Social and Educational Skills Program with Elementary School Teachers

Adriana Pinheiro Serqueira[1]
Vanessa Barbosa Romera Leme[1, 2]
Patrícia Lorena Quiterio[1]
Ana Maria Nunes El Achkar[2]

[1]*Universidade do Estado do Rio de Janeiro, UERJ, Rio de Janeiro, Brasil*
[2]*Universidade Salgado de Oliveira, UNIVERSO, Niterói, Rio de Janeiro, Brasil*

Abstract
The study evaluated the effects of a Social and Educational Skills Program on the repertoire of social skills, educational social skills, and self-efficacy beliefs in teachers. Participants included 45 teachers who taught at the final grades of elementary school, in public schools in the state of Rio de Janeiro. Participants were allocated by convenience into 2 groups: intervention (n=22) and control (n=23). The program consisted of 10 meetings, with pre-test and post-test measures. The teachers responded to the following instruments: Social Skills Inventory, Educational Social Skills Inventory-teacher, Teacher Self-Efficacy Scale, and Socioeconomic Questionnaire. Results indicated that the intervention promoted the repertoire of social and educational skills of teachers and increased teaching self-efficacy beliefs. It was concluded that the intervention showed some indicators of efficacy, signaling the interpersonal development of the educators. Future research should include accompanying measures and experimental design.
Keywords: social skills; self-efficacy; elementary school teachers; social skills training.

Programa de Habilidades Sociais e Educativas com Professores do Ensino Fundamental

Resumo
O estudo avaliou os efeitos de um Programa de Habilidades Sociais e Educativas no repertório de habilidades sociais, habilidades sociais educativas e nas crenças de autoeficácia docente. Participaram do estudo 45 professores que lecionavam nos anos finais do Ensino Fundamental, em escolas públicas no Estado do Rio de Janeiro. Os participantes foram alocados por conveniência em dois grupos: intervenção (*n* = 22); controle (*n* = 23). O programa foi composto por 10 encontros, com medidas de pré-teste e pós-teste. Os professores responderam aos instrumentos: Inventário de Habilidades Sociais, Inventário de Habilidades Sociais Educativas-professor, Escala de Autoeficácia Docente e Questionário Socioeconômico. Os resultados indicaram que a intervenção promoveu o repertório de habilidades sociais e educativas dos professores e aumentou as crenças de autoeficácia docente. Conclui-se que a intervenção evidenciou alguns indicadores de efetividade, sinalizando o desenvolvimento interpessoal dos educadores. Futuras pesquisas deverão incluir medidas de seguimento e delineamento experimental.
Palavras-chave: habilidades sociais, autoeficácia, professores do ensino fundamental, treinamento de habilidades sociais

Programa de Habilidades Sociales y Educativas con Docentes de Educación Primaria

Resumen
El estudio evaluó los efectos de un programa de habilidades sociales y educativas sobre el repertorio de habilidades sociales educativas y las creencias de autoeficacia de los profesores. El estudio incluyó a 45 profesores que enseñaban en los últimos años de la Educación Primaria en escuelas públicas del Estado de Río de Janeiro. Los participantes fueron asignados por conveniencia en dos grupos: intervención (n=22); control (n=23). El programa se compuso por 10 reuniones, con medidas pre test y post test. Los docentes respondieron a los instrumentos: Inventario de Habilidades Sociales; Inventario de Habilidades Sociales Educativas-docente; Escala de Autoeficacia Docente; Cuestionario Socioeconómico. Los resultados indicaron que la intervención promovió el repertorio de habilidades sociales y educativas de los docentes y aumentó las creencias de autoeficacia docente. Se concluye que la intervención evidenció algunos indicadores de efectividad, señalando el desarrollo interpersonal de los educadores. Futuras investigaciones deben incluir medidas de seguimiento y diseño experimental.
Palabras clave: habilidades sociales; autoeficacia; profesores de educación primaria; entrenamiento de habilidades sociales.

In recent years, there have been substantial problems in Brazilian public education, from precarious physical conditions of schools to deficiencies in the initial and ongoing teacher training, interfering with school results and the mental health of the school community (Ivenicki, 2019). In this scenario, schools, which are places were citizenship is learned, have also been considered spaces where students are unable to learn, which ends up making them producers and reproducers of school failure (Pozzobon, Mahendra, & Marin, 2017). However, the research highlights that the relationships between students and teachers characterized

http://dx.doi.org/10.1590/1413-82712022270107

by respect for differences and reciprocity, without the presence of different forms of oppression favor the academic and socioemotional performance of students (Abed, 2016; Mariano & Bolsoni-Silva, 2018; Yunes, Fernandes, & Weschenfelder, 2018).

One possible way to approach this issue is to provide ongoing training for teachers focused on their interpersonal development, considering the social character of the teaching and learning process (Cintra & Del Prette, 2019; Lessa, Felício, & Almeida, 2017). The school routine is crossed by interpersonal demands, such as episodes of bullying and other forms of discrimination and violence that require teachers to have relational skills in addition to specific teaching techniques for academic content (Yunes et al., 2018). This way, actions aimed at teacher training can foster resignification, the overcoming of inequalities, and the promotion of inclusive and democratic environments of multiple cultures in school contexts. (Ivenicki, 2019).

Rosin-Pinola, Marturano, Elias, and Del Prette (2017) emphasize that by using deliberately planned pedagogical practices, teachers can teach social skills to their students, contributing to the students' academic and socio-emotional learning. According to A. Del Prette and Del Prette (2017), social skills are a descriptive concept of learned and valued behaviors (e.g., expressing opinions and criticizing) in a given culture within a social and historical context, which contribute to positive relationships for people, their group, and their community. Social skills can be understood from the different social roles that the individuals take on their course of life. Thus, for example, specific social skills are expected in the relationships between teachers and students, such as organizing interactive activities among students, and praising and correcting behaviors in a non-aggressive way. The latter are called teachers' educational social skills and include intentional behaviors of educators aimed at students to promote development and learning (A. Del Prette & Del Prette, 2017; Z. Del Prette & Del Prette, 2008).

Several studies have shown that teachers who use social skills at school go beyond the idea of a mere transmission of content, favoring relationships that are guided primarily by dialogue, affection, and solidarity patterns among individuals, contributing to the strengthening of human rights (Achkar, Leme, Soares, & Yunes, 2016; Mariano & Bolsoni-Silva, 2018; Yunes et al., 2018). In this direction, Motta et al. (2017) when conducting a program, with a quasi-experimental design to promote empathy social skills in 12 public and private elementary school teachers from the early years of Elementary School (ES), found that teachers had higher levels of empathy with a significant difference compared to pre-testing. In another study, Lessa et al. (2017) implemented an intervention, with an A-B-A-type experimental design, in which behavior is observed during a baseline control period (A), during the intervention (B), and also in a second baseline period, after the intervention (A), focusing on the social ability to give positive and negative feedback with a 5th-grade teacher in a public school. The results indicated an increase in the amount of positive feedback after the intervention, compared to baseline.

Aiming at the development of educational social skills, Rosin-Pinola et al. (2017) evaluated a training program with 40 teachers from the early years of ES in public schools. The teachers were divided into 2 classes (A and B) based on different teaching procedures. In class A, homework was requested orally from the participants, which were reported at the next meeting. In class B, the teachers had access to the researcher by e-mail to answer questions about the homework and also received a paper form to describe the task. The results of the post-test indicated that in class A there was an increase in educational social skills of organizing the physical environment and exposing and explaining interactively, while in class B participants showed an increase in all factors of the socio-educational skills assessed. Finally, Cintra and Del Prette (2019), using intervention research, analyzed the efficacy and effectiveness of an ongoing semi-presential education to promote the social skills of 11 teachers in the early years of ES in a public school. Among the results, there was a significant increase in the social skills of self-exposure to strangers, in sexual-affective-assertiveness, and in total post-test scores.

In general, the revised interventions that focused on the promotion of teachers' social and educational skills indicated positive results in the interpersonal development of teachers (Cintra & Del Prette, 2019; Lessa et al., 2017; Motta et al., 2016; Rosin-Pinola et al., 2017). Teacher intervention programs have also been linked to increased self-efficacy beliefs (Jennings et al. 2013; Kleinsasser, 2014). In proposing the Social Cognitive Theory, Bandura (1997) supports self-efficacy as a central mechanism for motivation, well-being, and setting goals for the future. Self-efficacy refers to the individual's beliefs in their current abilities and skills to organize and conduct actions in a specific domain or context (Bandura, 1997).

In the educational field, the concept of teaching self-efficacy is understood as the belief that teachers hold about their own instructional capabilities and to favor the learning, even in difficult situations and with unmotivated students (Tschannen-Moran & Hoy, 2001). At the international level, Jennings et al. (2013) evaluated an intervention to promote socioemotional skills, involving stress management, mindfulness strategies, self-regulation, and expression of feelings with 53 teachers who taught in elementary and high school. The program, designed experimentally, indicated that the intervention group had higher levels in the total teaching self-efficacy scores and in the factors 'efficacy in student engagement' and 'efficacy in post-test instructional strategies', in addition to more well-being and less perceived stress.

Although this intervention was not conducted with the objective of developing social and educational skills, it evidenced the impact of interpersonal development on the teaching self-efficacy beliefs. According to Bandura (1997), direct experiences of success are the main and strongest sources of self-efficacy beliefs. In view of this, interventions focused on promoting social and educational skills can contribute to the practice of teachers, making them more confident in their self-efficacy beliefs and contributing to their choices throughout the development of their work activities.

Thus, the teachers' self-efficacy beliefs positively influence the selection of appropriate and innovative teaching strategies, the establishment of goals, and the consistency of teachers in the pursuit of objectives, contributing to the motivation, academic performance, and well-being of their students (Bandura, 1997; Casanova & Azzi, 2015; Fackler & Malmberg, 2016). Thus, it is observed that teachers with self-efficacy beliefs manage adversities better, adapt more easily to changes, (whether curricular or structural), becoming more engaged, persistent, and committed to more effective classroom strategies (Rodrigues & Iaochite, 2018).

Regarding the levels of education in the Brazilian school context, all the revised interventions were conducted with teachers from the early years of ES, and no investigation was identified with teachers who worked in the final years of ES. As reported in the 2018 School Census conducted by the National Institute of Educational Studies and Research Anísio Teixeira (INEP), the final years of ES have the highest rates of dropout/withdrawal, failure, and age-grade distortion compared to other educational levels. Also, no study at the national level that sought to evaluate the effects of a social and educational skills program on teachers' self-efficacy beliefs was found in the literature review. Therefore, the need for research to fill this gap is highlighted, enabling teachers to focus on their interpersonal development critically and reflectively. Thus, the present study evaluated the effects of a Social and Educational Skills Program on the repertoire of social skills, educational social skills, and teaching self-efficacy beliefs.

Method

Participants

The intervention is characterized as a pilot study, with a quasi-experimental design (Cozby, 2003), composed of pre-test and post-test evaluation. Participants included 45 teachers, aged between 29 and 65 years (M = 42.44; SD = 8.55), mostly women (N = 33, 73.3%). The educators taught in the final years of the ES (6th to 9th grade), in 14 public schools distributed in a municipality in the state of Rio de Janeiro. All participants had been working on average for 13 years (SD = 8.58) and most taught mathematics (n = 9) and Portuguese (n = 9), followed by history (n = 7), and the rest, geography (n = 5), science (n = 5), English (n = 3), art education (n = 4), and physics (n = 3). All participants had completed higher education in different areas, most of them in history, mathematics, and languages, and 66.6% had complete postgraduate studies.

Teachers were allocated for convenience into 2 groups: intervention (IG, n = 22); and control (CG, n = 23). During the intervention, IG teachers had no contact with CG teachers. The IG educators taught in a single municipality, while most CG teachers worked in 2 other separate municipalities. Only two CG teachers taught in the same municipality where the work with the IG was developed and yet, they developed their work activities in different schools. As inclusion criteria, teachers who taught in the final years of ES and for the same classes since the beginning of the school year were able to participate in the IG. This criterion was adopted to ensure that teachers were aware of the interpersonal demands of their classes and thus were able to use the social and educational skills developed in the intervention with their students.

Instruments

Demographic questionnaire. Instrument designed for this study in order to investigate participants' social and demographic information, such as name, age, sex, schooling, subject taught, and time of experience.

Social Skills Inventory (IHS-DEL-PRETTE). It is a self-report evaluation tool developed by Z. Del Prette and Del Prette (2009), which investigates the social skills of individuals between 18 and 25 years old in different situations such as work, school, family. The IHS contains 38 items with alternative answers arranged on a five-point Likert scale, ranging from "Never or seldom" (0) to "Always or almost always" (4). The IHS has 5 factors, with the following internal consistency indexes in the validation sample: (1) Risk Coping and self-affirmation (α = 0.77); (2) Self-exposure in the expression of positive affection (α = 0.75); (3) Conversation and social resourcefulness (α = 0.74); (4) Self-exposure to strangers (α = 0.81); (5) Self-control of aggressiveness (α = 0.77). The psychometric analysis of the IHS-Del-Prette indicated, test and retest stability (r = 0.90, p = 0.001) and concomitant validity with the Rathus Inventory (r = 0.79, p = 0.01).

Inventory of Educational Social Skills - Teachers (IHSE-Pr). It is a self-report inventory, developed by Z. Del Prette and Del Prette (2013), with 64 items that describe social behaviors presented in the relationship with the students, answered by the teachers on a Likert-type scale, which ranges from "never or almost never "(0) to" always or almost always "(4). The items on the scale were elaborated based on the Educational Social Skills Categories System, proposed by Z. Del Prette and Del Prette (2008). The preliminary psychometric properties, including determining the factorial structure of the inventory and obtaining internal consistency indexes, were assessed in a sample of 513 teachers of students from kindergarten (2 years old) until the end of high school (around 17 years). The instrument consists of 2 scales, with the following internal consistency indexes in the validation sample described as follows: Scale 1, 'Organize Interactive Activity', has 14 items and produces a total score (α = 0.95) and 3 factorial scores: F1- Give instructions on the activity (α = 0.75); F2 - Select, make available materials and content (α = 0.80); F3 - Organize the physical environment (α = 0.73); and Scale 2, 'Conduct interactive activity', has 50 items and produces a total score (α = 0.94) and 4 factor scores: F1 - Cultivating affection, support, and good mood (α = 0.89); F2 - Exhibit, explain and evaluate interactively (α = 0.89); F3 - Approve, value behaviors (α = 0.84); F4 – Disapprove, restrict, correct behaviors (α = 0.85).

Teacher Self-Efficacy Scale - Short version. This scale was developed by Casanova (2013) based on Tschannen-Moran and Hoy (2001) and aims to identify the perception of teaching self-efficacy. It consists of 12 items, in a 10-point Likert format, ranging from "not at all capable" (1) to "very capable" (10), organized in 3 dimensions, with satisfactory internal consistency indexes: (1) efficacy in instructional strategies (α = 0.81); (2) efficacy in classroom management (α = 0.81); (3) efficacy in student engagement (α = 0.80). The internal consistency of the total scale was α = 0.91.

Social and Educational Skills Program (PHS & E). It consisted of 10 weekly meetings, lasting approximately 2 hours each. The meetings were held at a school designated by the Education Department with easy access, located in a central region, to ensure the attendance of teachers at the program. The principal of the school provided a well-ventilated, air-conditioned, and silent video room near the toilets. To increase the likelihood of teacher participation in the intervention, the researcher provided 2 options of dates for the training of the IG. In order for the groups to receive the same intervention and be faithful to the content worked in the meetings, a previous plan was prepared with themes, objectives, and techniques for each meeting, which can be accessed at (HIDDEN).

The selection of social skills and educational social skills to perform the intervention occurred based on the literature review (Rosin-Pinola et al., 2017; Z. Del Prette & Del Prette, 2017) and the round of conversation. The topics highlighted in the round of conversation (e.g., human rights, self-control, violence, and indiscipline) were worked on during the meetings together with social and educational skills, which followed an increasing order of complexity as recommended by A. Del Prette and Del Prette (2017).

The themes, social and educational skills, and objectives developed in each meeting were: (1) "Hurry up, the program will start!" - included the administration of the pre-test and, later, the presentation of basic concepts about the theoretical-practical social skills; (2) "Who I am as a teacher" - focused on self-monitoring, self-control, self-knowledge, and expressing emotions; (3) "Reversing roles in the school context" - worked on empathy, cultivating affection, support, and good mood; (4) "Great job! I am very proud of your performance in the task!" - focused on approving and valuing behaviors, expressing positive feelings, praising and being praised, explaining and differentiating positive and negative feedback; (5) "Okay, break it up! Don't fight! You two, to the principal's office!" - worked on disapproving, restricting, and correcting behaviors, values of coexisting and human rights; (6) "Principal, I

know you would like me to be present at this last-minute meeting, but at this moment I need to finish correcting the tests" - focused on assertiveness and differentiation from aggressiveness and passivity; (7) "Teacher, I know that you have already given all the explanations. But ... Can the test be with consultation?" - worked making and refusing abusive requests; (8) "How long will you behave this way? Who do you think I am?" - emphasized expressing dissatisfaction and asking for behavior change in an assertive way; (9) "You back there, go back to your seats!" - developed to give instructions on activities, conduct interactive activities, solve interpersonal problems, and conflict mediation in the classroom in an assertive way; (10) "Thank for your participation in PHS&E, teacher" – moment in which the post-test evaluation and a social gathering were conducted.

Each meeting followed a structure previously programmed in 3 parts. In the first part, the facilitators welcomed the group and recapped the previous meeting. Then there was a dialogue about the weekly interpersonal task (WIT), in which some participants distorted the situations they had managed to apply to the content of their difficulties. Thus, facilitators and participants critically discussed alternative solutions, and participants were encouraged to act in some situations related to the WIT, using role playing to practice the social and educational skills that were the focus of the previous meeting.

In the second part of the meeting, it was time to present the theme of the day, starting with a dynamic or practice for the teachers to reflect on the subject, dialogue with each other, and express their feelings, thoughts, and opinions. At this point in the meeting, there was also a presentation and discussion in small groups of excerpts from films and TV programs, as well as music lyrics that dealt with everyday school life. In the last part, it was conducted a written and oral assessment of the participants and the WIT was explained. The participants received a task composed of a sheet for self-registration of situations, behaviors, thoughts, and feelings related to social and educational skills when they met.

Procedures

Data collection

The study was presented to the Department of Education of the municipality (HIDDEN), which authorized the study with the teachers of the 2 final years of ES. The study was then submitted and approved by the Research Ethics Committee of the University (HIDDEN) under approval number (HIDDEN). All participants signed a Free and Informed Consent Form before the intervention. Next, the Department of Education sent an official letter to all the schools in the municipality, inviting the teachers who worked with the final years of ES to participate in a lecture on social skills and mental health at school, followed by a round of conversation. These activities were conducted by facilitators (first author and third author) in a classroom of a school indicated by the municipal Department of Education and lasted 2 hours. In the end, the teachers responded to a registration form and a form requesting suggestions on topics that could be addressed in the intervention. Of the 20 educators present, 10 participated in the intervention, the rest were recruited from social networks by an invitation to participate in the intervention with a link to access a Google Docs form and register.

The program was conducted by 2 facilitators who had previously participated in a training program involving both theoretical activities, such as participation in study groups on the implementation and evaluation of social skills programs and indicators of risk and protection in the school context, and practical activities, such as offering courses, lectures, and workshops for students and teachers in public schools. The participants of the CG and the IG completed the instruments at the same time. After data collection was completed, the facilitator held lectures and workshops on the intervention themes for the teachers who composed the CG. Thus, the CG was a wait control group and received no additional training. Lectures were also held in the participating schools with students, teachers, and other participants from the school context for data feedback.

Data Analysis

For data analysis, the global and scale scores obtained from the instruments were entered into a database for statistical analysis (SPSS, version 22.0). First, the normality assumption (Kolmogorov-Smirnov test) for parametric analysis was evaluated and confirmed. Next, the IG and CG were compared, in relation to the factors and the total of the pre-test instruments, using the Student's t test. Next, descriptive statistics (mean and standard deviation) were processed and the Student's t test was used for repeated measures to compare the intragroup means with instrument data. To measure the effect size (magnitude of the difference between the 2 conditions), Cohen's d coefficient was used. To

interpret the Cohen's d effect size, the following values were adopted: <0.20 to 0.50 = low; > 0.50 to <0.80 = moderate; > 0.80 = large (Dancey & Reidy, 2013).

Results

The analyses indicated that the groups were equivalent in relation to the variables investigated, that is, there was no significant statistical difference between the groups before the intervention: (1) social skills F1 (M = -0.40, SD = 10.16, t = -0.18, p = 0.85); F2 (M = -0.45, SD = 5.14, t = -0.41, p = 0.68); F3 (M = 0.13, SD = 6.41, t = 0.10, p = 0.92); F4 (M = 1.31, SD = 4.16, t = 1.48, p = 0.15); F5 (M = 0.22, SD = 2.59, t = 0.41, p = 0.68); total (M = 0.81, SD = 21.14, t = 0.18, p = 0.92); (2) educational social skills Scale 1: F1 (M = 1.00, SD = 5.56, t = 0.84, p = 0.40); F2 (M = 0.77, SD = 5.83, t = 0,62, p = 0,54); F3 (M = 1,40, DP = 4,90, t = 1,37, p = 0,19); total Scale 1(M = 3.18, SDP = 13.93, t = 1.07, p = 0.29); Scale 2: F1 (M = -0.04, SD = 12.69, t = -0.01, p = 0.98); F2 (M = -0.68, SD = 15.28, t = -0.20, p = 0.83); F3 (M = -0.27, SD = 8.57, t = -0.14, p = 0.88); F4 (M = -0.86, SD = 4.83, t = -0.83, p = 0.41); total Scale 2 (M = -1,86, SDP = 35.22, t = -0.24, p = 0,80); total educational social skills (M = 1.68, SD = 43.73, t = 0.16, p = 0.86); teacher self-efficacy: F1 (M = 0.01, SD = 4.85, t = -0.24, p = 0.80); F2 (M = -0.50, SD = 4.26, t = -0.55, p = 0.58); F3 (M = 0.68 SD = 6.12, t = 0.52, p = 0.60); total (M = 0.18, SD = 12.88, t = 0.66, p = 0.94).

Table 1 presents the comparisons between the IG and CG groups, referring to the factors and the total social skills. The data showed that after the intervention, the IG appeared with a statistically significant difference, more social skills in Factors 1, 2, and 5, and Total. There were no significant differences for the CG before and after the wait. Regarding the effect size, all significant statistical differences were from moderate to large magnitudes.

Table 2 presents the comparisons between the IG and CG for educational social skills. On Scale 1, we observed that IG showed more educational social skills in Factors 2 and 3 after the intervention. On Scale 2, the IG showed more non-post-test educational social skills in Factors 1, 4, and in Total. Finally, the CG showed less educational social skills after the wait on Factor 4. Regarding effect size, most of the statistically significant differences are of moderate magnitude.

Table 3 shows the comparisons between the IG and CG for teaching self-efficacy beliefs. We observed that the IG showed a statistically significant difference, with more self-efficacy in Factors 1, 3, and Total, in the post-test. There were no significant differences after the wait for the CG. Regarding the effect size, the significant statistical differences are from low magnitude.

Table 1.
Results of Social Skills Before and After Intervention (Intervention Group) and Wait (Control Group)

Social Skills	Intervention Group (n=22)				Control group (n=23)			
	Pre	Post	*t*	Cohen's d	Pre	Post	*t*	Cohen's d
F1- Coping and assertiveness...	24.45 (7.26)	32.00 (5.35)	-6.51*	1.18	24.74 (7.35)	24.96 (6.65)	−0.24	0.03
F2 – Assertiveness the expression...	23.05 (3.18)	25.68 (2.45)	-5.47*	0.92	23.48 (2.95)	22.35 (3.44)	1.98	0.35
F3- Conversion and social resourcefulness	18.77 (4.83)	18.36 (4.27)	0.36	0.08	18.48 (4.55)	18.43 (4.95)	0.06	0.01
F4- Self-exposure to strangers...	10.95 (3.06)	10.50 (2.90)	0.82	0.12	9.78 (2.33)	10.26 (2.34)	-0.93	0.20
F5- Self-control of aggressiveness	9.23 (1.97)	10.59 (1.62)	-3.52*	0.75	9.04 (1.82)	8.13 (2.20)	2.14	0.45
Total	86.45 (15.90)	97.14 (10.86)	-4.76*	0.78	85.52 (12.69)	84.13 (13.46)	0.79	0.18

Note. M = Mean. SD = Standard deviation. t = Student's t value. Cohen's d = effect size.

*p < 0.05.

Table 2.
Results of Educational Social Skills Before and After Intervention (Intervention Group) and Wait (Control group)

Social-Educational skills - Teachers	Intervention Group (n=22)				Control Group (n=23)			
	Pre	Post	*t*	Cohen's *d*	Pre	Post	*t*	Cohen's *d*
Scale 1								
F1- Give instructions...	18.64 (4.39)	18.77 (4.19)	-0.20	0.03	17.48 (4,22)	17.57 (4.89)	-0.15	0.01
F2 – Select, make available...	9.27 (3.86)	13.82 (2.17)	-6.56*	1.45	8.61 (4.02)	8.74 (4.22)	-0.22	0.03
F3- Organize the environment...	10.05 (3.19)	12.32 (2.60)	-3.63*	0.78	8.48 (3.30)	8.57 (3.36)	-0.38	0.02
Total Scale 1	37.95 (9.42)	39.05 (10.32)	-0.92	0.11	34.57 (9.86)	35.57 (10.18)	-0.81	0.09
Scale 2								
F1- Cultivate affectivity...	40.55 (8.19)	44.95 (7.42)	-6.25*	0.56	40.43 (7.95)	38.30 (8.49)	2.04	0.25
F2- Expose. explain...	37.41 (8.78)	42.41 (7.87)	-7.41	0.59	37.78 (10.61)	35.39 (9.27)	1.37	0.23
F3- Approve, value..	40.55 (7.52)	42.41 (6.52)	-1.62	0.26	40.83 (6.19)	40.65 (8.46)	0.15	0.02
F4- Disapprove restrict...	31.77 (3.62)	34.14 (2.43)	-5.64*	0.76	32.65 (3.36)	25.52 (7.69)	4.26*	1.20
Total Scale 2	150.27 (24.94)	163.91 (21.34)	-6.99*	0.58	151.70 (23.02)	146.74 (26.66)	1.47	0.19
Total	188.77 (32.68)	202.95 (30.26)	-5.46	0.45	186.57 (31.30)	182.96 (35.46)	0.80	0.10

Note. M = Mean. *SD* = Standard deviation. *t* = Student's *t* value. Cohen's *d* = effect size.

*$p < 0.05$.

Table 3.
Results of teaching Self-efficacy Beliefs Before and After Intervention (Intervention Group) and Wait (Control Group)

Teaching Self-efficacy Beliefs	Intervention Group (n=22)				Control Group (n=23)			
	Pre	Post	*t*	Cohen's *d*	Pre	Post	*t*	Cohen's *d*
F1- Efficacy in instructional strategies	32.45 (4.17)	34.09 (2.97)	-2.38*	0.45	32.43 (3.13)	32.04 (3.25)	0.62	0.12
F2- Efficacy in classroom management	29.14 (3.61)	29.41 (3.54)	-0.43	0.07	29.43 (3.71)	28.13 (4.83)	1.69	0.30
F3- Efficacy in student engagement	29.59 (4.21)	31.18 (3.86)	-2.5*	0.15	28.74 (3.87)	28.65 (4.11)	0.10	0.02
Total	91.18 (10.71)	94.68 (9.00)	-2.22*	0.35	90.61 (8.96)	88.83 (10.24)	1.17	0.18

Note. M = Mean. S*D* = Standard deviation. *t* = Students' *t* value. Cohen's *d* = effect size.

*$p < 0.05$.

Discussion

The study evaluated the effects of a Social and Educational Skills Program, on the teachers' repertoire of social skills, educational social skills, and teaching self-efficacy beliefs. The results showed that the IG teachers showed an increase in the social skills of coping and assertiveness with risk (F1), assertiveness in the expression of positive feelings (F2), self-control of aggressiveness (F5), and total score, compared to the pre-test. Similar results were observed in other interventions focusing on interpersonal teacher development (Cintra & Del Prette, 2019; Motta et al., 2017; Lessa et al., 2017). As for the CG, the results showed that there was no increase in social skills after the wait.

The social skill of coping and assertiveness in risk-taking situations (F1) had the highest average post-test in the IG. It is a factor that evaluates the assertiveness of individuals in coping situations, with the possibility of aversive consequences on the part of the interlocutor (A. Del Prette & Del Prette, 2017). A situation that exemplifies this ability is when a teacher manages to express to students something that is bothering him or her in a direct, honest, and appropriate way, minimizing losses for him- or herself and students, to maintain self-control about the possible undesirable reactions, and the emotional well-being of each one involved. Therefore, it can be assumed, based on our results, that the teachers after experiencing PHS&E will be more prepared to handle conflicts in the classroom and that, according to Mariano and Bolsoni-Silva (2018), they will not need to resort to aggressive and passive strategies that harm their mental health and relationship with their students. On the contrary, they will develop positive interactions in a context of healthy work and will simultaneously contribute to their own quality of life.

The results of the IG revealed that the participants presented, after the intervention, higher levels in the educational social skills of selecting, making available materials and contents (F2) and Organizing the physical environment (F3) belonging to Scale 1, as well as educational social skills of cultivating affectivity, support, good mood (F1), To disapprove, restrict and correct behaviors (F4) and in the total of Scale 2. These results are in line with the study by Rosin-Pinola et al. (2017), who also evidenced an increase in the educational social skills of teachers after conducting an intervention program in educational social skills.

The use of diversified teaching strategies in the classroom and an organized environment will favor the learning of school contents by students and stimulate their curiosity (Cintra & Del Prette, 2019). The ability to show support, good mood, and meet requests for private conversations (A. Del Prette & Del Prette, 2017) is associated with the solidarity of the teacher in the face of academic and interpersonal demands of their students, which develops when educators perceive the problems of their students and offer them help, seeking to dialogue with them. Therefore, these educational social skills should be intentionally promoted during the initial or continuing training of teachers, especially for their potential to favor the context of academic learning and interpersonal relationships characterized by respect, reciprocity and empathic relationships.

Finally, there was no increase in educational social skills for the CG after the wait. On the contrary, the data showed a statistically significant decrease in the social ability to disapprove, restrict, and correct behaviors (F4). One hypothesis for this decrease may be associated with the fact that teachers did not participate in the program. In addition, one should consider the moment of the post-test, which occurred at the end of the 3rd bimester of schools. This period of the school year is exhausting because it involves test corrections and grade closings that can hinder interactions with students, especially when educators have few educational social skills to correct and disagree with students' behaviors in a non-aggressive or punitive way.

Regarding the teachers' self-efficacy beliefs, the PHS&E data showed that the IG teachers had higher post-test levels in the factors Efficacy of instructional strategies (F1), Efficacy in student engagement (F3), and overall scores. These results are in line with the intervention performed by Jennings et al. (2013), although without the focus on promoting social and educational skills. Given the results of the present study, it is likely that the PHS&E contributed to the successful experiences of teachers in the face of school demands, expanding their self-knowledge about the influences of their actions on their educational strategies, and the quality of relationships with students.

The teachers' conception of students' potential to learn a given content is mediated by the beliefs of teacher self-efficacy, which, in turn, favor the students' learning context (Casanova & Azzi, 2015). Thus, the intervention, by strengthening the teachers' self-efficacy beliefs, may have favored the reflection on their ways of thinking and acting in the school routine, contributing to critical decision-making in face of their instructional and sociability practices.

Furthermore, the data from this study can be analyzed considering that, according to Olaz (2009), social skills programs for the use of teaching strategies that are based on, for example, role play, feedback, and experiences allow educators to restructure their beliefs and have experiences of mastery, making them more flexible in problem solving situations. During PHS&E, the use of experiences and the discussion of homework tasks related to the daily work of educators, may have allowed for the successful resolution of demands associated with exposing academic and management-rerated content in the classroom. It is noteworthy that we no social skills program was identified with teachers in the Brazilian context that has evaluated its effects on self-efficacy beliefs. Such evidence limits the discussion of the findings of this research. However, we emphasize that it is necessary to invest in other interventions to investigate these relationships.

The results of this research, which came from an intervention characterized as a pilot study, although novel in the national context, suggested some evidence that favored its efficacy. It was possible to verify that the intervention increased both social and educational skills, as well as the teachers' self-efficacy beliefs. Some relevant aspects of the research can be highlighted, such as: (1) the intervention, with a quasi-experimental design, which was relatively short and economical, occurred in the context of coexistence and based on the daily lives of educators in the classroom, collaborating to promote mental health and positive social relations between teachers and teachers and students; (2) the indication of the possible impact of social and educational skills on teaching self-efficacy beliefs, contributing to the literature in the area regarding the relationships between these variables, which are still rare in Brazilian research; (3) the relevance of the use of experiences and role playing adapted to the reality of the teachers' work. Along with the other procedures, these ingredients were essential in the execution of the program and may bring about changes in practices in future studies, ensuring greater ecological validity of the results obtained in the investigations, besides contributing to the research agenda.

Considering some positive aspects and scientific and social implications of the present study, its limits should be pointed out. First, we emphasize that the intervention had an exploratory character by associating the variables social skills and teaching self-efficacy beliefs. Second, the absence of randomization to select the samples in the intervention and control groups and the absence of follow-up measures. Third, the fact that the information about teachers' repertoires before and after the intervention or the wait was self-reported. Finally, the number of meetings, since some dimensions of social skills and teaching self-efficacy beliefs did not show significant increases in the post-test, which may suggest the need for more time in the execution of the intervention for its learning by teachers.

Therefore, considering the findings of this work, future studies could: (1) include randomization in sample selection, decreasing bias due to an experimental design; (2) conduct follow-up evaluations 6 months and 1 year after the intervention; (3) propose a greater number of meetings to explore conversational social skills, as well as educational social skills to instruct, approve, and value behaviors and favor self-efficacy beliefs associated with classroom management; (4) analyze the data using the JT method, which would bring complementary contributions, identifying which teachers have the largest and those with the least gains from the intervention, in an individual analysis; (5) perform a generalization assessment, i.e., investigate the impact of the intervention on student behavior, e.g., on social skills, self-efficacy beliefs, and school performance. Some educators reported having replicated some of the experiences that were proposed in the intervention with their students. According to the teachers, the experiences contributed to positive interactions between them and the students; (6) include other authors from the school context to provide information on the efficacy of the intervention, such as coordinators and principals. Therefore, it is recommended to replicate this study with the implementation of improvements in evaluation measures and design.

References

Abed, A. L. Z. (2016). O desenvolvimento das habilidades socioemocionais como caminho para a aprendizagem e o sucesso escolar de alunos da educação básica. *Construção Psicopedagógica, 24*(25), 8-27. Recuperado de http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1415-69542016000100002&lng=pt&nrm=iso

Achkar, M. N. E., Leme, V. B. R., Soares, A. B., & Yunes, M. A. M. (2016). Correlações entre habilidades sociais educativas dos professores, burnout e relação professor-aluno. *Estudos e Pesquisa em Psicologia, 16*(3), 873-891. doi: https://doi.org/10.12957/epp.2016.32890

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.

Barros, L. O., & Murgo, C. S. (2018). A escola dos alunos reprovados: Um estudo qualitativo *Pesquisas e Práticas Psicossociais*, *13*(3). Recuperado de http://pepsic.bvsalud.org/pdf/ppp/v13n3/11.pdf

Brasil. Ministério da Educação [MEC] (2018). *Índice da Educação Básica*. Brasília: INEP. Retrieved from http://ideb.inep.gov.br/resultado/

Casanova, D. C. G. (2013). *Crenças de eficácia de gestores escolares e de docentes no ensino médio paulista.* (Tese de doutorado). Programa de Pós-graduação em Educação da Faculdade de Educação de Campinas. Campinas-SP. Recuperado de http://repositorio.unicamp.br/jspui/handle/REPOSIP/250823

Casanova, D. C. G., & Azzi, R. G. (2015). Análise sobre variáveis explicativas da autoeficácia docente. *Educar em Revista, 58*, 237-252. doi: http://dx.doi.org/10.1590/0104-4060.43236

Cintra, A. B., & Del Prette, Z. A. P. (2019). Caraterísticas dos professores-cursistas, processo e resultados em programa semipresencial de habilidades sociais. *Psico-USF, 24*(4), 711-723. doi: http://dx.doi.org/10.1590/1413-82712019240409

COZBY, P. C. (2003). *Métodos de pesquisa em ciências do comportamento.* São Paulo: Atlas.

Dancey, C. P., & Reidy, J. (2013). *Estatística sem matemática para psicologia.* Porto Alegre: Penso.

Del Prette, A., & Del Prette, Z. A. P. (2017). *Competência social e habilidades sociais: Manual teórico-prático*. Petrópolis: Vozes.

Del Prette, Z. A. P., & Del Prette, A. (2008). Um sistema de categorias de habilidades sociais educativas. *Paidéia, 18*(41), 517-530. doi: http://dx.doi.org/10.1590/S0103-863X2008000300008

Del Prette, Z. A. P., & Del Prette, A. (2009*). Inventário de habilidades sociais (IHS-Del-Prette): Manual de aplicação, apuração e interpretação.* São Paulo: Casa do Psicólogo.

Del Prette, Z. A. P., & Del Prette, A. (2013). *Inventário de habilidades sociais educativas - versão Professor (IHSE--Prof): Dados psicométricos preliminares*. Relatório não publicado disponível com os autores.

Fackler, S., & Malmberg, L. E. (2016). Teachers' self-efficacy in 14 OECD countries: Teacher, student group, school and leadership effects. *Teaching and Teacher Education, 56*, 185-195. doi: http://dx.doi.org/10.1016/j.tate.2016.03.002

Ivenicki, A. (2019). A escola e seus desafios na contemporaneidade. *Ensaio: Avaliação e Políticas Públicas em Educação*, *27*(102), 1-8. doi: https://dx.doi.org/10.1590/s0104-40362018002700001

Jennings, P. A., Frank, J. L., Snowberg, K. E., Coccia, M. A., & Greenberg, M. T. (2013). Improving classroom learning environments by cultivating awareness and resilience in education (care): Results of a randomized controlled trial. *American Psychological Association, 28*(4), 374-390. doi: http://dx.doi.org/10.1037/spq0000035

Kleinsasser, R. C. (2014). Teacher efficacy in teaching and teacher education. *Teaching and Teacher Education, 44* (4), 168-179. doi: http://dx.doi.org/10.1016/j.tate.2014.07.007

Lessa, T. C. R., Felicio, N. C., & Almeida, M. A. (2017). Práticas pedagógicas e habilidades sociais: Possibilidade de pesquisa de intervenção com professores. *Psicologia Escolar e Educacional, 21*(2), 167-174. doi: http://dx.doi.org/10.1590/2175-3539/2017/02121096

Mariano, M., & Bolsoni-Silva, A. T. (2018). Social interactions between teachers and students: A study addressing associations and predictions. *Paidéia, 28*, 1982-4327. doi: https://dx.doi.org/10.1590/1982-4327e2816

Motta, D. C., Dias, A. P., Carvalho, A. L. N., Castro, R. V., Manhães, A. C., Silva, L. G.G., & Santos, K. N. V. (2017). Programa para a promoção da empatia em sala de aula. *Revista Brasileira de Terapias Cognitivas, 13*(2), 122-130. doi: http://dx.doi.org/10.5935/1808-5687.20170017

Olaz, F. O. (2009). Contribuições da Teoria Social--Cognitiva de Bandura para o Treinamento de Habilidades Sociais. In A. Del Prette & Z. A. P. Del Prette (Orgs.), *Psicologia das Habilidades sociais: Diversidade teórica e suas implicações*. Petrópolis, RJ: Vozes.

Pozzobon, M., Mahendra, F., & Marin, A. H. (2017). Renomeando o fracasso escolar. *Psicologia Escolar e Educacional*, *21*(3), 387-396. doi: https://dx.doi.org/10.1590/2175-3539201702131120

Rodrigues, G. C., & Iaochite, R. T. (2018). Promovendo crenças de autoeficácia docente para o ensino de arte: Resultados de uma experiência de formação

continuada. *Educação em Revista. 19(2)* 143-160. Recuperado de http://www2.marilia.unesp.br/revistas/index.php/educacaoemrevista/article/view/7376

Rosin-Pinola, A. R., Marturano, E. M., Elias, S. C. S., & Del Prette, Z. A. P. (2017). Ensinando habilidades sociais educativas para professores no contexto da inclusão escolar. *Revista Educação Especial, 30*(59), 737-750. Recuperado de https://periodicos.ufsm.br/educacaoespecial/article/view/28430/pdf

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive constructo. *Teaching and Teacher Educacion, 17*, 7783-805. doi: https://doi.org/10.1016/S0742-051X(01)00036-1

Yunes, M. A. M., Fernandes, G., & Weschenfelder, G. V. (2018). Intervenções psicoeducacionais positivas para promoção de resiliência: O profissional da educação como tutor de desenvolvimento. *Revista Quadrimestral de Educação, 41*(1), 83-92. doi: http://dx.doi.org/10.15448/1981-2582.2018.1.29766

Recebido em: 07/04/2020
Reformulado em: 03/09/2020
Aprovado em: 02/10/2020

About the authors:

Adriana Pinheiro Serqueira is a Professor, Pedagogist, and PhD student at the Graduate Program in Social Psychology of the Universidade do Estado do Rio de Janeiro – UERJ.
ORCID: https://orcid.org/0000-0002-1236-2258
E-mail: professoradrianaserqueira@gmail.com

Vanessa Barbosa Romera Leme is a Psychologist and Professor at the Graduate Program in Social Psychology of the Universidade do Estado do Rio de Janeiro – UERJ.
ORCID: https://orcid.org/0000-0002-9721-0439
E-mail:vanessaromera@gmail.com

Patricia Lorena Quiterio is a Professor and Pedagogist. Professor at the Graduate Program in Social Psychology of the Universidade do Estado do Rio de Janeiro – UERJ.
ORCID: https://orcid.org/0000-0002-4553-6429
E-mail: patricialorenauerj@gmail.com

Ana Maria Nunes El Achkar is a Pedagogist and PhD student at the Graduate Program in Psychology of the Universidade Salgado de Oliveira – UNIVERSO.
ORCID: https://orcid.org/0000-0003-1628-1006
E-mail: anaelachkar@yahoo.com.br

Contact:

Vanessa Barbosa Romera Leme
Rua São Francisco Xavier, 524, 10ª andar – Bloco "b", sala 10.019, Maracanã
Rio de Janeiro, RJ, Brasil
CEP: 24030-060