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Sandplay therapy in the treatment of children with Oppositional Defiant Disorder and Conduct Disorder

A terapia de sandplay no tratamento de crianças com Transtorno Opositivo-Desafiador e Transtorno de Conduta

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Abstract

The study aimed at assessing the effectiveness of sandplay therapy in the treatment of children with symptoms of oppositional defiant disorder and/or conduct disorder. The intervention consisted of twelve weekly sessions of sandplay therapy. The Child Behavior Checklist 6-18 was used to assess symptoms before and after the intervention. Participants were 41 children of both sexes, randomly divided into two groups. The control group remained on hold while experimental group 1 underwent the intervention. After three months, control group participants who still met the inclusion criteria were placed in experimental group 2. Results were analyzed statistically, in order to compare the control group and experimental group 1, as well as to assess the evolution of the total experimental group, which included experimental groups 1 and 2. Results pointed to the effectiveness of sandplay therapy in reducing symptoms of oppositional defiant disorder and conduct disorder.

Keywords: Child psychotherapy; Conduct disorder; Oppositional defiant disorder; Sandplay.

Resumo

O estudo visou avaliar a efetividade da terapia de sandplay no tratamento de crianças com sintomas de Transtorno Opositivo-Desafiador e/ou Transtorno de Conduta. A intervenção consistiu de 12 sessões semanais de terapia de sandplay. O

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Child Behavior Checklist 6-18 *foi o instrumento utilizado para avaliar os sintomas antes e após a intervenção. Participaram do estudo 41 crianças de ambos os sexos, divididas randomicamente em dois grupos. O grupo controle permaneceu em espera enquanto o grupo experimental 1 passava pela intervenção. Após três meses de intervenção, os participantes do grupo controle que ainda atendiam aos critérios de inclusão formaram o grupo experimental 2. Os resultados obtidos foram analisados estatisticamente, de modo a comparar o grupo controle e o grupo experimental 1 bem como avaliar a evolução do grupo experimental total, que incluiu os grupos experimentais 1 e 2. Os resultados indicam que a terapia de sandplay foi eficiente na redução dos sintomas dos transtornos em questão.*

Palavras-chave: *Psicoterapia da criança; Sandplay; Transtorno de conduta; Transtorno opositivo-desafiador.*

Oppositional-Defiant Disorder (ODD) in children is characterized by a persistently negative, hostile, defiant, provocative, and destructive behavior, outside the normal range of behavior of the age group and the socio-cultural context. Conduct Disorder (CD) is considered an aggravation of ODD, as it encompasses behavior that violates the law and the basic right of others (American Psychiatric Association, 2014; Organização Mundial da Saúde, 1993). The DSM-5 classifies these disorders as disruptive of behavior, as there is difficulty in controlling impulses and conduct. It also classifies the infantile manifestation of ODD into three subtypes: irritable, defiant, and vindictive mood, in addition to indicating that there is a higher incidence of ODD in males compared to females, in the proportion of 1.4: 1.

The prevalence of ODD varies between 2 and 6% in children and adolescents (Demmer et al., 2017, and the most common comorbidities are Attention Deficit Hyperactivity Disorder (ADHD) (Freeman et al., 2016; Mohammadi et al., 2020), Separation Anxiety Disorder, Anxiety Disorder, Depressive Disorder (Mohammadi et al., 2020), and Disruptive Mood Regulation Disorder (DMRD) (Freeman et al., 2016). Living in a dysfunctional family (Monsalve et al., 2017) and having gone through a stressful situation (van den Heuvel et al., 2018) are risk factors. The literature also points out the impact on the learning processes (Araújo & Araújo, 2017; Vilhena & de Paula, 2017) and severe developments in the future life, such as the increased risk of suicide and the recurrence of criminal behavior (Aebi et al., 2015) and depressive symptoms in adolescence (Blain-Arcaro & Vaillancourt, 2017), as well as a high probability of developing anxiety disorders, depression and antisocial behavior in adulthood (Waldman et al., 2018).

Based on the understanding that a psychological intervention in childhood plays a preventive role in relation to mental disorders in adolescents and adults, several studies have sought to assess the effectivity of the use of psychotherapeutic techniques in reducing the symptoms of ODD and/or CT in childhood (Landim & Borsa, 2017; Monsalve et al., 2017).

Most studies were based on the behavioral approach and, in general, have a combined format, involving father/mother and child (Landim & Borsa, 2017; Monsalve et al., 2017; Muratori et al., 2019; Ollendick et al., 2016). Although positive results have been achieved, Landim and Borsa (2017) point out the methodological limitations of several studies, such as the use of inaccurate instruments, statistical data that are sometimes absent or insufficient, criteria – not always mentioned – for assessing effectiveness, and restricted samples. Monsalve et al. (2017), in turn, although they state that the combined interventions of the child + mother/father type are more effective, they also highlight the frequent occurrence of relapses, attributing these to the parents who abandoned the treatment or, still, to the difficulty in supporting positive reinforcements in the parental management.

Studies developed since 2017 used interventions that combine the behavioral approach and the systemic and psychodynamic approaches. Cucu-Ciuham and Sararu (2017), understand that behavioral therapies leave a gap on emotional aspects, because they focus excessively on reducing inadequate behaviors. The interventions on which these studies are based have led to a reduction in aggressive behaviors associated with ODD and /or CD (Cucu-Ciuham & Sararu, 2017; Prout et al., 2019; Wofford & Ohrt, 2018). However, they involved a limited number of participants (a maximum of three).

Regarding interventions with a psychodynamic approach, Roesler (2019) examined the evidence bases for the application of Sandplay Therapy (ST) in several cases. To this end, the author carried out a systematic survey of empirical studies whose method involved the comparison between control group (without intervention) and experimental group (intervention with ST), concluding that ST was effective in treating externalizing problems of aggressiveness and social behavior, among others, since there was a significant improvement with an effect size that varied from moderate to strong in the studies analyzed. The improvement of externalizing problems in children aged 4 and 5 years, after an intervention process with ST, was also reported by Han et al. (2017). In Brazil, the research by Matta (2015), a pioneer in measuring and statistically treating the effects of ST in children, showed the reduction of internalizing and externalizing symptoms, which reinforces the hypothesis that children with symptoms of ODD and/or CD can also benefit from this intervention.

Based on analytical psychology and developed by Dora Kalff in 1956, ST is a playful psychotherapeutic method, in which different miniatures are used to compose a scene inside a rectangular box with sand. It is seen as a non-verbal therapy and is based on the principle that, through manual creation, the unconscious dynamics that mobilize the emotions become visible and recognizable. Roesler (2019) postulates that ST shifts the focus of exclusively verbal and cognitive communication to sand, miniatures, and playfulness and, with this, provides the patient with the possibility of expressing difficult issues in an indirect and non-confrontational way. In ST, the patient's production is carefully observed and recorded by the therapist, who does not judge or make immediate interpretations, which favors a safe, protected environment for free expression. Pearson and Wilson (2019) point out that the differential of ST in relation to other playful interventions is the containment offered to the patient through three configurations: the concrete limits of the sandbox, the limits of the therapy room, and the relationship of trust with the therapist. In this way, the therapeutic environment provides a protected, safe, and reliable space, in which patients can freely expose their emotional vulnerabilities. These authors state that patients, when starting ST, unload a mixture of different memories, potentials, and emotions. The sandplay room, the therapeutic alliance and the sandbox offer safe limits so that the unconscious contents can be emptied, rearranged, and refilled. Roesler (2019) points out that the ST scene portrays the patient's internal world. Contents referring to psychopathologies and disorders are projected on the scenes created, and the symbolic analysis of such scenes allows the therapist to understand the conflicts and defenses at stake. Weinrib (1993) states that, in ST, free and protected symbolic fantasies stimulate the imagination and release the neurotically fixed energy.

Fordham (2006) studied pathological childhood aggression, using the premises of analytical psychology. Fordham emphasizes the need for imaginative play in interventions, because, in this way, it is possible to transform physical violence into imaginative activity, which contributes to the child having greater control over his impulses.

The present research aimed to verify the effectiveness of ST in internalizing and externalizing behaviors, assessed by the Child Behavior Checklist (CBCL/6-18), in children from six to twelve years old, who presented symptoms of ODD and/or CD. It is worth noting that ST is based on the theory of analytical psychology, which is a psychodynamic approach. To verify the effectiveness of this therapeutic technique, the child's behavior was observed and quantified using the CBCL 6-18, thus following the same path taken by Matta (2015).

The psyche, in Jungian theory, is understood as a system in which there is a dialectical and constant relationship between the unconscious and conscious layers. The ego is seen as the instance that organizes the conscious and, thus, gives the individual a sense of identity and continuity. Although it occupies a central place in the conscious, the ego is not exempt from the constant influences of the unconscious and, thus, the thoughts, emotions and behaviors that are expressed in the conscious layer via ego, are, as it were, resulting from the dynamic relationship that occurs between the opposite and/or complementary instances of the unconscious and the conscious. Jung (1917/1989) states that all energy is produced through tension between

opposites and this dynamic is natural and vital. Due to this dynamism, it is common for content that is not compatible with the conscious to emerge. To avoid a painful experience or moral discomfort, the ego represses such contents, remaining latent in the unconscious layer of the psyche. A similar process occurs when the conscious is subjected to experiences for which it is not fully prepared. Such episodes and the affections that have been aroused are also removed from the conscious, through the mechanism of repression. However, even though these contents seem to have been excluded and protected from the conscious, they remain active in the unconscious, forming, as it were, a conglomeration of ideas and emotions that is called a complex. The more the ego invests energy in the mechanisms of repression, the more the repressed content, in the form of a complex, becomes imbued with the energy produced by the tension between the opposites. It is worth mentioning that the complex is an element of the psyche charged with affection, which, due to its energy charge, acts autonomously and independent of the ego's will. There is a quote from Jung that makes it easier to understand this concept: "complexes can have us" (Jung, 1934/1972, para. 200). When constellated, that is, when the person is in a situation that resembles that which may have originated the complex, it is activated and acts on the psyche regardless of the ego's will, which, in turn, is taken by a strong emotion. Jung (1934/1991a) postulates that every complex constellation results in a disturbed state of consciousness and places the person in a situation of non-freedom, characterized by obsessive thoughts and compulsive actions. Thus, it can be said that the complex represents a dissociated and partial aspect of the psyche that is incompatible with the usual attitude of consciousness. When being constellated, it determines actions, thoughts, and emotions, which leads the person to behave in a decontextualized or poorly adapted way, since the emotional reaction presented is not adequate to the current situation.

In view of this theoretical context, it is possible to infer that the disruptive behavior presented by children with symptoms of ODD and/or CD is due to the constellation of complexes. It is considered that, as the content of the complexes becomes integrated into the conscious layer, even if partially, the episodes of disruptive behavior tend to weaken, occurring less frequently and less emotionally.

In the theoretical framework of analytical psychology, it is the symbolization processes that establish a bridge, that is, they make the intermediation between the conscious and unconscious spheres, to allow the ego to integrate aspects that, until then, have remained unconscious. Jung (1920/1991b) states that the symbol can be formed from an image already known to the conscious and carries meanings that are beyond known images, being the best expression of something that is not yet known by the ego, but whose existence is postulated. Thus, unconscious contents tend to become conscious through the figurative language of images, so that the symbol always communicates something more. In short, through symbols, communication between conscious and unconscious is possible.

Given this perspective, we start from the premise that ST, as it is configured as a safe space for the free expression of unconscious contents related to a complex, allows the child to integrate them into the conscious, even partially, through the processes symbolization that are favored by the playful characteristics of the intervention method. Thus, our hypothesis is that ST contributes to the reduction of the symptoms of ODD and/or CT, by enabling the integration of unconscious aspects into the conscious, influencing a person's conduct, thoughts, impulses, and emotions.

Method

Participants

The sample consisted of children (n = 41) who attended a Center for Children and Adolescents (CCA) in the city of São Paulo (Brazil), with a mean age of 8.2 years (SD = 1.6), 68.3% of whom were boys. The participants had a mean of 3.2 years of formal education (SD = 1.5) and a mean IQ of 101.46 (SD = 10.32),

assessed using the Wechsler Abbreviated Intelligence Scale (WASI). None of the participants in the sample were taking psychiatric medication at the beginning of the research.

The inclusion criteria were: being in the age group between 6 years old and 11 years and 11 months old; scoring 3 or higher on the Strengths and Difficulties Questionnaire (SDQ) Conduct Problems scale; achieving scores equal to or greater than 65 points on the Oppositional Defiant Problem Scale or on the Conduct Problems Scale, indicated by the DSM Oriented-Scale results scale, provided by the CBCL/6-18; and obtain a score equal to or greater than 61 on the Externalizing Scale of the CBCL/6-18. The sample was formed by intensity criterion, measured by the CBCL/6-18 scale at the borderline or clinical level. The exclusion criteria were children who were already undergoing psychotherapy or had cognitive performance below the normal range for the respective age on the WASI scale.

Instruments

The assessment instruments used were: an identification form to record information about the child; the SDQ Conduct Problems Scale – Version for parents (Fleitlich et al., 2000); the CBCL/6-18 (Achenbach & Rescorla, 2001) which assesses a child's behavior and skills problems, via the parents' perception, in three different scores: Internalizing (IP), Externalizing (EP) and Total Problems (TP). These scores are measured by the Syndrome Score Scales (SSS): Anxiety/Depression (A/D), Depression/Withdrawal (D/W), Somatic Complaints (SC), Social Problems (SP), Thinking Problems (TP), Attention Problems (AP) Rule-Breaking Behavior (RBB), Aggressive Behavior (CA). The reliability coefficients of interclass correlation are greater than 0.92 ($p < 0.0001$). It also provides results guided by the DSM Oriented-Scale, considered by specialists as very consistent with the diagnostic categories of the aforementioned manual (Barletta, 2011; Lacalle et al., 2012). These results are: Depressive Problems (DP), Anxiety Problems (AO), Somatic Problems (SO), Attention Deficit (AD), Oppositional Defiant Problems (ODP), and Conduct Problems (CP); the WASI (Trentini et al., 2009), a brief tool for assessing cognitive skills.

Ethical care

This study was submitted to and approved by the Research Ethics Committee of the Pontifícia Universidade Católica de São Paulo (PUC-SP, Pontifical Catholic University of São Paulo) (CAEE nº 2.497.135). Among the measures adopted to ensure compliance with ethical provisions, the Informed Consent Form (ICF) was signed by representatives of the institution, by parents in the assessment, and by parents in the intervention, in addition to verbal consent from the child.

Procedures

After the CCA board signed the ICF (Institution), 200 invitation letters were sent to all children who were in the age group, through their schoolbooks, corresponding to the inclusion criteria of the research. Thus, the demand for psychological care was from the family and not from the institution. Families of 78 children expressed interest in participating in the study. Individual assessment interviews were scheduled with the mother, father, or legal guardian of the 78 children and the respective ICF (Assessment) was sent in a closed envelope inside the schoolbook.

Screening

The initial assessment interview presented the following sequence: explanation of the procedures involved, filling in the identification form, application of the SDQ and, if the scores were between 3 and

10 (borderline or clinical level) on the Conduct Problems scale, the CBCL/6-18 instrument was applied (T0). Data from the CBCL/6-18 were then recorded on specific inventory sheets and transferred to the Achenbach System of Empirically Based Assessment (https:\\www.aseba-web.org), an online correction base that shares the results in digital format.

Of the 78 children, 14 did not score at the borderline or clinical level of the SDQ. Of the 64 children whose guardians answered the CBCL/6-18, 22 did not have borderline or clinical level scores in the scales of the inclusion criteria. The 42 children who met the inclusion criteria answered the WASI. One of them had a score between 70-79 and was removed from the study. The ICF (Intervention) was sent via the schoolbook to the 41 children who met all the criteria and, subsequently, a draw was carried out to randomly form the Experimental Group (EG1), with children who would initiate the intervention and the Control Group (CG) , with those who would wait in line for approximately three months. A commitment was made that, if the children in the CG still presented results according to the inclusion criteria at the end of the waiting period, they would be referred for intervention (EG2).

Intervention

It consisted of twelve weekly and individual sandplay therapy sessions, held on the premises of the institution, with an approximate time of 40 minutes, initially involving the children of EG1.

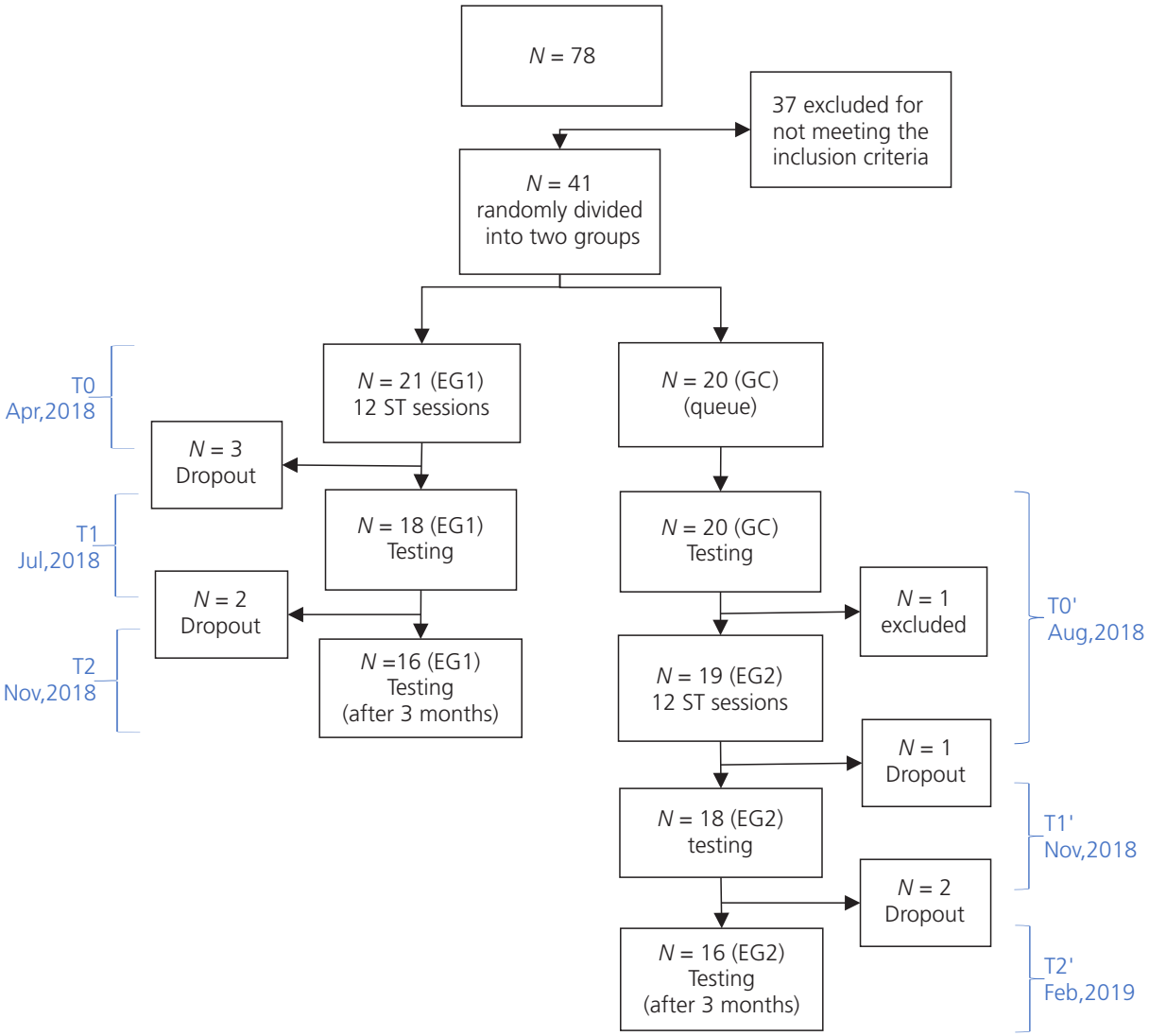
Those responsible for the children in EG1 were asked to reassess them using the CBCL/6-18, right after the end of the intervention period, at T1. After three months, a follow-up was carried out, using the same instrument (T2). At T1, those responsible for the participants of the CG, were again called for the reassessment of the children (CBCL/6-18), and those who still showed results within the inclusion criteria were referred to the intervention and, thus, formed EG2 with 19 participants. The scores obtained from the participants of the CG at T1 were used as measures at T0' of EG2. The EG2 participants started ST and, at the end of the twelve sessions, their guardians answered the CBCL/6-18 at T1'. After three months, a follow-up was carried out, with a new assessment (T2'). Throughout the process, there were eight dropouts. In EG1, there were three, between T0 and T1 (two due to sick leave and one dropout) and two, between T1 and T2 (one due to leaving the institution and the other due to the need to travel). In EG2, one between T0 'and T1' (dropout) and, between T1 'and T2', two (due to leaving the institution). Figure 1 shows the flowchart of the research procedures.

The verification of the effectiveness of ST occurred through two different analyzes. Analysis 1 compared the results of EG1 with the results of the CG before (T0) and after (T1) of the intervention. Analysis 2 had the purpose of monitoring the evolution of children who went through ST: EG1 + EG2 = total EG, in the three stages of the research T0 '(before), T1' (after), T2 '(three months after the intervention).

Data Analysis

The data were analyzed using the IBM SPSS software (version 25). A significance level of 0.05 was adopted. The Shapiro-Wilk test was used to check the adherence of the variables to the normal distribution to define the statistical method to be used: parametric or non-parametric. The comparison of the descriptive data of the groups was performed using the t test (numerical variables) or, in the case of categorical variables, using Fisher's exact test (with 2x2 contingency tables) or the chi-square test (larger than 2x2 tables). The comparison of the mean scores was performed using the t-test and the Mann-Whitney test, depending on the normality of the variables. In both cases, the effect size was calculated, the interpretation of which was as proposed by Dancey and Reidy (2019) for Pearson's *r*: small (from 0.10 to 0.39); medium (from 0.40 to 0.69), and large (from 0.70 to 0.99).

Figure 1
Flowchart



Results

Analysis 1: EG1 x CG

The data that characterize EG1 ($n = 21$) and CG ($n = 20$) did not show significant differences considering the pairing of the age, sex, and years of formal education variables. The same occurred when comparing the data of the screening tests, with a 95% confidence interval (CI): SDQ with Student's t test with a p-value of 0.887 [(EG1 = 4.86 *SD* * 1.236) - (CG = 4 , 80 SD 1.322)] and WASI with a p-value of 0.531 [(EG1 = 100.90 *SD* 10.639) (CG = 102.06 *SD* 10.226)]. As for the results of the CBCL/6-18 at T0, the EG1 and the CG do not differ in the studied variables. The comparison of the results of the groups at T1 (post-intervention) points to the occurrence of significant differences in the scores of the CBCL/6-18 domains (p-value < 0.05), as shown in Table 1.

Table 1
CBCL/6-18 – Comparison between the EG and CG - T0 and T1

CBCL/6-18	T0					T1					
	EG (*n* = 21)		CG (*n* = 20)		*p*	EG (*n* = 21)		CG (*n* = 20)		*p*	*r*
	M	*(SD)*	*M*	*(SD)*		*M*	*(SD)*	*M*	*(SD)*		
IP	19.38	(8.23)	21.2	(7.54)	0.620*	9.94	(5.21)	18.89	(7.38)	< 0.001*	0.54
EP	26.43	(4.60)	24.60	(6.34)	0.295**	12.28	(7.87)	23.84	(4.78)	< 0.001*	0.70
TP	77.14	(20.36)	75.15	(23.06)	0.771**	41.22	(15.04)	65.42	(20.89)	< 0.001*	0.56
A/D (SSS)	11.81	(5.01)	12.55	(4.41)	0.539*	5.83	(2.97)	11.84	(4.50)	< 0.001*	0.60
D/W (SSS)	3.62	(2.22)	3.60	(2.74)	0.981**	2.39	(2.09)	3.37	(2.65)	0.219**	
SC (SSS)	3.95	(3.01)	5.05	(4.36)	0.352**	1.72	(1.99)	3.68	(3.50)	0.044**	0.37
SP(SSS)	7.43	(3.89)	7.15	(4.26)	0.664*	3.33	(1.78)	5.95	(3.63)	0.009**	0.42
TP (SSS)	6.19	(4.14)	5.95	(4.42)	0.858**	3.28	(2.56)	4.11	(3.68)	0.707*	
AP (SSS)	9.90	(4.36)	8.10	(5.07)	0.272*	6.72	(2.54)	6.11	(4.05)	0.707*	
RBB (SSS)	5.14	(2.29)	4.55	(2.84)	0.467**	2.56	(2.43)	4.89	(2.00)	0.001*	0.51
AB (SSS)	21.29	(3.33)	20.05	(4.11)	0.299**	9.72	(5.87)	18.95	(3.55)	< 0.001*	0.69
DP DSM)	5.67	(3.29)	6.80	(4.05)	0.373*	3.61	(2.43)	5.53	(3.57)	0.064**	
AO (DSM)	8.29	(2.85)	8.25	(3.31)	0.948*	4.17	(2.75)	7.89	(3.40)	0.001*	0.51
SO (DSM)	2.67	(2.31)	2.75	(2.90)	0.920**	1.22	(1.80)	2.05	(2.09)	0.199*	
AD (DSM)	8.90	(3.63)	7.65	(3.84)	0.244*	5.72	(3.48)	6.00	(3.20)	0.822*	
ODP (DSM)	8.14	(1.62)	8.40	(0.94)	0.541**	3.83	(1.82)	8.26	(1.40)	< 0.001*	0.75
CP (DSM)	8.29	(3.62)	6.90	(3.82)	0.195*	4.00	(4.97)	7.00	(3.42)	0.042**	0.36

Note: *Mann-Whitney test; **_t_ test. *r*: Effect size; PI: Internalizing Problems; PE: Externalizing Problems; TP: Total Problems; A/D (SSS): Anxiety/Depression; D/W (SSS): Depression/Withdrawal; SC (SSS): Somatic complaints; SP (SSS): Social Problems; TP (SSS): Thinking Problems; AP (SSS): Attention Problems; RBB (SSS): Rule-Breaking Behavior; AB (SSS): Aggressive Behavior; DP (DSM): Depressive Problems; AO (DSM): Anxiety Problems; SO (DSM): Somatic Problems; AD (DSM): Attention Deficit; ODP (DSM): Oppositional Defiant Problems; CP (DSM): Conduct Problems. (SSS): Syndrome Score Scales; (DSM): Diagnostic and Statistical Manual of Mental Disorders – oriented scales.

Analysis 2: Evolution of EGt (EG1 + EG2)

The EGt was composed of the sum of participants from EG1 and EG2 who completed all the research procedures: ST (twelve sessions) and assessment at T0 ', T1', and T2 '. Due to some participants dropping out, 32 was the number adopted for the comparative analysis, according to the criteria established by Dancey and Reidy (2019).

The distribution of variables was calculated with a 95% confidence interval. The mean age of the group was 8.2 years, with a predominance of boys, with girls making up approximately one third of the sample. They had a mean of 3.2 years of formal education and a mean intelligence coefficient of 101.19, in the total coefficient (*SD* = 9.86 CI = 97.63 -104.75). The mean score on the SDQ Conduct Problems scale was 5.03 (*SD* = 1.204 CI = 4.60-5.47).

The participants of EGt had, at T0, the following symptoms at borderline or clinical levels: ODP: 78.2%; AO: 62.5%; CP: 34.4%; SO: 21.9%; AD: 21.9% and DP: 12.5%. Thus, the sample mostly presents symptoms of oppositional defiant disorder associated with symptoms of anxiety. In Tables 2 and 3) it is possible to observe the evolution of the results of the EGt.

The comparison between the results of the EGt, at T0 'and T1', shows significant differences in all domains of the CBCL/6-18, with mean scores at T1 'lower than at T0'. The effect size was moderate in seven domains – AD, SO, DP, AP, TP, SC, D/W) – and strong in ten domains – IP, EP, TP, A/D, SP, RBB, AB, AO, ODP, and CP –, as shown in Table 3.

To identify whether the results were sustained up to three months after the end of the intervention, the means were compared between T1 'and T2'. The results showed significant differences, with higher means

Table 2
CBCL/6-18 –EGT mean values from T0′ to T1′ to T2′ (n = 32)

CBCL/6-18	T0′		T1′		T2′	
	M	(*SD*)	*M*	(*SD*)	*M*	(*SD*)
IP	20.06	(7.14)	10.06	(5.00)	12.00	(5.43)
EP	25.03	(4.17)	9.16	(4.35)	11.25	(5.08)
TP	72.25	(20.08)	35.00	(12.95)	39.34	(14.96)
A/D (SSS)	12.22	(4.35)	6.22	(3.10)	6.75	(3.22)
D/W (SSS)	3.69	(2.15)	2.28	(2.27)	2.69	(2.27)
SC (SSS)	4.16	(3.36)	1.56	(1.95)	2.56	(2.45)
SP (SSS)	6.81	(3.86)	3.03	(1.77)	3.22	(2.10)
TP (SSS)	4.84	(3.91)	2.87	(2.73)	2.65	(2.56)
AP (SSS)	8.31	(4.71)	5.06	(3.25)	5.13	(3.62)
RBB (SSS)	4.91	(2.01)	1.81	(1.5)	2.22	(1.74)
AB (SSS)	20.13	(2.89)	7.34	(3.55)	9.03	(4.17)
DP (DSM)	5.41	(3.20)	2.97	(2.50)	3.09	(2.41)
AO (DSM)	8.37	(3.02)	4.84	(2.46)	5.19	(2.50)
SO (DSM)	2.53	(2.32)	0.97	(1.56)	1.50	(1.65)
AD (DSM)	7.34	(3.83)	4.69	(3.17)	4.72	(3.52)
ODP (DSM)	8.22	(1.44)	3.16	(1.59)	3.97	(1.81)
CP (DSM)	7.47	(3.51)	2.19	(2.06)	2.69	(2.51)

Note: IP: Internalizing Problems; EP: Externalizing Problems; TP: Total Problems; A/D (SSS): Anxiety/Depression; D/W (SSS): Depression/Withdrawal; SC (SSS): Somatic complaints; SP (SSS): Social Problems; TP (SSS): Thinking Problems; AP (SSS): Attention Problems; RBB (SSS): Rule-Breaking Behavior; AB (SSS): Aggressive Behavior; DP (DSM): Depressive Problems; AO (DSM): Anxiety Problems; SO (DSM): Somatic Problems; AD (DSM): Attention Deficit; ODP (DSM): Oppositional Defiant Problems; CP (DSM): Conduct problems. (SSS): Syndrome Score Scales; (DSM): Diagnostic and Statistical Manual of Mental Disorders – oriented scales.

Table 3
CBCL/6-18 – Comparison between EGT mean values from T0′ to T1′ to T2 (n = 32)

CBCL/6-18	T0′ - T1′		T1′ - T2′		T0′ - T2′	
	p	r	*p*	ES	*p*	r
IP	< 0.001*	0.86	0.016*	0.43	< 0.001*	0.43
EP	< 0.001*	0.87	0.012*	0.45	< 0.001**	0.95
TP	< 0.001*	0.87	0.006*	0.48	< 0.001**	0.89
A/D (SSS)	< 0.001*	0.85	0.489*	-	< 0.00*	0.77
D/W (SSS)	< 0.001**	0.64	0.102**	-	0.001**	0.57
SC (SSS)	< 0.001**	0.65	0.016**	0.41	0.022**	0.40
SP(SSS)	< 0.001*	0.79	0.667*	-	< 0.001*	0.76
TP (SSS)	0.004*	0.49	0.410**	-	0.001**	0.56
AP (SSS)	< 0.001*	0.68	0.885*	-	< 0.001*	0.72
RBB (SSS)	< 0.001**	0.85	0.227**	-	< 0.001**	0.74
AB (SSS)	< 0.001**	0.87	0.012*	0.44	< 0.001**	0.96
DP DSM)	< 0.001*	0.66	0.721**	-	< 0.001**	0.64
AO (DSM)	< 0.001*	0.73	0.634*	-	< 0.001*	0.68
SO (DSM)	0.001**	0.56	0.143**	-	0.070**	-
AD (DSM)	< 0.001*	0.63	0.969*	-	< 0.001*	0.76
ODP (DSM)	< 0.001*	0.88	0.014*	0.43	< 0.001*	0.87
CP (DSM)	< 0.001*	0.86	0.730*	-	< 0.001*	0.85

Note: *paired Wilcoxon test; **paired t-test; r: Effect size. IP: Internalizing problems; EP: Externalizing problems; TP: Total Problems; A/D (SSS): Anxiety/Depression; D/W (SSS): Depression/Withdrawal; SC (SSS): Somatic complaints; SP (SSS): Social Problems; TP (SSS): Thinking Problems; AP (SSS): Attention Problems; RBB (SSS): Rule-Breaking Behavior; AB (SSS): Aggressive Behavior; DP (DSM): Depressive Problems; AO (DSM): Anxiety Problems; SO (DSM): Somatic Problems; AD (DSM): Attention Deficit; ODP (DSM): Oppositional Defiant Problems; CP (DSM): Conduct Problems. (SSS): Syndrome Score Scales; (DSM): Diagnostic and Statistical Manual of Mental Disorders – oriented scales.

at T2 'in the IP, EP, TP, SC, AB, and ODP domains, which indicates that the improvement was not sustained in terms of the symptoms of the previously mentioned domains. In the A/D, D/W, SP, TP, AP, RBB, DP, AO, SP, AD, and CP domains, the results were maintained with a weak effect size (Table 3).

The comparison of the results of the EGt between T0 'and T2' (Tables 2 and 3) had the purpose of identifying whether the regression of symptoms occurred at baseline level. Sixteen CBCL/6-18 domains showed significant differences, with lower means at T2' than at T0', which indicates that the regression of symptoms did not occur. The effect was moderate or strong, in the following domains: IP, EP, TP, A/D, D/W, SC, SP, TP, AP, RBB, AB, DP, AO, AD, ODP, and CP. The SP domain presented a lower mean at T2 when compared to T0, but the mathematical calculation did not show the difference as significant.

Discussion

The comparison of the CBCL/6-18 results between the EG and the CG, before and after ST (Table 1), as well as the observation of the means obtained by the total EG at T0', T1' and T2' (Tables 2 and 3) demonstrate a significant reduction in the means in most of the measured domains and, thus, it is possible to affirm that ST was an efficient intervention to reduce these symptoms in the children of the sample.

It can be seen that, in Analysis 1, in the four specific domains of the CBCL/6-18 that are central to ODD and/or CD (RBB, AB, ODP, and CP), EG1 showed a significant improvement in different domains, one of them with weak effect size, two with moderate effect size, and one with strong effect size. On the other hand, Analysis 2 points out that there was no regression of symptoms at baseline level in these domains, all of them with a strong effect. Both analyzes show that it is possible to attribute to ST the reduction of symptoms.

In view of the improvement in the symptoms of the children in the sample after the intervention, we will continue with theoretical reflections, which seek to broaden the understanding of the results.

It is worth noting that the risk factors for children to develop ODD and/or CD point to previous emotional problems related to family dynamics. Thus, the containment offered at three levels by ST (Pearson & Wilson, 2019) may have ensured an atmosphere of trust, which provided enough security for children to express their unconscious conflicts. In addition, the use of an individual and playful intervention, which allows to approach disturbing and difficult issues in an indirect and non-confrontational way (Roesler, 2019), seems to have been highly beneficial, since children were able to express and reframe emotions that are easily objectionable in the family and social contexts. It is possible to suppose that fantasizing and playing in a free and protected environment has enabled these children to recognize, in a symbolic way, the unconscious conflicts that are at the core of their complexes, since the scene portrays the dynamics of their internal world (Roesler, 2019). Faced with the externalization of internal and unconscious conflicts, the children had the opportunity to symbolically reorganize it, enabling to be integrated into the conscious (Pearson & Wilson, 2019), since the communication between the conscious and unconscious layers of the psyche was made easier. In summary, with its intrinsic characteristics, ST favored the expression and recognition of the unconscious conflicts that underlie aggressive behavior and, in this way, children were able to confront and reorganize them. It also enabled physical violence to be turned into imaginative activity (Fordham, 2006).

Conclusion

In view of the discussion presented above, an exacerbated aggressive behavior is understood as a consequence of a complex, which takes the individual to a disturbed state, characterized by obsessive thoughts, compulsive and impulsive actions that erupt in the conscious, regardless of the ego's will. When we look at

the effect of ST on the children in this study, it can be assumed that, as the 12 therapy sessions elapsed, the playful and dynamic representation of unconscious conflicts led to the reorganization and resignification of these contents, allowing the energy that was neurotically fixed to be released. In this way, part of the psychic energy that served to repress conflicting contents was removed, weakening the complex's potential for autonomy. As a result, disruptive episodes tended to decrease, since the complex becomes less powerful and the child's ego less vulnerable, having been able to confront, recognize, and reframe the unconscious conflicts that caused their suffering. It is, therefore, feasible to infer that, after ST, the children's psyche was less susceptible to be driven by the complexes and, consequently, impulsive, aggressive, and poorly adapted behaviors occur less frequently.

Although the present research demonstrates the effectiveness of ST to treat children who present symptoms of the studied disorders, the results are not subject to generalization, since the sample was limited to a sample of only one institution and, therefore, specific socio-cultural components may have exercised influence on the results. Thus, it is suggested that further research be developed in order to include children who have more heterogeneous living conditions.

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Contributors

M. S. T. CHALFON defined the objective of the research and contributed to the study conception and design; she was responsible for coordinating research procedures in conjunction with the assistant researchers; applied the intervention to the participants; analyzed and interpreted the data obtained and reviewed the final version of the article. D. G. RAMOS guided the study, collaborating for the study conception and design, as well as in the analysis and interpretation of the results, in addition to reviewing the final version of the article.

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