Social Skills Training (SST) for students facing social vulnerability

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Abstract
This study aimed to promote social skills training for Elementary School students through a psychoeducational model. The research aimed to identify the effects of a Social Skills Training (SST) on social skills, behavioral problems and academic performance of fifth graders in primary school-aged from 10 to 13 years old (M = 10,3; DP = 1,5), 26 girls and 25 boys, living and studying in a social vulnerability area in Rio de Janeiro. The sample was divided into the Intervention Group (IG) and Control Group (CG). The SST was applied into ten sessions to work the skills of Civility, Self-control, Assertiveness, and Academic Skills. The Social Skill Rating System (SSRS) and the School Performance Test (SPT) were used as instruments. The obtained results showed positive gains for the majority of the students participating in the intervention and higher IG scores compared to the CG for all variables.

Keywords: training; social skills; students; social vulnerability; elementary school.

TREINAMENTO DE HABILIDADES SOCIAIS (THS) PARA ALUNOS EM SITUAÇÃO DE VULNERABILIDADE SOCIAL

Resumo
A pesquisa objetivou promover as habilidades sociais de estudantes do Ensino Fundamental em um modelo psicoeducativo. Buscou identificar os efeitos de um Treinamento de Habilidades Sociais (THS) nas habilidades sociais, problemas de comportamento e no desempenho acadêmico de crianças do quinto ano do Ensino Fundamental com idades de 10 a 13 anos (M = 10,3; DP = 1,5), sendo 26 meninas e 25 meninos que residem e estudam em área de vulnerabilidade social no Rio de Janeiro. A amostra foi dividida em Grupo Intervenção (GI) e Grupo Controle (GC). O THS foi aplicado em 10 sessões nas quais foram trabalhadas as habilidades de: Civilidade, Autocontrole, Assertividade e Habilidades Acadêmicas. Utilizou-se, como instrumentos, o Social Skill Rating System (SSRS) e o Teste de Desempenho Escolar (TDE). Os resultados revelaram ganhos positivos para a maioria dos alunos participantes da intervenção e escores superiores do GI em relação ao GC em todas as variáveis.

Palavras-chave: treinamento; habilidades sociais; alunos; vulnerabilidade social; Ensino Fundamental.
ENTRENAMIENTO DE HABILIDADES SOCIALES (EHS)
PARA ALUMNOS EN SITUACIÓN DE VULNERABILIDAD SOCIAL

Resumen
La investigación objetivó promover las habilidades sociales de estudiantes de la Enseñanza Fundamental en un modelo psicoeducativo. Se buscó identificar los efectos de un Entrenamiento de Habilidades Sociales (EHS) en las habilidades sociales, problemas de comportamiento y el desempeño académico de niños del quinto año con edades de 10 a 13 (M = 10,3; DP = 1,5), siendo 26 niñas y 25 niños que residen y estudian en área de vulnerabilidad social en Río de Janeiro. La muestra fue dividida en Grupo Intervención (GI) y Grupo Control (GC). El EHS fue aplicado en 10 sesiones para habilidades de: Civilidad, Autocontrol, Asertividad y Habilidades Académicas. Se utilizó como instrumentos el Social Skill Rating System (SSRS) y la Prueba de Desempeño Escolar (PDE). Los resultados revelaron ganancias positivas para la mayoría de los alumnos participantes de la intervención y puntuaciones superiores del GI en relación al GC en todas las variables.

Palabras clave: entrenamiento; habilidades sociales; alumnos; vulnerabilidad social; enseñanza fundamental.

1. Introduction
The school is an essentially interactive and extremely relevant space for childhood development. It is determinant for the cognitive and social development of the child (Cia & da Costa, 2017). It presents itself, together with the family, as a place of great socialization for this phase of life, where children spend a good part of their day, all week long, building knowledge and relationships. The school is characterized as a fundamental institution for the individual and the evolution of society and humanity (Casali-Robalinho, Del Prette, & Del Prette, 2015). In the current educational legislation (Brasil, 2013, 2017), the school is recognized as an interactive and psychosocial space. The curricular guidelines for Elementary Education cover, among other contents, the “transversal themes” that include the skills of coexistence, interpersonal relationships, and responsibility with the collective. In the National Curriculum Common Core (Base Nacional Comum Curricular – BNCC), of the ten general guidelines, four deal with socio-emotional skills, such as collaborating, developing empathy, self-control, and resolving conflicts. However, this place of socialization can also be the scene of many conflicts and challenges, espe-
cially in schools in areas of social vulnerability. This work is based on the concept of social vulnerability as a disadvantage for social actors due to lack of access to economic, social and cultural resources and opportunities and/or the scarcity of material or symbolic resources. This condition may affect social mobility and the ability to respond to crises (Abramovay, Castro, Pinheiro, Lima, & Martinelli, 2002).

The most recent data from the Instituto Brasileiro de Geografia e Estatística [Brazilian Institute of Geography and Statistics – IBGE] (2012), with Elementary Education students, revealed that 18% of Brazilian students study in areas of social vulnerability. In Rio de Janeiro, this number corresponds to 11%. The schools in areas of vulnerability that were cataloged by the Municipal Department of Education of Rio de Janeiro present some of the worst results of the entire Municipal Network. In terms of school dropout, for example, the schools' mean is 5.06%, compared with 2.68% of the Network overall mean. The proportion of those who stopped going to class due to fear of violent episodes on the way to or inside the school was, respectively, 9.5% and 9.1%, practically twice as much as the rate for students of private institutions (5.0% and 4.4%) (Instituto Brasileiro de Geografia e Estatística, 2012). Paula, Curto, Teixeira, & Bordin (2014) identified some factors associated with aggressive behavior and highlighted, among others, the low socioeconomic status and social vulnerability related to behavioral problems, as already indicated in studies by Lopes, Del Prette, & Del Prette (2013) and Noltemeyer & Bush (2013), who identified social competence and empathy as protective, adaptive, and resilient factors in poor children.

A characteristic of education is the segmentation of students by their level of income. Families with higher incomes often enroll their children in the private education network, which usually has better quality teaching. Poorer children generally study in public institutions, where conditions are, for the most part, precarious and also where complaints about behavior problems and poor school performance are frequent. Thus, it can be seen that the most vulnerable families are those that face a worse situation in the distribution of income (Pizarro Hofer, 2001). In a society where public policies fail to fulfill the main social requirements, strategies for overcoming adversities are commonly directed toward social interactions based on cooperation, empathy, support for others, and resilience, while the subject becomes more participative in the construction of means to overcome the vulnerability condition of these actors (Calejon, 2017).
Social skills training for students

In this context, many authors advocate more significant investment in social-emotional development by educational institutions (Abed, 2016; Faijão, Carneiro, Bruni, Montiel, & Bartholomeu, 2015; Schonfeld et al., 2015). They emphasize the adequate preparation of the individual to live and participate in a democratic and multicultural society, as a social function of the school, prioritizing the implementation of strategies that allow the acquisition and maintenance of adequate social behaviors. A school that aims for a broader preparation needs to include in its curricula the development of autonomy, moral values, responsibility, and the ability to solve problems.

There is evidence in the literature that social skills contribute to socioemotional and academic development and the reduction of behavioral problems (Feitosa, Matos, Del Prette, & Del Prette, 2009). In this way, universal programs of social skills promotion should be disseminated more and tested in the school context. The Social Skills Training (SST) program is characterized as a method of educational or preventive intervention, which presupposes an initial evaluation or diagnosis of the participants' difficulties and interpersonal resources to guide the planning of the program (Michelson, Sugai, Wood, & Kazdin, 2013). Social skills can be understood as a descriptive construct of response classes that, under specific antecedents, have a high probability of positive or negative reinforcement, contributing to socially competent behavior (Del Prette & Del Prette, 2017). These behaviors contribute to the social competence of the individual, which can be defined as the ability of the subject to emit thoughts, feelings, attitudes, desires and opinions in an appropriate way for each situation, respecting the rights and duties of all, favoring the resolution of conflicts and minimizing the risks of future problems (Del Prette & Del Prette, 2017).

The acquisition, even in childhood, of a more elaborate repertoire of social skills, may have repercussions throughout the individual's future life and in their interpersonal relationships (Elias & Amaral, 2016). The variation of the contexts propels the testing of different types of intervention to evaluate the effectiveness of programs that can be replicated in different realities, and that can be part of the school curriculum (Del Prette & Del Prette, 2017). The field of social skills has contributed to studies that seek to indicate new paths and a better comprehension of the phenomenon to minimize the problems of daily school life (D'Abreu & Marturano, 2010). The authors emphasize that training children to be more competent in
their social interactions can prevent behavioral problems and improve academic performance. By observing the consequences in the life of the individual, caused by low academic performance and the possible concomitance with behavioral problems, intervention programs have been planned to prevent individual adverse effects, reducing school failure and its impacts, such as withdrawal prior to High School Education and the low economic outlook, especially in areas of higher social vulnerability (Noltemeyer & Bush, 2013).

In addition to the changes relevant to the biological development phase, children are constantly exposed to new demands for interpersonal relationships that may require the student to master social skills such as asking for help; resolving conflicts; speaking in public; and adapting to the environment and new academic methods. When there is a deficit, or a low repertoire of these skills to cope with these requirements, stress, mental illness, and school failure may be triggered (Gonçalves & Murta, 2008; Schonfeld et al., 2015).

Reflecting more specifically on social skills in children, Michelson, Sugai, Wood, and Kazdin (2013) presented seven points that they consider essential to understand social skills: 1) Social skills are acquired through learning; 2) They involve specific verbal and nonverbal behaviors; 3) They involve effective and appropriate interventions and responses; 4) They maximize social reinforcement; 5) They are interactive in nature and imply a sufficient and adequate response capacity; 6) The performance of social skills is influenced by characteristics of the environment and factors such as age, sex, and social status affect social performance; 7) Deficits and excesses in social performance should be targets of intervention.

In this respect, Lopes et al. (2013) carried out a study on the impact of SST in children with low academic performance. The intervention was performed in three classes of a private elementary school in São Paulo. The students obtained improvements in the social skills repertoire, in the academic performance and the resolution of behavioral problems according to the evaluation of parents, teachers and of the students themselves, who cited gains, mainly in self-control skills. These findings corroborate the study by Casali-Robalinho et al. (2015), which emphasized school age as an ideal period for improving social skills and preventing behavior problems such as aggressive behavior, disobedience, low impulse control, fits of anger, tantrums, delinquent behavior, withdrawal, fear, sadness, anxiety, and depression.
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Also regarding the impact of social skills intervention programs on academic performance and behavior problems, Martin, Martin, Gibson, and Wilkins (2007) conducted an intervention focused on the acquisition of social skills with 33 black American students with a history of aggressive behavior, low academic performance and multiple disciplinary sanctions at school. After two years of the program, the results showed that the students increased their social skills levels, improved attendance, and reduced the incidence of sanctions and disciplinary actions. There were also gains in academic performance with increased means in math, reading, and writing.

With the aim of performing an intervention in social skills aimed at minimizing behaviors of indiscipline in class and improving social interaction, Faijão et al. (2015) conducted training with 23 students between the ages of 14 and 15, of both sexes, in an elementary school in São Paulo, with pre and post-tests for the skills of effective communication, critical thinking, self-knowledge and interpersonal relationships. The post-test results were favorable for acquiring more skillful behaviors, especially for the girls.

Considering the benefits reported in the literature of interventions in the area of social skills for behavioral problems and school performance in different populations, the present study proposed to apply and evaluate an SST program for students of the fifth year of elementary education. The evaluation of the effects of the SST was performed comparing two groups of students: the intervention group (IG) and control group (CG). In addition to the comparison between the groups, it was investigated whether the mean of the IG and CG participants presented differences over time to verify whether the changes in IG resulted from the intervention and were not just changes expected in the normative development cycle of the participants, as in the CG changes.

This study aimed to identify the effects of an intervention carried out in a school located in an area of social vulnerability of the municipality of Rio de Janeiro. The choice of this school grade was made due to it being a period that precedes the transition of the students to another system of study with an increase in the number of subjects, of teachers and new evaluative requirements. Also, behavioral problems and low academic performance are usually accentuated in this age group at the beginning of adolescence (Faijão et al., 2015; Marturano, Elias, & Leme, 2014). These difficulties can be aggravated by the fact that it is a
school located in a low-income area and continuously exposed to violence (Nolte-

2. Method

2.1 Participants

The sample consisted of 51 children enrolled in the 5th year of Elementary
Education of a Municipal School in Rio de Janeiro located in an area of social vul-
nerability; the mean age was 10.3 (SD = 1.5 years, range from 10 to 13 years), with
51.0% being female. In addition to the students, 51 of the parents/people respon-
sible for the children involved and the teachers in charge of the class that each
child belonged to participated.

In order to evaluate the effectiveness of the intervention to promote social
skills, the total sample was divided into two groups in a non-random manner. One
group, identified as the Intervention Group (IG), received the social skills promotion
intervention and another group was used as the Control Group (CG). The following
inclusion criteria for the IG and the CG were adopted: a) to be regularly enrolled in
the 5th year of a Public School in Rio de Janeiro; b) to be between 10 and 13 years
of age; c) to have the consent of the legal guardians for the child to participate in
the study; d) and to have the legal guardians agreement to participate in the study.
The division of the total sample between the IG (26 students) and the CG (25 stu-
dents) was carried out through convenience and the selection criteria used for the
inclusion of participants into the IG were: a) the presence of behavioral problems
(violence between peers, lack of anger control or internalizing problems that lead
to withdrawal, fear or sadness); b) academic performance (assessed through the
student’s notes throughout the year in which the intervention was carried out); c)
the availability of schedules.

2.2 Instruments

The Social Skill Rating System (SSRS) (Gresham & Elliott, 1990), adapted by
Del Prette et al. (2016), is an instrument to be answered by parents, teachers and
students that evaluates the Social Skills repertoire, indicators of Behavior Problems
and Academic Competence of children between 6 and 13 years of age. The SSRS
uses two types of indicators (frequency and importance), which can be answered
Social skills training for students

on a three-point scale that includes Never, Sometimes, and Very Often. In this study, inventories were used for Students, Parents, and Teachers. The version for children, with 20 items, can be used to investigate children's behaviors in the Empathy ($\alpha = 0.78$), Responsibility ($\alpha = 0.82$), Assertiveness ($\alpha = 0.70$) and Self-control = 0.88) dimensions. The parental version has 38 items, with the internal consistency of the overall score being 0.96. The scales that investigate the social skills dimensions separately also presented satisfactory internal consistency indexes (Responsibility, $\alpha = 0.76$; Self-control, $\alpha = 0.91$; Cooperation/Affectivity, $\alpha = 0.91$; Assertiveness/Social Resourcefulness, $\alpha = 0.81$; Civility, $\alpha = 0.81$; Externalizing Behavior Problems, $\alpha = 0.86$; and Internalizing Problems, $\alpha = 0.70$). The teacher version consists of three scales that evaluate: a) the frequency and importance of the social skills of the children, with 22 items ($\alpha = 0.91$); b) the frequency of problematic behaviors, with 14 items ($\alpha = 0.89$); and c) the academic competence of the students, with 9 items ($\alpha = 0.98$). In addition to assessing the general social skills score of the students, the scale answered by the teachers can measure the levels of Responsibility ($\alpha = 0.70$), Self-control ($\alpha = 0.70$), Assertiveness/Social Resourcefulness ($\alpha = 0.70$) and Cooperation/Affectivity ($\alpha = 0.70$) of the students. The behavioral problems of the students can also be evaluated in dimensions separated by the teachers, these being Externalizing Behavior Problems ($\alpha = 0.70$), Hyperactivity ($\alpha = 0.70$), and Internalizing Problems ($\alpha = 0.70$).

The School Performance Test (Teste de Desempenho Escolar – TDE) (Stein, 1994) is an individual application instrument that evaluates the fundamental skills for academic performance in three specific areas: reading, writing, and arithmetic. It was conceived and standardized to evaluate students from the 1st to the 6th grade of Elementary Education. Application of the subtest is interrupted by the applicator as soon as the items presented are challenging to resolve, with it presenting a Cronbach’s Alpha of 0.79.

2.3 Data collection and intervention procedures

The intervention consisted of 10 sessions with weekly frequency and duration of 60 minutes each. The first (T1) and the last (T2) sessions were for data collection; while the training was applied from the second to the ninth sessions. The intervention was applied by the first author of this study in the afternoon school period of the students. The techniques used were group experiences, self-monitoring.
ing, behavioral testing, modeling, relaxation, cognitive restructuring, and dialogic exposition. A detailed description of the intervention can be found in Souza (2018). With the CG, only the data collection was performed at the same time as the IG collection.

2.4 Ethical procedures

The study was performed after approval from the Research Ethics Committee of the Salgado de Oliveira University, under authorization number 2.001.230. The parents and teachers signed a consent form, and the children signed the assent form, according to the guidelines of resolution 466.2012.

2.5 Data analysis procedure

Initially, descriptive data analyses were performed to investigate whether the means of the IG and CG presented changes over time. In order to evaluate whether the differences observed in the means were statistically significant, Mixed Univariate Analysis of Variance (ANOVA) was performed for each construct investigated. In all the ANOVAs performed, the moment of collection (T1 and T2) and the affiliation of the participant group (control and intervention) were established as independent variables.

3. Results

When analyzing the Descriptive data of the Intervention Group (IG), it was observed that, as expected, after the intervention the participants presented an increase in the levels of the dimensions of empathy/affectivity and responsibility assessed by the participants, social resourcefulness assessed by the parents, self-control and cooperation/affectivity assessed by the teachers and in arithmetic and reading performance. Another result observed that was an expected outcome of the intervention was the reduction of the indexes of internalizing problems evaluated by the teachers. Despite these positive outcomes, some results were different than expected, such as an increase in scores for externalizing behaviors assessed by the parents, and for externalizing behavior problems and hyperactivity assessed by the teachers (Table 3.1, Figure 3.1 and 3.2).

Regarding the Control Group (CG), it was observed that from T1 to T2 the participants presented a decrease in the levels of empathy/affectivity and
assertiveness evaluated by the participants and affectivity/cooperation and civility evaluated by the parents. However, there was an increase in the indexes of responsibility and self-control evaluated by the parents, self-control evaluated by the teachers, externalizing behavior problems and hyperactivity evaluated by the teachers and improvements in writing, arithmetic and reading performance (Table 3.1, Figure 3.1 and 3.2).

In order to evaluate the results in-depth, mixed ANOVAs were performed in order to identify which of the differences of means observed were statistically significant. A significant interaction between the time (T1 and T2) and the condition of the participants with IG or CG in the Mixed ANOVA was observed for the dimension of internalizing problems evaluated by the teachers (F (1) = 17.7, p < 0.001, \( \eta^2 = 0.27 \)). These results showed that the IG presented a significant decrease in the presentation of internalizing problems evaluated by the teachers over time (MT1 = 1.1; SDT1 = 0.5; MT2 = 0.7; SDT2 = 0.3), differing significantly from the scores obtained by the CG (MT1 = 0.4; SDT1 = 0.4; MT2 = 0.4; SDT2 = 0.4).

The mixed ANOVA results of the reading performance dimension also showed a significant interaction between the time (T1 and T2) and the condition of the participants with IG or CG (F(1, 43) = 87.7; p < 0.001; \( \eta^2 = 0.64 \)). The findings of this interaction indicate that the IG showed a significant improvement in reading performance over time (MT1 = 39.0; SDT1 = 13.3; MT2 = 50.3; SDT2 = 12.8), differing significantly from the scores obtained by the CG (MT1 = 41.6; SD T1 = 16.1; MT2 = 44.8; SDT2 = 16.0). Finally, the Mixed ANOVA of the performance in the mathematics dimension showed that the two groups presented an improvement over time (F (1, 49) = 21.8; p < 0.001; \( \eta^2 = 0.31 \)). Based on these results, it can be observed that both the participants of the IG (MT1 = 13.7; SDT1 = 4.0; MT2 = 16.7; SDT2 = 3.6) and those of the CG (MT1 = 17.1; SDT1 = 3.8; MT2 = 19.1; SDT2 = 5.3) presented an increase in arithmetic skills.
Table 3.1. Descriptive Statistics of the Social Skills and Academic Performance Dimensions of the Participants Evaluated by themselves, by Parents and Teachers.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>IG</th>
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<tbody>
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<td></td>
<td>T1 M</td>
<td>SD</td>
<td>T2 M</td>
<td>SD</td>
<td>C. T.</td>
<td>T1 M</td>
<td>SD</td>
<td>T2 M</td>
<td>SD</td>
<td>C. T.</td>
<td>T1 M</td>
<td>SD</td>
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<td>1.4 0.4</td>
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<td>-</td>
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<td>1.6 0.3</td>
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<td>-</td>
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<td>1.1 0.5</td>
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<td>-</td>
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<td>-</td>
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<tr>
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<td>-</td>
<td>1.1 0.4</td>
<td>1.2 0.5</td>
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<td>+</td>
<td>1.5 0.4</td>
<td>1.3 0.5</td>
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<td>+</td>
<td>1.4 0.5</td>
<td>1.3 0.5</td>
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<td>1.1 0.3</td>
<td>+</td>
<td>1.4 0.5</td>
<td>1.4 0.5</td>
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<tr>
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<td>1.4 0.4</td>
<td>+</td>
<td>1.4 0.6</td>
<td>1.4 0.6</td>
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<td>0.3 0.5</td>
<td>0.4 0.5</td>
<td>+</td>
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<tr>
<td>IntP-Tea</td>
<td>1.1 0.5</td>
<td>0.7 0.3</td>
<td>-*</td>
<td>0.4 0.4</td>
<td>0.4 0.4</td>
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<tr>
<td>AcC-Tea</td>
<td>3.5 0.9</td>
<td>3.5 1.0</td>
<td>-</td>
<td>3.6 0.9</td>
<td>3.6 0.9</td>
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<tr>
<td>WritP</td>
<td>19.0 7.6</td>
<td>19.0 7.4</td>
<td>+</td>
<td>22.6 7.4</td>
<td>23.4 8.3</td>
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<tr>
<td>MathP</td>
<td>13.7 4.0</td>
<td>16.7 3.6</td>
<td>+*</td>
<td>17.1 3.8</td>
<td>19.1 5.3</td>
<td>+</td>
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<tr>
<td>ReadP</td>
<td>39.0 13.3</td>
<td>50.3 12.8</td>
<td>+*</td>
<td>41.6 16.1</td>
<td>44.8 16.0</td>
<td>+</td>
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</table>

Note: IG = Intervention Group; CG = Control Group; T1 = First collection moment; T2 = Second moment of collection; C. T. = Comparisons over Time; * = p <0.05; + = Increase in scores; – = Decrease in scores; Emp/Aff-P = Empathy/Affectivity assessed by the Participants; Resp-P = Responsibility assessed by the Participants; SCon/Civ-P = Self-control/Civility assessed by the Participants; Ass-P = Assertiveness assessed by the Participants; Resp-Parents = Responsibility assessed by the Parents; SCon-Parents = Self-control assessed by the Parents; Ass/SocRes-Parents = Assertiveness/Social Resourcefulness assessed by the Parents; Civ-Parents = Civility assessed by the Parents; ExtBP-Parents = External Behavior Problems assessed by the Parents; IntP-Parents = Internalizing Problems assessed by the Parents; WritP = Writing Performance; MathP = Mathematics Performance; ReadP = Reading Performance.
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Figure 3.1. Intervention Group and Control Group scores at T1 and T2.

Note: T1–IG = Intervention Group Participants’ scores at the First Study Moment (T1); T1–CG = Control Group Participants’ scores at the First Study Moment (T1); T2–IG = Intervention Group Scores at Second Study Moment (T2); T2–CG = Participants’ scores of the Control Group at the Second Study Moment (T2); Emp/Aff–P = Empathy/Affectivity assessed by the Participants; Resp–P = Responsibility assessed by the Participants; SCon/Civ–P = Self-control/Civility assessed by the Participants; Ass–P = Assertiveness assessed by the Participants; Resp–Parents = Responsibility assessed by the Parents; SCon–Parents = Self-control assessed by the Parents; Coop/Aff–Parents = Cooperation/Affectivity evaluated by the Parents; Ass/SocRes–Parents = Assertiveness/Social Resourcefulness evaluated by the Parents; Civ–Parents = Civility evaluated by the Parents; ExtBP–Parents = Externalizing Behavior Problems assessed by the Parents; IntP–Parents = Internalizing Problems evaluated by the Parents.
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Figure 3.2. Intervention Group and Control Group scores at T1 and T2.

Note: T1–IG = Intervention Group Participants' scores at the First Study Moment (T1); T1–CG = Control Group Participants' scores at the First Study Moment (T1); T2–IG = Intervention Group Scores at Second Study Moment (T2); T2–CG = Participants' scores of the Control Group at the Second Study Moment (T2); Resp–Tea = Responsibility assessed by the Teachers; SCon–Tea = Self-control evaluated by the Teachers; Ass/SocRes–Tea = Assertiveness/Social Resourcefulness assessed by the Teachers; Coop/Aff–Tea = Cooperation/Affectivity assessed by the Teachers; ExtBC–Tea = Externalizing Behavior Problems evaluated by the Teachers; Hyp–Tea = Hyperactivity assessed by the Teachers; IntP–Tea = Internalizing Problems evaluated by the Teachers; AcC–Tea = Academic Competence evaluated by the Teachers; WritP = Writing Performance; MathP = Mathematics Performance; ReadP = Reading Performance.

4. Discussion

The results obtained by the IG are in agreement with the literature that children who undergo SST benefit from the acquisition of social skills (Michelson et al., 2013, Del Prette & Del Prette, 2017). The social skills factors that appeared to be more developed for the children at T2 were: affectivity and responsibility. In the evaluation of the teacher, the skills most present were those related to cooperation and self-control. The parents also noticed changes linked to social resourcefulness, a factor that assesses the students' ability to position themselves adequately in
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social settings, defending their points of view, as well as asking questions to the teacher or adults and greeting people. Social Skills Training can favor better performance in social interactions. Positive interaction with peers from childhood can affect children’s future interactions, making them more confident and skilled in conflict resolution, and can also act in a preventive way in aggressiveness (Marturano et al., 2014). These results corroborate the study of Elias and Amaral (2016) with Elementary Education students who, after the intervention, presented gains in skills that favor social interactions.

A favorable difference was found in the Intervention Group (IG) concerning the Control Group (CG). It was noticed that the IG presented improvements, leading to the reduction of behavior problems and better academic performance. The T2 data for the IG reveal improvements in internalizing behavior problems that are behaviors indicative of anxiety, sadness, loneliness, and low self-esteem (Achenbach, 1991). In general, they occur due to a low social skills repertoire, mainly in the expression of feelings and in the resolution of conflicts, which can generate psychological disorders such as depression and isolation, with the risk of these problems enduring throughout the life of the individual (Cia & da Costa, 2017). There was also a decrease at T2 in the means of externalizing behavior problems according to the teacher, which involve physical or verbal aggression and a lack of mood control, as well as an improvement in the hyperactivity factor that involves behaviors of restlessness and excessive movement. Particularly in areas of social vulnerability, behavioral problems that involve aggression are frequently present in the surroundings and also in the school environment. Violence is a complex social phenomenon because it is related to diverse socio-cultural, ideological, and political issues and concerns general conditions of existence, work, and sociability (Paula et al., 2014). The reduction of these problems composes one of the most significant challenges for educators.

For the CG, the T2 results indicate a less developed repertoire for empathy/affectivity and assertiveness by the participants. This result seems to be associated with those of the parents and teachers, who perceived them with fewer skills related to interactions, such as affectivity, cooperation and civility (parents), while at the same time highlighting the increase in externalizing problems and hyperactivity (teachers). In general, externalizing behavior problems occur due to a low social skills repertoire, mainly in the expression of feelings and in the resolution of con-
conflicts. At school, children experience innumerable situations of interaction and conflicts daily, where they need to be assertive, exercise self-control, have a clear concept of civility and develop empathy (Cia & da Costa, 2017). In this respect, universal intervention programs could be replicated in all schools in the country, especially in schools in areas with a greater history of violence, aggressive behavior and school failure (Casali-Robalinho et al., 2015). Social Skills Training can be used as a tool to improve social interactions and minimize the behaviors of indiscipline, as highlighted in the study by Faijão et al. (2015). The CG presented improvement in writing, arithmetic, and reading, increased responsibility and self-control according to the parents, even though they were not submitted to any intervention, which is probably explained by the work performed by the school. Also, concerning the CG, there was a decrease in civility reported by the parents. Civility involves respect for rules, use of skillful words, notions of rights and duties, and care for the local environment. The school in question had many complaints regarding this, which was one of the skills chosen for the intervention.

For the CG, there was also an increase in the incidence of externalizing behavior problems and hyperactivity. Accordingly, because this was an intervention in a public school of an area of social vulnerability, where one can perceive a more serious picture of externalizing behavior problems that involve aggressive behavior, among other factors, the decrease in externalizing problems in the IG and the increase of the same factor in the CG may indicate the effectiveness of the intervention, in which any improvement, even if discrete, can be considered relevant (D’Abreu & Marturano, 2010). A similar result was found in the study conducted by Gonçalves and Murta (2008) with children of low socioeconomic status, whose parents complained about the aggressive behavior of their children. The training proved to be effective in promoting significant changes concerning externalizing behavior problems and the interpersonal relationship according to the evaluation of students, parents, and classmates. These results validate the idea that children undergoing SST have fewer behavioral problems than those who do not participate in the training, demonstrating social skills as protective for contexts of social vulnerability (Noltemeyer & Bush, 2013).

Regarding the assumption that children submitted to SST present better academic performance than children who do not undergo this training, the data show that the IG obtained better results than the CG. It has been noted that the
expansion of the social-emotional skills repertoire can promote improvements in the academic performance of the students, as found in the study of Lopes, Del Prette and Del Prette (2013). Reading, writing, and arithmetic skills have been of great interest to Psychology, because problems in this area can affect social inclusion and, consequently, harm students' self-concept and self-efficacy (Abed, 2016, Del Prette & Del Prette, 2017). It was observed that the IG participants showed an improvement in their reading skills, superior to that of the CG participants. For mathematics, there was no difference between the groups, since they both presented increases in their abilities. For writing, there was no significant change in either group.

Concerning reading, the change can be attributed to training that also worked on academic, social skills that involved soliciting help; identifying difficulties; working in groups; working on the focus and working with discipline. Similar results were found in the study by Schonfeld et al. (2015) who, after conducting an intervention study with 24 schools located in areas with high levels of social vulnerability, observed an improvement in reading tests for the IG, corroborating the understanding that SST can act on the prevention and reduction of school failure and its impact on the future lives of the students (Lopes et al., 2013, Noltemeyer & Bush, 2013). The results of the arithmetic test are possibly the result of the influence of other variables, such as the specific work of the school with all the classes, considering that the change for the better also happened with the CG, who did not receive the intervention.

The present study corroborated the idea that children who undergo Social Skills Training (SST) present better repertoires of social skills in the post-training test than those who do not participate in the training. These findings add to the evidence presented in interventions with schoolchildren that showed improvements in different variables associated with social skills (Elias & Amaral, 2016; Schonfeld et al., 2015).

According to the previous studies already mentioned, the results of the present study highlight a decrease in behavioral problems and an improvement in academic performance after the SST, corroborating that social skills affect academic performance and behavior problems (Martin et al., 2007; Feitosa et al., 2009; Lopes et al., 2013; Schonfeld et al., 2015). Also, these findings contribute to the evidence that SST is an essential tool for the protection and prevention of ev-
everyday school problems, increase in social skills, promotion of healthy development of the student, and improvement of academic performance (Cia & da Costa, 2017).

Finally, this study aimed to verify the effect of a Social Skills Training program on the behavioral problems and school performance of students of the fifth year of Elementary Education I, divided into intervention and control groups, who live and study in socially vulnerable areas. The results indicate the effectiveness of the training with this population. The majority of the participants obtained gains from the intervention according to the children themselves, their parents, and teachers. Although the CG presented improvements in a few items, they presented lower scores in most of the variables studied compared to the IG.

Confirming previous studies, it can be inferred that SST presents itself as an essential tool to be used in the school context. In this space, daily, children experience numerous situations of interaction and conflict resolution, in which they need to be assertive, exercise self-control, have a clear concept of civility and develop empathy. Accordingly, SST programs could be replicated in all schools in the country, especially those in areas of social vulnerability. Actions more focused on the full development of the child, not only the development of the intellect, but also social and psychic aspects are already contemplated in Brazilian legislation. However, they must find ways to be effective.

As limitations of the study, we can highlight the fact that the research was carried out in a single school unit in the city of Rio de Janeiro and with only one class for intervention; also, due to having included only the fifth year, the age and the stage of development of the children in which the intervention was applied were restricted. Studies such as these can be replicated in other grades and socio-economic realities for comparison purposes. The study collaborates with the confirmation of the effectiveness of SST in the school context, specifically in contexts of situations considered more adverse and of difficult control, as well as proposes a model for intervention in schools that can be replicated in other educational units.

References

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