing more consistent data to compare them to the results obtained in this study. Moreover, differentiating the sample also in terms of the gender could assist the analysis and better understanding of the reported behavior problems, being that the literature indicates that boys are more prone to present the externalizing and total behavior problems, while girls have a greater propensity to present the internalizing type of behavior problems (Emerich, Rocha, Silveiras & Gonçalves, 2012); whereby the latter represents the most reported in this article, albeit without gender distinctions.

In addition, it is pertinent to the discussion that in this study only the Family Adversity Index was used, which may in a certain manner restrict the results: the enumeration of protective factors present in the environment of these children may assist in the better understanding of the risk factors that exert more or less influence on not only the children's report, but that of the parents in this study as well. Sapienza and Pedromônico (2005), in addition to emphasizing the fact that the risk factors are remotely isolated events, point out the promising inquiry in the studies that contemplate the investigation of protective factors, in order to facilitate the planning of interventions and reducing behavioral problems. Therefore, studies that highlight the protective factors in the same way in which we highlight the risk factors are necessary (Maia & Williams, 2005). In this manner, articulating the literature in a way that involves the risk and protection factors may impact the field of resilience, promoting the better comprehension of how the variety of attributed variables function in terms of whether the behavioral problems manifest or not in the children.

### 5. Final Considerations

The results corroborate with the literature on this area of study, in a way that suggests the presence of multiple factors associated with the presence of psychopathology in childhood, which constitutes a major challenge in the field of children's mental health. It is important to look specifically for mental health conditions of the caregiver and the presence of marital conflict, both factors identified as being significant in these relationships. Thus, it is necessary to implement preventive strategies to reduce family adversity factors and promote healthy development of all family members. These strategies should address both the minimizing risk factors, as well as the maximization of the protective factors, as these aspects may represent the resources necessary to deal with these adversities at different levels (individual, family and community). It is expected that the results of this study will contribute to the development of effective intervention programs that can be performed by different professionals and the discussion of public policies for preventative and early-onset mental health care initiatives.

### References

- Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for the ASEBA School-Age Forms & Profiles*. Burlington: University of Vermont.
- Achenbach, T. M., & Rescorla, L. A. (2003). *Manual for the ASEBA Adult Forms & Profile*. Burlington: University of Vermont.
- Alvarenga, P., Oliveira, J. M., & Lins, T.. (2012). O impacto da depressão materna nos problemas internalizantes de pré-escolares [The impact of maternal depression on preschoolers internalizing behavior problems]. *Aletheia*, (38-39), 94-108. Recuperado de [http://pepsic.bvsalud.org/scielo.php?script=sci\\_arttext&pid=S1413-03942012000200008&lng=pt&tlng=pt](http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1413-03942012000200008&lng=pt&tlng=pt)
- Betts, K. S., Williams, G. M., Najman, J. M., & Alati, R. (2014). Maternal depressive, anxious, and stress symptoms during pregnancy predict internalizing problems in adolescence. *Depression and Anxiety*, 31(1), 9–18. doi:10.1002/da.22210
- Blanz, B., Schmidt, M. H. & Günther, E. (1991). Familial adversities and child psychiatric disorders. *Journal of Child Psychology and Psychiatry*, 32, 939-950.
- Bolsoni-Silva, A. T., & Del Prette, A. (2003). Problemas de comportamento: um panorama da área. *Revista Brasileira de Terapia Comportamental e Cognitiva*, 5(2), 91-103. Recuperado em 20 de fevereiro de 2016, de [http://pepsic.bvsalud.org/scielo.php?script=sci\\_arttext&pid=S1517-55452003000200002&lng=pt&tlng=pt](http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1517-55452003000200002&lng=pt&tlng=pt).



- Bordin, I. A. S., & Paula, C. S. *Estudos populaciona is sobre saúde mental de crianças e adolescentes brasileiros*. Em M. F. Mello, A. Mello, & R. Kohn (Orgs.), *Epidemiologia da saúde mental no Brasil* (pp. 101-118). Porto Alegre: Artmed, 2007.
- Bordin, I. A., Rocha, M. M., Paula, C. S., Teixeira, M. C. T. V., Achenbach, T. M., Rescorla, L. A., & Silveiras, E. F. M. (2013). Child Behavior Checklist (CBCL), Youth Self-Report (YSR) and Teacher's Report Form (TRF): An overview of the development of the original and Brazilian versions. *Cadernos de Saúde Pública*, 29(1), 13-28. doi:10.1590/S0102-311X2013000100004
- Carter, A. S., Godoy, L., Marakovitz, S. E., & Briggs-Gowan, M. J. (2009). *Parental reports and infant-toddler mental health assessment*. In C. H. Zeanah Jr. (Org.), *Handbook of Infant Mental Health* (4th ed). New York, NY: Guilford Press.
- Emerich, D.R., Rocha, M. M. , Silveiras, E. F. M. & Gonçalves, J.P. (2012). Diferenças quanto ao gênero entre escolares brasileiros avaliados pelo inventário de comportamentos para crianças e adolescentes (CBCL/ 6-18), *PSICO*, 43(3), 380-387.
- Ginige, P., Tennakoon, S. U. B., Wijesinghe, W. H. M. K. J., Liyanage, L., Herath, P. S. D., & Bandara, K. (2014). Prevalence of behavioral and emotional problems among seven to eleven year old children in selected schools in Kandy District, Sri Lanka. *Journal of Affective Disorders*, 167C, 167–170. doi:10.1016/j.jad.2014.05.062
- Gritti, A., Bravaccio, C., Signoriello, S., Salerno, F., Pisano, S., Catone, G., ... Pascotto, A. (2014). Epidemiological study on behavioural and emotional problems in developmental age: prevalence in a sample of Italian children , based on parent and teacher reports. *Italian Journal of Pediatrics*, 40(1), 19. doi:10.1186/1824-7288-40-19
- Kagan, J., Snidman, N., McManis, M., Woodward, S., & Hardway, C. (2002). One measure, one meaning: multiple measures, clearer meaning. *Development and Psychopathology*, 14(3), 463-475.
- Knook, L. M., Konijnenberg, A. Y., van der Hoeven, J., Kimpen, J. L., Buitelaar, J. K., van Engeland, H., & de Graeff-Meeder, E. R. (2011). Psychiatric disorders in children and adolescents presenting with unexplained chronic pain: what is the prevalence and clinical relevancy? *European Child & Adolescent Psychiatry*, 20(1), 39–48.
- Leve, L. D., Kim, H. K., & Pears, K. C. (2005). Childhood temperament and family environment as predictors of internalizing and externalizing trajectories from ages 5 to 17. *Journal of Abnormal Child Psychology*, 33, 505-520.
- Low, S. M., & Stocker, C. (2005). Family functioning and children's adjustment: associations among parents' depressed mood, marital hostility, parent-child hostility, and children's adjustment. *Journal of Family Psychology*, 19(3), 394-403
- Maia, J. M. D. & Williams, L. C. A. (2005) Fatores de risco e fatores de proteção ao desenvolvimento infantil: uma revisão da área. *Temas em Psicologia*, 13(2), 91-103.
- Marturano, E. M., Toller, G. P., & Elias, L. S. (2005). Gênero, adversidade e problemas socioemocionais associados à queixa escolar. *Estudos de Psicologia (Campinas)*, 22, 4, 371-380.
- Mash, E., & Hensley, J. (2010). *Assessment of childhood disorders*. In: E. Mash, & R. Barkley, *Assessment of childhood disorders* (pp. 3-51). New York, NY: Guilford Press.
- McConaughy, S. H. (2005). *Clinical Interviews for Children and Adolescents: Assessment to Intervention*. New York, NY: Guilford Press.
- McConaughy, S. H., & Achenbach, T. M. (2001). *Manual for the Semistructured Clinical Interview for Children And Adolescents* (2° edição ed.). Burlington, Vermont: University of Vermont.
- Mendes, J. C. P., Pandolfi, M. M., Carabetta Júnior, V., Novo, N. F. & Colombo-Souza, P.(2012). Fatores associados a alteração da linguagem em crianças pré-escolares. *Revista da Sociedade Brasileira de Fonoaudiologia* 17(2), 177-181. <http://dx.doi.org/10.1590/S1516-80342012000200013>
- Murray L., Pella, J. E., Pascalis, L., Arteché, A., Pass, L. Percy, R., et al. (2014). Socially anxious mothers' narratives to their children and their relation to child representations and adjustment. *Development and Psychopathology*, 26, 1531-1546. Doi: 10.1017/S0954579414001187.
- Rocha, M. M., Rescorla, L. A., Emerich, D. R., Silveiras, E. F. M., Borsa, J. C., Araújo, L. G., et al. (2012). Behavioural/emotional problems in Brazilian children: Findings from parents' reports on the Child Behavior Checklist. *Epidemiology and Psychiatric Sciences*, 22(4), 329-338. doi:10.1017/S2045796012000637

- Rohenkohl, L. M. I., & Castro, E. K. (2012). Afetividade, conflito familiar e problemas de comportamento em pré-escolares de famílias de baixa renda: visão de mães e professoras. *Psicologia: Ciência e Profissão*, 32(2), 438-451.
- Rutter, M. (1981). Stress, coping and development: Some issues and questions. *Journal of Child Psychiatry* (22), 323-356.
- Santos, L.C. (1999). *Crianças com dificuldades de aprendizagem: um estudo de seguimento*. Dissertação de mestrado não-publicada, Programa de Pós-Graduação em Saúde Mental, Faculdade de Medicina de Ribeirão Preto, Universidade de São Paulo, Ribeirão Preto.
- Sapienza, G. & Pedromônico, M. R. M. (2005). Risco, proteção e resiliência no desenvolvimento da criança e do adolescente. *Psicologia em Estudo* 10(2), 209-216.
- SEADE. (2006). *Pesquisa de condições de vida*. São Paulo: Fundação Sistema Estadual de Análise de Dados.
- Silva, M., Farias, M. A., Silvas, E. F. M., & Arantes, M. C. (2008). Adversidade familiar e problemas comportamentais entre adolescentes infratores e não-infratores. *Psicologia em Estudo*, Maringá. 13(4), 791-798.
- Silvas, E. F. M., & Souza, C. L. (2008). Discórdia conjugal: distúrbios psicológicos infantis e avaliação diagnóstica comportamental-cognitiva. *Psicologia: teoria e prática*, 10(1), 200-213. Recuperado em [http://pepsic.bvsalud.org/scielo.php?script=sci\\_arttext&pid=S1516-36872008000100015&lng=pt&tlng=pt](http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1516-36872008000100015&lng=pt&tlng=pt)
- Straus, M. A. (1979). Measuring familiar conflict and Violence: The conflict Tactics (CT) Scales. *Journal of Marriage and the family*, 41, 75-88.
- Vuchinich, S., Bank, L. & Patterson, G. R. (1992). Parenting, peers, and the stability of antisocial behavior in preadolescent boys. *Developmental Psychology*, 28(3), 510-521.
- Whiffen, V. E., Kerr, M. A., & Kallos-Lilly, V. (2005). Maternal depression, adult attachment and children's emotional distress. *Family Process Journal*, 44(1), 93-103.
- Ximenes, L.F., Oliveira, R. V.C. & Assis, S. G. (2009). Violência e Transtorno de estresse pós-traumático na infância. *Ciência e Saúde Coletiva*, 14(2), 417-433. <http://dx.doi.org/10.1590/S1413-81232009000200011>.