



# Inclusive Education: A Data Triangulation Study

Eliza França e Silva<sup>1</sup>  · Luciana Carla dos Santos Elias<sup>2</sup> ·  
Maria Catarina Leite Rodrigues Grande<sup>3</sup> · Anaísa Leal Barbosa Abrahão<sup>4</sup>

Accepted: 27 June 2024

© Associação Brasileira de Psicologia 2024

## Abstract

The inclusion of students with disabilities faces challenges in Brazil, despite legislative efforts. The literature documents the importance of social skills in this process. The present study aimed to verify and understand relationships between resources and difficulties in the inclusion process with the social skills and behavioral problems of students, the educational social skills of parents and teachers, and sociodemographic variables. This is a mixed study, with data triangulation. A total of 42 guardians and 34 teachers of 44 students with intellectual disabilities enrolled in public schools in Minas Gerais (Brazil) participated. The instruments used were a semi-structured interview, a questionnaire to characterize sociodemographic variables, the Social Skills Rating System (SSRS), the Parenting Educational Social Skills Interview Guide (*Roteiro de Entrevista de Habilidades Sociais Educativas Parentais—RE-HSE-P*), and the Teacher Educational Social Skills Inventory (*Inventário de Habilidades Sociais Educativas de Professores—IHSE-Prof*). The Iramuteq software program was used for triangulation. The first triangulation comprised qualitative data from interviews with guardians, quantitative data from the *RE-HSE-P* and SSRS instruments, and sociodemographic data referring to guardians and children. The second triangulation involved qualitative data from interviews with teachers, quantitative data from the *IHSE-Prof* and SSRS, in addition to sociodemographic data from teachers and students. Classes of resources and difficulties were identified. The triangulation regarding the guardians showed that variables relating to a positive repertoire of students' social skills, absence of behavioral problems, and negative educational practices were associated in classes that involved resources. The triangulation for teachers signaled links between classes of resources and educational social skills above or on average; and in the difficulty classes, educational social skills were below average. It is concluded that programs to promote childhood social skills and educational social skills are relevant to this population.

**Keywords** Social skills · Educational practices · Behavior problems · Educational inclusion · Intellectual disability · Parents · Teachers

---

Extended author information available on the last page of the article

## Introduction

Inclusive education has the fundamental principle that all children should learn together, regardless of any difficulties and differences they may have (UNESCO, 1994). Therefore, the inclusive school must be given new meaning in its political, social functions, and pedagogical practices in order to facilitate learning for any student (Carvalho, 2019). The education of people with disabilities is a right guaranteed by law, with the Brazilian Inclusion Law in chapter IV, article 27, establishing: “Education constitutes the right of people with disabilities, ensuring an inclusive educational system at all levels and learning throughout the entire life in order to achieve the maximum possible development” (Brazil, 2015). Furthermore, the National Policy on Special Education from the Perspective of Inclusive Education (in Portuguese, *Política Nacional de Educação Especial na Perspectiva da Educação Inclusiva*) aims to ensure access, participation and learning for students with disabilities, autism spectrum disorder, and high abilities in regular schools, guiding education systems to promote responses to special educational needs, through the mainstreaming of special education from early childhood education to higher education; specialized educational assistance; continuity of schooling at the highest levels of education; training of teachers and other professionals for specialized educational assistance and school inclusion; family and community participation; accessibility in urban, architectural, furniture and equipment, transport, communication and information; and intersectoral coordination in the implementation of public policies (MEC, 2008). To the detriment of the rights guaranteed by law, inclusive education faces implementation problems and a lack of consensus on how to carry it out (Rahme et al., 2019; Tavares et al., 2016). The literature has pointed to factors which affect the failure of school inclusion, such as flaws in existing public policies, teacher training, pedagogical practices, accessibility, material resources, and difficulties in the family-school relationship (Carvalho, 2019; Garcia et al., 2022; Silva & Elias, 2022; Maturana et al., 2019; Vieira & Omote, 2021). Vaz (2019) highlights veiled exclusion when the education offered to students with intellectual disabilities does not provide means for developing socio-cognitive skills and they are still approved, ending the education cycle with the right to quality knowledge being denied.

In this complex context of many difficulties, social skills and educational social skills have been identified as important resources which help in the inclusion of children with disabilities. A satisfactory repertoire of skills promotes socially competent performance, helps in social relationships with peers and teachers, and can promote academic performance and better school adaptation (Garrote, 2017; Lyons et al., 2016; Rosin-Pinola & Del Prette, 2014; Sucuoglu et al., 2019). Social skills are defined as “a descriptive construct of social behaviors valued in a given culture, with a high probability of favorable outcomes for the individual, their group and community, which can contribute to socially competent performance in interpersonal tasks” (Del Prette & Del Prette, 2017, p. 24).

Del Prette and Del Prette (2013a) point out seven classes of social skills that are relevant in childhood: (1) self-control and emotional expressiveness, which

involves dealing with frustrations and expressing positive and negative feelings; (2) civility, how to greet and thank; (3) empathy, which includes listening, showing interest in, and understanding of another person's feelings; (4) assertiveness, which consists of defending your own rights; (5) making friends; (6) problem solving, meaning to identify and evaluate possible alternative solutions; and finally, (7) academic social skills. According to the authors, these skills are first learned in the family environment and later in other environments such as school.

A satisfactory repertoire of skills seems to be associated with harmonious relationships with parents, peers, teachers, and adaptive functioning (Barreto et al., 2011; Cia & Barham, 2009; Demirkaya & Bakkaloglu, 2015), in addition to positively supporting academic competence (child's general academic functioning) and school performance (Achkar et al., 2019; Elias & Amaral, 2016; Fernandes et al., 2018; Gresham & Elliot, 1990). Impairments in the repertoire of social skills may be associated with the existence of behavior problems (among other difficulties), and therefore, there is an inverse association between social skills and behavior problems (Bolsoni-Silva & Loureiro, 2019b; Del Prette & Del Prette, 2013a; Elias & Amaral, 2016; Hukkelberg et al., 2019). The literature shows that girls are more skilled than boys and have fewer behavioral problems, although recent studies have not shown significant differences (Pizato et al., 2014; Bolsoni-Silva & Mariano, 2018; Rovaris & Bolsoni-Silva, 2020).

Behavior problems can be defined as behavioral excesses or deficits that make it difficult for the child to access new reinforcement contingencies, which would facilitate acquiring repertoires relevant to learning (Bolsoni-Silva & Del Prette, 2003); these are divided into internalizing behavior problems (expressed in relation to the individual themselves, characterized by sadness, withdrawal, shyness, insecurity, fear); and externalizing (expressed more in relation to others, involving impulsivity, aggression, agitation, provocations, and challenging behavior) (Achenbach, 1966; Del Prette & Del Prette, 2013a).

Intellectual disability is a condition that is characterized by a significant limitation in both intellectual function, adaptive behavior, performance, and acquisition of social skills (American Association of Intellectual and Developmental Disability – AAIDD, 2021). It is known that children with intellectual disabilities present deficits in their social skills' repertoire due to diagnostic characteristics, and are therefore likely to experience more behavioral problems (Aguilar et al., 2019; Freitas & Del Prette, 2014; Garrote, 2017; Lyons et al., 2016).

Interactions in childhood with educators, both in the family and educational context, are extremely important for development; thus, the skills of these educators deserve attention. Educational social skills (which can be understood as a synonym for positive parenting practices) are defined as classes of behaviors or responses from parents/teachers to their children/students, which promote children's social skills and minimize behavioral problems (Achkar et al., 2016; Alvarenga et al., 2016; Bolsoni-Silva & Loureiro, 2021; Mariano & Bolsoni-Silva, 2018).

Parental educational social skills are divided into three categories: communication, expressing feelings, and coping and establishing limits (Bolsoni-Silva & Loureiro, 2010). Teachers' educational social skills can be divided into the following classes: establishing potentially educational contexts (e.g., organizing

materials, changing distance, and proximity); transmit or expose content about social skills (i.e., probing or challenging questions, presenting objectives); monitor positively (i.e., show attention to the report); establishing limits and discipline (i.e., drawing attention to a colleague's appropriate behavior) (Del Prette & Del Prette, 2008).

Behaviors in social interactions between parents-children and teacher-students may include negative practices such as shouting, neglecting, hitting, and threatening (Bolsoni-Silva et al., 2016a). Such practices do not promote development and can lead to child behavior problems (Assis-Fernandes & Bolsoni-Silva, 2020; Coulombe & Yates, 2018; Leme & Bolsoni-Silva, 2010; Mariano & Bolsoni-Silva, 2018), which is aggravated in the disabled population (Agostini & Freitas, 2022; Benitez et al., 2020; Rocha & Del Prette, 2017; Silva & Elias, 2020).

Still in the child development process, the context and sociodemographic characteristics of the family environment are also important. In this sense, some factors can act as risk factors, including low family income and low parental education (Houston & Griffiths; 2000; Mancini et al., 2004; Poletto & Koller), which in turn can influence parental practices and child behaviors (Bolsoni-Silva & Loureiro, 2019a; Marturano & Ferreira, 2004).

Studies point out the importance of characterizing and understanding variables that exist in the developmental contexts of children with disabilities with the aim of promoting a partnership between the family and the educational environment, thus fostering the student's development (Abrahão et al., 2022; Munhóz, 2003; Parreira & Marturano, 1999). In the context of educational inclusion, the participation of parents in the development and educational process of their children is even more important, as well the family-school partnership (Cabral et al., 2021; Coelho et al., 2017; Luiz & Nascimento, 2012; Silva & Elias, 2022). According to the Salamanca Declaration, inclusive education is a task to be shared between professionals and parents, in which parents must have support from the school through effective communication to assume their roles (UNESCO, 1994).

According to the Bioecological Theory of Human Development (Bronfenbrenner, 2011), developmental processes do not only incorporate the individual characteristics of individuals, but also the relationships and interactions that are established in different contexts. It is understood that the experiences and specificities of disability can accentuate contexts of difficulties in a systemic way, in which resources are found to combat difficulties (Bronfenbrenner, 1986, 2011; Cunha et al., 2017; Maturationa et al., 2019; Teles et al., 2013).

In this sense, social skills can be developed, taught, and learned in the closest contexts (family and school microsystems) and must also be included in school curricula and teacher training, involving public policies (macrosystem). The continuing teacher training can provide better development of teaching work and provide family-school closeness and communication (Silveira et al., 2012; Vilaronga & Mendes, 2014), as well as programs to promote educational and children's social skills (Benitez et al., 2020; Bolsoni-Silva & Fogaça, 2018; Bolsoni-Silva et al., 2021; Elias et al., 2012; Gavasso et al., 2016; Frederickson et al., 2007; Quitério et al., 2021). Given this exposed scenario, the present study aimed to verify and understand relationships between the resources and difficulties of the inclusion process with the

social skills and behavioral problems of students, the educational social skills of parents and teachers, and sociodemographic variables.

## Method

### Study Design

This is a cross-sectional study with a mixed approach, composing part of a larger study. Mixed methods (multimethods) are procedures for collecting, analyzing, and combining quantitative and qualitative techniques in the same research design, which presupposes interaction between methods, providing deeper analytical possibilities (Creswell & Plano Clark, 2013). The present study used a triangulation of quantitative and qualitative data, constituting a strategy that helps validate and provide in-depth understanding of the data (Denzin, 2009).

### Participants

The sample was defined by convenience. A total of 42 guardians (40 mothers, one father, and one grandmother) and 34 teachers of 44 students with intellectual disabilities enrolled in regular public schools in a city in the interior of Minas Gerais, Brazil, participated. Of the 44 students, 30 were boys (68.18%) and 14 were girls (31.82%), with a mean age of 9.68 years (SD 1.62). Four (9.10%) were in the first year, five (11.36%) in the second year, 11 (25.0%) in the third year, 15 (34.09%) in the fourth year, and nine (20.45%) in the fifth year. Only 33 (75%) of the students had a diagnosis of intellectual disability, while 11 (25%) had other diagnoses in addition to intellectual disability.

The average age of the guardians was 34.16 years (SD 6.73), approximately half of them (47.62%) had incomplete elementary education, and 45.24% belonged to economic class D–E according to the *Critério Brasil* (Associação Brasileira de Empresas de Pesquisa-ABEP, 2018). The average age of the teachers was 42.25 (SD 9.15), the average time in the profession was 16.27 years (SD 7.68), most of them (79.41%) had a specialization, and 47.06% were in economic class B2, according to the *Critério Brasil* (Associação Brasileira de Empresas de Pesquisa-ABEP, 2018).

### Instruments

- Semi-structured interview: an interview guide was prepared with the aim of identifying the main resources and difficulties encountered by parents and teachers in the inclusion process, and understanding how this process is occurring and the relationship between students, parents, and teachers.
- Questionnaire on sociodemographic variables: questionnaire to identify the sociodemographic variables of guardians and teachers (gender, age, marital status, education, and time in the profession).

- Brazil Economic Classification Criteria Questionnaire (*Questionário Critério de Classificação Econômica Brasil—CCEB*) (Associação Brasileira de Empresas de Pesquisa-ABEP, 2018) ([www.abep.org](http://www.abep.org)): this is a socioeconomic stratification based on the possession of assets, the education level (years of study) of the head of the family, and the conditions of public service infrastructure. Six socioeconomic strata are given, called A, B1, B2, C1, C2, and DE.
- The Social Skills Rating System (SSRS)—form for teachers and parents (Del Prette et al., 2016): guardians and teachers evaluate children and students regarding social skills, behavior problems, and academic competence (teacher assessment only). The forms are given on a Likert scale, which ranges from 0 = never, 1 = sometimes, and 2 = very often. In the version for parents, values are assigned for the total of social skills for five classes (responsibility, self-control, affection/cooperation, social resourcefulness, and civility); and also for the total of behavior problems, externalizing behavior problems and internalizing behavior problems. In the version for teachers, the total social skills and four classes (responsibility, self-control, assertiveness/social resourcefulness, and cooperation/affectivity) are assessed; in addition, total behavior problems are assessed on a general scale, including externalizing behavior problems, hyperactivity, and internalizing behavior problem; as well as an assessment of academic competence. The totals and factors in the instrument are quantified according to the instrument's percentile and classified. Classifications of above average, average, and below average were used for this study. The instrument presents Cronbach's alpha values ranging between 0.79 and 0.91 (teacher version) and 0.58 and 0.75 (parent version).
- Parenting Educational Social Skills Interview Guide (*Roteiro de Entrevista de Habilidades Sociais Educativas Parentais—RE-HSE-P*) (Bolsoni-Silva et al., 2016b): this is a semi-structured interview which seeks to quantify and describe the interactions established between parents and children. The interview consists of 13 sets of questions, describing the frequencies and diversity of behaviors. The responses are analyzed and distributed into seven categories: Parental Educational Social Skills, Childhood Social Skills, Context Variables, Negative Educational Practices, Childhood Behavioral Problems, Total Positive, and Total Negative. Three classifications are provided: Clinical, Borderline, and Non-Clinical. The instrument has Cronbach's alpha values between 0.64 and 0.96.
- Teacher Educational Social Skills Inventory (*Inventário de Habilidades Sociais Educativas de Professores—IHSE-Prof*) (Del Prette & Del Prette, 2013b): in a Likert scale describes social behaviors presented in relationships with students, divided into two scales. Scale 1: organize interactive activity (give instructions about the activity; select, make materials and content available; and organize the physical environment); and scale 2: conduct interactive activity (cultivate affection, support, good humor; interactively expose, explain, and evaluate; approve, value behaviors; and disapprove, restrict, correct behaviors). The raw scores were classified for this study based on the percentiles provided as above average, average, and below average. The instrument has Cronbach's alpha ranging from 0.73 to 0.96.

## Data Collection Procedure

Data were collected in public schools in a city in the interior of Minas Gerais, Brazil. Contact was made with the directors of different schools after approval by the Ethics Committee and the city's competent bodies, and names of possible participants were requested if they had an interest in participating. Then, the legal guardians and the teachers were contacted with the names of potential students. Given availability and interest, a meeting was scheduled with each person at their own school. After presenting the study on the day and time scheduled at the school, an informed consent form was filled out, and the interview and the instruments were applied; the average time used in each meeting was 1 h. Therefore, the sample was formed by convenience. All participants who could participate and consent were included in the study, respecting the inclusion criteria to be a student with intellectual disability enrolled in regular schools (elementary school).

## Ethical Procedures

The present study was submitted to the Faculty's Ethics Committee of the Faculty of Philosophy, Sciences and Letters of Ribeirão Preto at the University of São Paulo (USP) and was approved under the CAE number 86636918.9.0000.5407. The precepts in force in Resolution 466/12, which provides guidelines and standards for research involving human beings, were respected throughout the study. After data collection and preliminary analysis, individual or group feedback was conducted.

## Data Analysis Procedure

The data obtained by applying the instruments were quoted according to the established propositions and analyzed using the Jasp statistical software program (version 0.9.2) through descriptive and inferential analyses. Next, all variables were transformed into categorical variables and added to the textual corpus (a set of all interviews with guardians and teachers) and then analyzed using the Iramuteq software program (*Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires*—version 0. 7).

The Iramuteq program enables lexical analyzes to be conducted using statistical calculations on essentially qualitative variables (texts) (Camargo & Justo, 2013; Lahlou, 1994; Ratinaud, 2009). The Descending Hierarchical Classification (DHC) analysis was initially carried out (cluster analysis) and presents a hierarchical scheme of classes organized in a dendrogram, which illustrates the relationship and opposition between classes (Camargo & Justo, 2013). DHC partitions the text into text segments and analyzes the words (reduced by the lexical root) and variables (categorical variables added) significantly associated with each class using the chi-squared test ( $p < 0.05$ ), and the value of  $X^2$  is greater than 3.80 (Salvati, 2017). For this analysis, at least 75% of the corpus needs to be used.

A content analysis was subsequently conducted according to the assumptions of thematic content analysis by Minayo (2008); this occurred by reading text segments



and words associated with the class, giving meaning to the text and naming each class. According to Nascimento and Menandro (2006), content analysis is used in an analogous and complementary way in the entire process of using lexical analysis software.

Then, two triangulations were performed through this procedure, obtained from quantitative variables transformed into categorical variables and associated with each of the classes by DHC. The first triangulation comprises qualitative data from interviews with guardians associated with quantitative data from the *RE-HSE-P* and the SSRS instruments (answered by guardians), as well as sociodemographic data referring to guardians and children. The second triangulation involved the qualitative data from the interview with the teachers, together with the quantitative data from the *IHSE-Prof* and the SSRS instruments (answered by the teachers), in addition to the sociodemographic data of teachers and students.

## Results

Triangulations of the qualitative and quantitative data regarding guardians and children will initially be presented, followed by triangulations of qualitative and quantitative data relating to teachers and students. The data will be presented in two dendrograms obtained through DHC analyses, accompanied by an overview of the classes and triangulated variables, exemplified with representative statements from the participants (highlighting the triangulation).

### Triangulation I—Triangulation of Interviews with Guardians with Quantitative Data from Guardians and Students

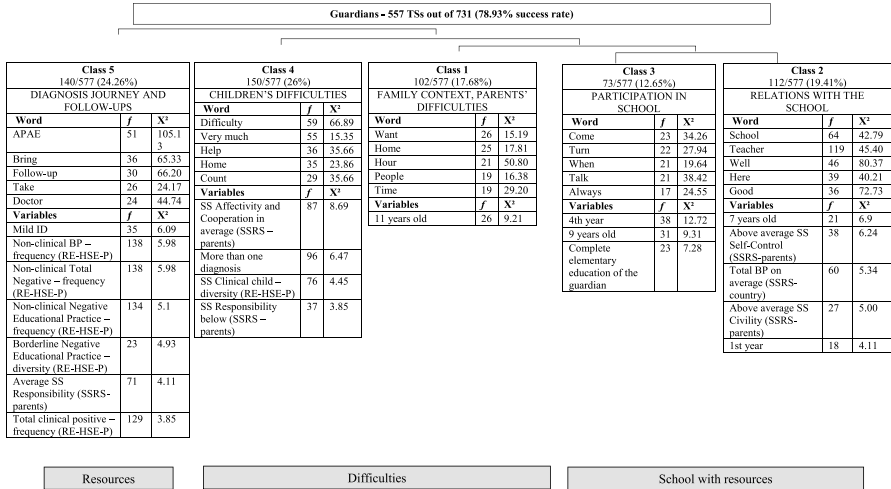
The interview corpus of the guardians was divided into 731 text segments (TSs), with 577 (78.93%) being used, which is considered satisfactory. The corpus was divided into five classes: class 1 with 102/577 TSs (17.68% success); class 2 with 112/577 TSs (19.41%); class 3 with 73/577 TSs (12.65%); class 4 with 150/577 TSs (26%); and class 5 with 140/577 TSs (24.26%). The division of the five classes, their naming, the list of the five most evoked significant words, and the associated significant variables can be observed in the dendrogram in Fig. 1 ( $p < 0.05$ ).

It can be seen in Fig. 1 that classes 1 and 4 refer to difficulties experienced, while classes 2 and 3 present the school as a resource for these parents in facing difficulties. Class 5 refers to alternatives and resources that they seek when faced with their children's disabilities.

#### Class 1

In class 1 "Family context, parents' difficulties," it was possible to identify, through the analysis of words and text segments, content relating to the relationships and family organization. The guardians highlighted the rules and limits for their children, organization and support for educational issues, and feelings regarding the





**Fig. 1** Dendrogram of the textual corpus classes for the guardians. Legend: BP, behavioral problem; ID, intellectual disability; SS, social skills

difficulties experienced. The associated variable was having a child aged 11 years old; therefore, this age group seemed associated with difficulties in the guardian-child relationship.

I try to help her, but there are times when she doesn't want to, she stays in her room alone and says she's going to study, but you have to leave her alone, you can't get close to her, you can't even say anything (Guardian 17).  
 He's not old enough to go out alone, so you have to set limits. But, he doesn't like it, because he sees other boys his age playing late on the street, so he wants to, but I don't let him (Guardian 16).

**Class 2**

Class 2 "Relations with the school" refers to a positive relationship with the school. Parents presented the idea that they like school, that they have a good relationship with teachers, and that their children feel good in the educational environment. The significantly associated variables were as follows: social skills of self-control and civility above average and average total behavior problem; guardians who have children with this behavioral repertoire report better relationships with school, as in the example below:

She gets along well with her classmates, and with her teachers too. Everything works fine with the teachers, when they call me I come, when I'm working my mother comes. My relationship with the school is good (Guardian 19).  
 The relationship with the school is good, I studied here. He has a good relationship with the teachers, he feels good at school. I told him I was going to

change schools because we were living far away, he even cried. He likes it here. I like it here too (Guardian 34).

Next, the sociodemographic variables of 7 years old and first year of school were significantly triangulated, which are associated with reports from parents with close and positive contact with the school:

I always try to be present, to know what is happening. Great relationship with teachers. He likes school, I ask him and he says he likes it, I asked if he wanted to change schools, he said no, he wanted to stay here (Guardian 25).

I never had a problem, not at school. He feels good at school, he seems to feel at ease, with his classmates, with the teacher, he even likes her more (Guardian 32).

### Class 3

Class 3 “Participation in school” also covers the relationship that parents establish with the school, more specifically focusing on situations that occur in everyday school life. Guardians report that they are present, that they attend school whenever requested, and that they talk to their children when faced with conflicting situations and try to encourage them. This class was triangulated with the sociodemographic variables fourth school year, age of 9 years, and completed elementary school by parents.

I always come to school, I justify their absences in whatever way I need, I’m always here. I always talk to the director, his teacher, the direct support teacher, I talk to her (Guardian 24).

I think it’s wrong, I said I think what she did is wrong, but it only happened once (Guardian 02).

### Class 4

Class 4 “Children’s difficulties” refers to learning development, the children’s difficulties, and how parents seek to help. The significantly associated variables were as follows: social responsibility skills below average, clinical child social skills, and having more than one diagnosis, in addition to the diagnosis of intellectual disability. These variables are associated with difficulties, as in the following report:

He has difficulty writing, so today he can write his name, but if he has to write a large text, he has difficulty writing that text in the time that other colleagues do and he sees that he has this difficulty (Guardian 09).

Papers are spread all over the house at home. His difficulty is reading, I imagine it is reading, and writing the word, without needing to copy. If you tell him, write the letter T, I think he will have difficulty (Guardian 31).

Another variable significantly associated with class was the average social ability of affection and cooperation, associated with the child’s report of cooperation:

I read with him, I help him do his homework, he does it right. When he doesn't have to, we try to make something for him to write (Guardian 29).

Everyone has a different way of relating, even studying. Just like him, he is better at listening and speaking, he is not much good at writing, he still has difficulty (Guardian 27).

## Class 5

Class 5 "Diagnosis journey and follow-ups" covers the journey and discovery of the child's diagnosis, in addition to the follow-ups carried out. Parents report that despite seeking support, they often encounter difficulties such as a lack of places. The variables in this class related to the guardians that were significantly associated included: non-clinical negative educational practice (frequency) and borderline negative educational practice (diversity); variables related to the father-child relationship: total negative non-clinical (frequency) and total positive clinical (frequency). The search for follow-up and difficulties encountered can be highlighted in the reports below:

Then at the end of the year I took her to *Apae* and she went to a psychologist, speech therapist, everything there said that she really has an intellectual disability, so there is no vacancy this year (Guardian 19).

He was referred to *Apae* and they said he had an intellectual disability. He stopped going to *Apae* since last year, he doesn't go there anymore, I couldn't afford to take him to *Apae* (Guardian 23).

Variables relating to children were also triangulated: non-clinical behavior problem (frequency), average social responsibility skills, and diagnosis of mild intellectual disability.

He has an intellectual disability and this was making him have a lot of difficulty, but he is developing, because he had an interview at *Apae* and the girl said that he has it, but it is mild (Guardian 14).

Then you have to take medicine to be insured. He is even calm at home. He is undergoing treatment at *APAE*, but now he will be discharged from there, he'll go once a week, just for follow-up (Guardian 30).

## Triangulation II: Triangulation of Teachers' Interviews with Quantitative Data from Teachers and Students

The corpus of the teachers' interviews was separated into 1056 text segments, with 835 of these segments being used (78.93%), considered satisfactory. Five classes were formed: class 1 with 147/835 TSs (17.68%); class 2 with 207/835 TSs (24.79%); class 3 with 193/835 TSs (23.11%); class 4 with 139/835 TSs (16.65%); and class 5 with 148/835 TSs (17.84%). The dendrogram in Fig. 2 presents the classes, the list of most frequent significant words, and the list of significant variables ( $p < 0.05$ ).

**Teachers - 557 TSs from 731 (78.93% success rate)**

Class 3 138/835 (23.11%)			Class 4 139/835 (16.65%)			Class 1 147/855 (17.60%)			Class 2 207/825 (24.79%)			Class 5 149/835 (17.84%)		
DIFFICULTIES IN THE INCLUSION PROCESS			TEACHERS PRACTICES WITHIN THE CLASSROOM			UNDERSTANDING THE INCLUSION PROCESS			SCHOOL-FAMILY RELATIONS			STUDENT DEVELOPMENT		
Word	f	X <sup>2</sup>	Word	f	X <sup>2</sup>	Word	f	X <sup>2</sup>	Word	f	X <sup>2</sup>	Word	f	X <sup>2</sup>
Give	61	43.2	Activity	24	47.74	Inclusion	68	71.82	No	147	8.03	Able	111	23.46
Difficulty	54	14.72	Always	30	32.39	Difficultly	43	148.95	Very much	81	24.20	Read	30	64.47
Teacher	39	17.39	All	21	16.42	School	39	7.49	Mother	62	166.71	Write	23	102.52
Time	31	22.95	Time	17	40.55	Child	29	19.09	Come	29	46.46	Yet	18	23.67
Attention	25	50.69	Search for	15	26.64	Variables	f	X <sup>2</sup>	Family	25	38.00	Letter	18	63.08
Variables	f	X <sup>2</sup>	Variables	f	X <sup>2</sup>	Average SS	76	10.18	52 years of age	32	25.84	Variables	f	X <sup>2</sup>
Time since graduating of 6 years	14	9.71	Above average BP Total (SSRS-teachers)	101	14.78	Average SS responsibility (SSRS-teachers)	11	9.13	Below average ESS give instructions (HSE)	37	13.79	Average ESS Conduct Interactive Activity (HSE)	85	11.24
Above average ESS Organizing the physical environment (HSE)	36	7.66	Age 55 years	11	10.7	ID diagnosis only	107	9.13	Average total SS (SSRS-teachers)	70	10.54	Average BP Hyperactivity (SSRS-teachers)	90	6.72
			Average ESS Organizing Interactive Activity (HSE)	82	9.72	Above average SS Self-control (SSRS-teachers)	34	7.47	ID + ADHD	25	9.26	Average SS Self-Control (SSRS-teachers)	89	6.13
			Above average BP Externalizing (SSRS-teachers)	87	8.57	Average total BP (SSRS-teachers)	75	7.29	Average ESS selecting, providing materials and content (HSE)	24	9.20	Average ESS Organizing Physical Environment (HSE)	100	5.32
			More than one diagnosis	84	7.01	Above average Total SS (SSRS-teachers)	30	7.21	Below average ESS Organize Interactive Activity (HSE)	24	9.20	Average ESS Organizing Physical Environment (HSE)	100	5.32
			Average ESS Organize the Physical Environment (HSE)	95	6.42	Female child sex	67	7.03	Below average Academic competence (SSRS-teachers)	185	7.19	Average ESS Give Instructions (HSE)	100	5.32
			Average ESS Selecting, providing materials and content (HSE)	82	4.9	Above average ESS Select, make available materials and content (HSE)	36	6.66	Below average Organize Total SS (SSRS-teachers)	150	5.33	Above average ESS Approve, value behaviors (HSE)	74	5.06
						Above average ESS Organize Interactive Activity (HSE)	72	4.89	Below average ESS Conduct Interactive Activity (HSE)	42	4.94			
						Average externalizing BP (SSRS-teachers)	69	4.25	Average ESS Approve, Value Behaviors (HSE)	84	4.70			
						Above average ESS Approve, value behaviors (HSE)	72	4.18	Above average ESS Organize Above Physical Environment (HSE)	47	4.44			
						Above average ESS Disapprove, Restrict, Correct Behaviors (HSE)	66	4.6	Below average ESS Affection and cooperation (SSRS-teachers)	67	4.30			
						Below average BP hyperactivity (SSRS-teachers)	30	4.14						
						Have specialization	123	3.92						

Difficulties
Resources
Difficulties
Resources Difficulties

**Fig. 2** Dendrogram of classes in the textual corpus from the professors. Legend; BP, behavioral problem; ESS, educational social skills; ID, intellectual disability; SS, social skills

Figure 2 shows that classes 1 and 4 correspond to resources in the inclusion process; class 3 refers to difficulties experienced by teachers; class 2 refers to the teachers' difficulties in their relationship with the family; and class 5 involves resources and students' difficulties.

### Class 1

Class 1 "Understanding the inclusion process" refers to the understanding that teachers have about inclusive education. They showed theoretical understanding and talked about the difference between what is established in theory and what occurs in practice. For them, educational inclusion means include students with difficulties/disabilities into the classroom in regular schools together with other children, creating mechanisms so that these students can develop and truly be included. The variables referring to the teachers associated with the class were above average educational social skills (selecting, providing materials and content; organizing the physical environment; organizing interactive activity; approving, valuing behaviors; and disapproving, restricting, correcting behaviors); and the sociodemographic variable was associated with having a specialization. This triangulation is clear in the teachers' statements:

Inclusion is not only inserting the student into school, but also creating possibilities for development within what they can, and little by little they develop (Teacher 27).

In this part where I think that inclusion is not happening, right, because just throwing the student into the classroom is not enough for us to really work on inclusion, we would have to have this service with the student so that they can develop their skills (Teacher 02).

Triangulation of class 1 was observed with variables related to students such as the following: average social responsibility skills; above average self-control social skills and total social skills; on average total and externalizing behavior problems; below average hyperactivity behavior problem; in addition to sociodemographic variables, such as having only been diagnosed with intellectual disability (no other diagnosis) and being female. The report from teachers which signals triangulation is presented below:

She gets along very well with the group when there are recreational activities. I see how inclusion in regular schools is a very good step and I think there is only something to be gained (Teacher 29).

So their interaction with the students is very good and for us I think it is a challenge having to look every day to see what we can be doing differently to help with their inclusion (Teacher 08).

## **Class 2**

Class 2 “School-family relations” focuses on families within the context of inclusive education. The teachers report on their relationships with parents, in which they try to talk and seek support from these families. However, according to them, most families have difficulties and are unable to provide support, although there are reports of families who are able to support their children more, which is a difference. The variables related to the significantly associated teachers in the class were as follows: below average social educational ability to give instructions, organize interactive activities, and conduct interactive activities; average educational social ability to select, make materials/content available, and approve and value behaviors; above average educational social ability to organize the physical environment; and sociodemographic variable of age (52 years). The reports below show the relationship between teachers with these characteristics and their families.

An interview was requested, the mother was asked to come, but she came a long time later. His mother came here to talk to me recently, we explained that he would have to come but he didn’t come, it didn’t work with him, he didn’t have that responsibility (Teacher 21).

I’m good friends with his mother, I even help her with other things as a teacher. But elsewhere there’s no way, because the whole family doesn’t accept it, just the mother. He is in the pre-syllabic phase (Teacher 25).

The significantly associated variables referring to students with this class were as follows: academic competence and total social skills below average and diagnosis of intellectual disability concomitant with a diagnosis of attention-deficit hyperactivity disorder (ADHD). Teachers of students with these characteristics report difficulties in the family-school relationship.

I think her problem is her family, her mother doesn't solve it. The father is already trying to solve it a little, her intellectual problem is easier for me (Teacher 07).

The mother treats him as if he were a baby and doesn't let him grow up. I see that he has difficulties, but he has the possibility of maturing (Teacher 18).

### Class 3

Class 3 "Difficulties in the inclusion process" covers the main adversities that teachers experience, such as difficulties in paying attention to students with disabilities and the rest of the class, difficulties in managing day-to-day activities and specific activities for the student in inclusion, in addition to the lack of support. Only variables related to teachers were significantly associated, such as 6 years of training and below average social educational ability to organize the physical environment. The reports below address these difficulties:

I think what makes it most difficult is the lack of support and structure, because we end up not having time, I can't give him the full attention he needs, I have 26 children (Teacher 25).

So, as I have the whole room, sometimes I pass by, I don't have time to go to the desk, so I have to go to the board, sometimes there's a lot of things that have to be explained and it's very complicated to leave everyone else to just stay with him, there's no way, you know, you have to help others too, I think that's the difficulty (Teacher 17).

### Class 4

The practices used by teachers about inclusive education are addressed in class 4 "Teachers' practices within the classroom." They reported the resources they use, such as looking for specifically adapted and more individualized activities to help the student or placing a classmate to offer extra support. The variables referring to the teachers that triangulated were on average social educational skills of organizing interactive activity, organizing and selecting the physical environment, making materials and content available, and the sociodemographic variable of age (55 years old). These are examples of speeches:

Try to work on activities so that he can get involved and develop according to the stage he is at... you have to adapt, you have to change, you have to work according to the child's level and look for material that meets what he needs (Teacher 09).

Work focused on his needs and skills that he has already mastered and needs to improve, so I work specifically on specific activities for him, but also activities integrated with the class so that he also feels like he is interacting with all his colleagues (Teacher 09).

The variables relating to the students that were triangulated were as follows: above average total behavior problems, above average externalizing behavior problem, and having more than one diagnosis. The report below shows what difficulties lead teachers to seek different practices:

It is very difficult to concentrate, memorize and a number of other things. I try to work in the same way, with fewer activities, but with help, or when we don't have specific time in the room to work with them separately, we work in groups with a colleague who has it easier and one helps the other (Teacher 12). I found it very difficult, I'm not going to lie, I found it very complicated, because he has to be included but he is often very resistant, he often doesn't accept help so much... He has a notebook in which I put activities like others, but he has a separate notebook where I work on contextualized activities, but which will affect his learning (Teacher 34).

## **Class 5**

Class 5 "Student development" encompasses reports regarding the student's development during the school period, the progress made, and the main difficulties experienced. The teachers also report some resources they use to help these students. The associated variables referring to the teachers were on average educational social skills, conducting interactive activities organizing the physical environment, and give instructions; above average educational social ability of approving; valuing behavior. The report below signals triangulation:

I talked to him about the alphabet, so now I'm starting with simple word search activities that he really likes, some different activities, to see if it catches his attention a little, if it awakens his learning (Teacher 01).

These days he started reading the vocal encounters, for me it was a victory because he doesn't even memorize the right name, he knows how to write child\_41, but he needs a form for the full name (Teacher 31).

The variables referring to the students who triangulated with this class were as follows: average total social skills and self-control, as well as average hyperactivity behavior problem. Stories below show the triangulation:

He has advanced, because he arrived without knowing the letters of the alphabet yet, he didn't know how to write his name, he had no phonological notion at all. Today he began the process of phonological awareness, he already knows the letters of the alphabet (Teacher 23)

I always told him to think the way he could, that it was ant's work, little by little. Now he can write simple words, form sentences, he can write his entire name (Teacher 32).



## Discussion

The present study aimed to verify and understand relationships between resources and difficulties in the inclusion process with the social skills and behavioral problems of students, the educational social skills of parents and teachers, and sociodemographic variables. To achieve this, a triangulation study was conducted, combining quantitative data obtained through instruments with qualitative data collected through interviews with both guardians and teachers of students with intellectual disabilities enrolled in regular schools.

The triangulation of the guardians' interviews with variables assessed in the different instruments pointed to important results in the discussion of the topic. Class 1 "Family context, parents' difficulties" was significantly associated with the sociodemographic variable age 11 years, highlighting parents' difficulties in the family context, whether in the daily life of imposing rules and limits, or helping with household chores; this appears to be linked to the end of childhood and the transition to adolescence (Bee & Boyd, 2011), bringing significant biopsychosocial changes. For Bronfenbrenner (2011), the family continues to be one of the most important microsystems of interaction and development in adolescence, but at this time there is also an expansion of the microsystems of participation, new transitions and changes, in which there must be a compression from a systemic perspective in which difficulties and resources occur in individual interactions, relationships with others and context.

It was possible to notice through class 2 "Relations with the school" that guardians who have children with an above-average repertoire of social skills and who do not have behavioral problems have speeches referring to a good relationship with school and positive feelings of children in relation to the educational context. Children who do not have behavioral problems and are more skilled allow families to have more positive contact with school, as a satisfactory repertoire of social skills contributes to more positive relationships in both the educational and family contexts (Achkar et al., 2019; Barreto et al., 2011; Bolsoni-Silva & Loureiro, 2019a; Cia & Barham, 2009; Demirkaya & Bakkaloglu, 2015; Hukkelberg, et al., 2019), and with children's successful relationships, families are more likely to do so as well. The first school year and consequently the age of 7 were also triangulated to the class. Parents need to have a more positive relationship with the school and be more committed at this stage due to the initial demands of schooling. According to Marturano (2013), the transition to elementary school is a time of several changes which require adaptations for the child and can impact other years of the school trajectory; therefore, family support and participation are essential. It is also understood that these transition issues are even more important for inclusive education.

Only sociodemographic variables were associated in class 3 "Participation in school," such as fourth year of school, age of 9 years, and parents' completed elementary education. The class is formed by reports of participation and presence at school. It can be inferred that the fourth school year and the age of 9 is an important phase for the study population because it is when most diagnoses are confirmed, which can be proven by the greater number of students enrolled this year, or because it is a series that requires greater demand from students and

consequently greater participation from parents. Having completed primary education also seemed to be important; most parents in the study had incomplete primary education, so it is understood that training can help in understanding that school participation is important. For Marturano and Ferreira (2004), maternal education is a differentiating factor in investing in resources that promote development in the school context. Furthermore, according to Bronfenbrenner (1986), parental education is an important source for conceptions about the child's capacity and life stages. Thus, parents need to be supported in this context of difficulties (Maturana et al., 2019; Silva & Elias, 2022).

In class 4 "Children's difficulties," below average social skills (denoted by the guardian) and clinical child social skills and having more than one diagnosis were associated. Parents with children with these characteristics report school difficulties. It is known that social skills are positively associated with good school performance (Elias & Amaral, 2016; Fernandes et al., 2018; Gresham & Elliot, 1990), so it is understandable that even in the face of inherent difficulties due to disability, a deficient repertoire of social skills accentuates these difficulties. Having other diagnoses, in addition to the diagnosis of intellectual disability, also increases the complexity of the adversities experienced. It is known that each diagnosis has specific demands (Teles et al., 2013); therefore, parents must understand the diagnosis and the inherent difficulties, as well as have information and support available for this (Coelho et al., 2017). Average affection and cooperation ability, as can be seen in the example of the speech of guardian 27, indicates that this ability indicates cooperation on the part of children, which helps parents to emit helping behaviors. This skill concerns behaviors that contribute to carrying out an activity, meeting the needs of others, as well as behaviors of providing help, following rules and instructions (Del Prette & Del Prette, 2013a; Del Prette et al., 2016).

Class 5 "Diagnosis journey and follow-up" was the only class in which variables relating to parents' practices in their relationship with their children were triangulated. Negative educational practices (non-clinical and borderline) were triangulated, which indicates that parents who do not use these practices are more likely to observe their children, have a closer relationship, and thus seek the necessary support. It is understood that guardians who use negative educational practices, such as punishing, hitting, shouting, swearing, express fewer feelings, and talk less to their children (Bolsoni-Silva & Loureiro, 2019a). The associated non-clinical negative total, which indicates the absence of child behavior problems and educational practices in family relationships, also shows that less negative contexts can encourage more parental behaviors to seek resources, which may be due to the fact that they feel less tired. The clinical positive total was also associated, which indicates that both children's social skills and educational social skills need to be improved. Therefore, there are still difficulties in the family context that impact and deserve attention. In turn, the importance of relationships between parents and children is observed, in addition to how parents' practices can influence their children's behaviors (Bolsoni-Silva et al., 2016a). It is understood that the guardians, even when faced with difficulties, showed the resources to seek assistance in their reports, which is important for child development and will have a positive impact on the family context.

Variables related to children were also associated with class 5, which include average social responsibility skills and the absence of behavioral problems. It can be hypothesized that management during monitoring is important, including for more responsibility, affection, and cooperation, as parents who reported seeking monitoring and diagnosis have children with these characteristics. Finally, the variable having mild intellectual disability was also associated, as parents of children with this diagnosis tend to follow the same path when searching for care and the diagnostic question brings specific experiences, in which the care network is an important resource, but also brings difficulties (Cunha et al., 2017; Maturana et al., 2019; Teles et al., 2013).

It can also be observed that in class 5, which refers to parents' resources, and in classes 2 and 3, which place the school as a resource, variables relating to a positive repertoire of children's social skills (on average or above average), the absence of behavioral problems (below average or average), and negative educational practices (borderline and non-clinical) were associated. Then in class 4, which refers to the difficulties experienced, a negative repertoire of social skills and the presence of behavioral problems are associated. Therefore, the importance of children's social skills, positive parental relationships, and family-school relationships in the context of educational inclusion are evident (Benitez et al., 2020; Cabral et al., 2021; Lyons et al., 2016; Sucuoglu et al., 2019). The social skills of students can be developed in inclusive environments and can act as resources in the inclusion process, as they can improve social relationships, adaptation, and academic performance (Garrote, 2017; Lyons et al., 2016; Rosin-Pinola & Del Prette, 2014). Parental educational social skills (positive practices) were not associated with any class; however, those responsible were evaluated as clinicians, which establishes the need to promote these skills which will contribute to helping children, family relationships, and consequently school relationships (Benitez et al., 2020; Silva & Elias, 2020).

Regarding the triangulation of the teachers' interviews in class 1 "Understanding the inclusion process," above average social educational skills were associated. The speeches that teachers with this characteristic present show a theoretical understanding of the inclusion process, consistent with current laws and the National Special Education Policy (MEC, 2008), in addition to understanding the importance of inclusion and the difficulties of practice. Having these skills in the educational context can be a resource in building this understanding (Rosin-Pinola & Del Prette, 2014), as well as having a specialization, which is also associated with the class. One of the greatest difficulties experienced in the inclusion process is the necessary training (Silveira et al., 2012; Vilaronga & Mendes, 2014); thus, the findings of this study confirm the importance of continued training and the need for investments in this direction, as it is a resource for developing the work of these professionals. In addition to theoretical training, the importance and encouragement of training in interpersonal and social skills are highlighted (Rosin-Pinola & Del Prette, 2014).

Class 1 also included student characteristics such as being female, having only a diagnosis of intellectual disability, average or above-average social skills, and average or below-average behavior problems. Girls are reported to have fewer behavioral problems and a more elaborate repertoire of social skills (Bolsoni-Silva & Mariano, 2018; Pizato et al., 2014). Therefore, having students with these characteristics

(positive repertoire of social skills and absence of behavioral problems) and with just one diagnosis, without the complexity of other diagnoses, can lead to more positive relationships in the inclusion process, for which teachers issued reports of theoretical understanding regarding the inclusion process (they issued a positive report).

In class 2 “School-family relations,” it was evident that teachers who have students with below average social skills and academic competence report more difficulties in their relationship with their families, as they also have more difficulties with these children in the classroom. It is known that the repertoire of social skills in childhood can strengthen relationships with teachers (Achkar et al., 2016; Demirkaya & Bakkaloglu, 2015) and that there is interdependence between the two contexts (Bronfenbrenner, 1986). The educational skills of the teachers who were significantly related were very diverse, both above, below, and average, which requires better understanding. It is understood that teachers also need to perform other skills in the context of the relationship with the family in addition to those specific to the educational context.

Next, the sociodemographic variables of 52 years of age and having a student diagnosed with intellectual disability plus ADHD were associated. An older age of teachers is indicative of more experience, as in a study by Abrahão et al. (2022), age and length of time in the profession favored identification of family help with school tasks and support from mothers. The complexity of yet another diagnosis can also be an unfavorable factor for the family-school relationship.

Regarding the relationship with the family, the reports show that the teachers try to maintain contact with the family members, trying to talk and get closer, but they still report difficulties. Dialogue with families is extremely important to encourage partnership and teachers are essential agents, so they must also be supported in this regard (Cabral et al., 2021; Coelho et al., 2017; Silva & Elias, 2022). In this study, the guardians report being participative, but for the teachers, there is an absence. Thus, a non-synthonic relationship can be seen, also found in other studies, in which parents claim to participate in what was requested and the school reports a lack of interest (Pamplin, 2005).

Variables relating to teachers were associated in class 3 “Difficulties in the inclusion process,” in which those with below average social educational ability to organize the physical environment and less than 6 years since graduating expressed coinciding reports of difficulties in the inclusion process. The time of 6 years since graduating (or experience time of less than 6 years) can be considered a shorter time of practice given the average time in the profession of the sample; in this sense, it can be seen that the teachers have more critical feelings between theory and practice. Furthermore, experience can be an important issue, but requires continued training (Abrahão et al., 2022). The ability to organize the physical environment involves creating a more pleasant environment for learning, modifying the position of desks to facilitate student contact and interaction, carrying out activities in pairs, trios, and small groups, and carrying out activities in environments other than the classroom (Rosin-Pinola et al., 2016). This ability is considerable in the context of inclusion and a below average rating was associated with reports of difficulties, highlighting the importance of this. Some resources found consist of this skill, such as working with pairs of students, which is described in class 4.

Class 4 “Teachers’ practices within the classroom” was associated with on average educational social skills, which indicates that teachers in this classification are able to provide resources in the classroom with the aim of promoting inclusion, as can be seen in the reports from teachers 09 and 12. Skilled teachers evoke different behaviors to promote learning in the educational process (Del Prette & Del Prette, 2008). It is noteworthy that this class is directly linked to class 3 (of the difficulties experienced), meaning the practices used (from the teachers’ speeches) are accompanied by reports of difficulties and vice versa. Although teachers have average educational social skills and this has been significantly associated with the class of teachers’ practices within the classroom, these skills may not be used in this context, which shows the importance of training and promotion programs. Age 55 was also triangulated, which once again indicates that experience is an important variable. Variables relating to students were also associated with class 4, such as above-average total and externalizing behavior problems, indicating that having a student with these characteristics can mobilize teachers to seek more resources (Bolsoni-Silva & Mariano, 2018).

Finally, class 5 “Student development,” which encompasses difficulties, student progress, and some teacher practices, was associated with average and above average educational social skills, which can indicate resources for these teachers and students. Educational social skills in the context of inclusion can aid in more effective social relationships with and between students, having a positive impact on students’ social and academic repertoire (Rosin-Pinola & Del Prette, 2014). Variables related to students, such as average social skills and average behavioral problems, may indicate that students with these variables are considered by teachers to have better progress in school development, as can be seen in the reports of teachers 23 and 32. Such results are an indicator of the effectiveness of educational programs that emphasize inclusion and demonstrate the importance of implementing appropriate school interventions to improve social performance (Bolsoni-Silva & Fogaça, 2018; Bolsoni-Silva et al., 2021; Elias et al., 2012; Frederickson et al., 2007).

Again, classes 1 and 4, which refer to the resources found in the educational inclusion process, were significantly associated with average and above average teachers’ social educational skills. In turn, class 4 is linked to class 3 of the difficulties encountered, in which below-average social educational skills were associated. Given the difficulties mentioned in the inclusion context, it can be inferred that these skills are not being used competently in the face of these difficulties, despite having an average repertoire. Class 5 refers to the development of the student, in which both the resources of these students are found, as well as the difficulties and management of the teachers. This class is associated with skills relating to a positive repertoire of the students, the absence of behavioral problems, and to average or above average educational skills. Class 3 was the one that varied the most, as educational social skills were associated with different classifications. In this class, teachers need other social skills to promote a rapport with the family. In this sense, the importance of continued training and programs to promote social skills and educational social skills, mainly aimed at inclusion, is highlighted.

## Final Considerations

The present triangulation study using qualitative and quantitative data sought to verify and understand relationships between resources and difficulties in the inclusion process, with the social skills and behavioral problems of students, the educational social skills of parents and teachers, and sociodemographic variables. The data triangulations pointed to the importance of resources for guardians, such as having specialized support, participation, and positive relationships with the school and positive educational practices. The resources of educational social skills and understanding of the inclusion process were highlighted in the data triangulation from the teachers, despite the difficulties of everyday classroom life. Their behavioral repertoire in both the data triangulation from legal guardians and teachers with variables of student inclusion was decisive for ease or difficulties in the inclusion process. The results contributed to broadly understanding educational inclusion by analyzing several variables that affect this context, from which it was concluded that quantitative and qualitative data interact and are important in understanding the phenomenon as a whole. The findings indicate the importance of children's social and educational skills of parents and teachers on the behavioral repertoire of students with intellectual disabilities, while also understanding and contextualizing sociodemographic variables. The positive repertoire of social skills and the absence of student behavior problems contributed to positive interpersonal relationships with parents and teachers in both contexts. The results point to the importance of the theoretical-practical field of social skills for the educational inclusion context, highlighting the importance of promoting these resources for better interaction and development of students in this context. Hence as educational implications, this study shows that inclusive education faces difficulties in the practical context; thus, one direction could be social skills training programs to promote social relations of students, professors, and parents as well as promote a resource to face difficulties.

Limitations of this study include the use of unique instruments to measure the educational social skills of teachers and parents, and the fact that the *IHSE-Prof* is a self-report instrument subject to high social desirability. Therefore, further studies with other instruments and observations are suggested.

The present study innovates by using the triangulation method in bringing together the process of educational inclusion with the social skills of students and the educational social skills of parents and teachers. Thus, it has scientific and social relevance, as it proposes this study method in a context of such importance and which still faces serious problems.

**Author Contribution** All authors contributed to the study conception and design. Material preparation and data collection were performed by Eliza Silva (author 1), and analysis was performed by Eliza Silva, Anaisa Abrahão, and Luciana Elias. The first draft of the manuscript was written by Eliza Silva, Luciana Elias, and Catarina Grande. As well, all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

**Funding** This study was funded by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – Brazil (CAPES).

**Data Availability** The data that support the findings of this study are available from the corresponding author (Eliza Silva) upon request.

## Declarations

**Ethics Approval** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the Resolution 466/12 (Brazil, 2012). The study was approved by the Ethics Committee of Faculty of Philosophy, Sciences and Letters at Ribeirão Preto, University of São Paulo, Brazil, number 86636918.9.0000.5407 (CAAE—Certificado de Apresentação para Apreciação Ética).

**Competing Interests** The authors declare no competing interests.

## References

- Abrahão, A. L. B., dos Santos Elias, L. C., & Silva, E. F. E. (2022). ADHD students, teachers, and families: A triangulation study. *Trends in Psychology*, *30*(4), 745–762.
- Achenbach, T. M. (1966). The classification of children's psychiatric symptoms: A factor-analytic study. *Psychological Monographs*, *80*(7), 1–37.
- Achkar, A. M. N., 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 Pesquisas Em Psicologia*, *16*(3), 873–891.
- Achkar, A. M. N. E., Leme, V. B. R., Soares, A. B., & Yunes, M. A. M. (2019). Life satisfaction and academic performance of elementary school students. *Psico-USF*, *24*(2), 323–335. <https://doi.org/10.1590/1413-82712019240209>
- Agostini, J. M. G., & Freitas, L. C. (2022). Habilidades sociais educativas de pais de crianças com autismo: Revisão de literatura. *Psicologia Escolar E Educacional*, *26*, e234495. <https://doi.org/10.1590/2175-35392022234495>
- Aguiar, A. L., Aguiar, C., Cadima, J., Correia, N., & Fialho, M. (2019). Classroom quality and children's social skills and problem behaviors: Dosage and disability status as moderators. *Early Childhood Research Quarterly*, *49*, 81–92.
- Alvarenga, P. A., Weber, L. N. D., & Bolsoni-Silva, A. T. (2016). Cuidados parentais e desenvolvimento socioemocional na infância e na adolescência: uma perspectiva analítico-comportamental. *Revista Brasileira De Terapia Comportamental E Cognitiva*, *18*(1), 4–21. <https://doi.org/10.31505/rbtcc.v18i1.827>
- American Association of Intellectual and Developmental Disability (AAIDD). (2021). *Intellectual disability: Definition, classification, and systems of supports* (12th ed.). Washington, DC: AAIDD.
- Assis-Fernandes, R. P., & Bolsoni-Silva, A. T. (2020). Educational social skills and repertoire of children differentiated by behavior and sex. *Paidéia (ribeirão Preto)*, *30*, e3015. <https://doi.org/10.1590/1982-4327e3015>
- Associação Brasileira de Empresas de Pesquisa-ABEP. (2018). *Critério de Classificação Econômica Brasil*. São Paulo: ABEP. Disponível em: <http://www.abep.org/criterio-brasil>
- Barreto, S. O., Freitas, L. C., & Del Prette, Z. A. P. (2011). Habilidades sociais na comorbidade entre dificuldade de aprendizagem e problemas de comportamento: Uma avaliação multimodal. *Psico*, *42*(4), 503–510.
- Bee, H., & Boyd, D. (2011). *A criança em desenvolvimento*. São Paulo: Artmed.
- Benitez, P., de Fátima Kirchner, L., Ribeiro, G. W., & Tatmatsu, D. I. B. (2020). Educational social skills of parents of children with and without intellectual disability. *Psico-usf*, *25*(3), 415–424. <https://doi.org/10.1590/1413-82712020250302>
- Bolsoni-Silva, A. T., & Del Prette, A. (2003). Problemas de comportamento: Um panorama da área. *Revista Brasileira De Terapia Comportamental e Cognitiva*, *5*(2), 91–103.
- Bolsoni-Silva, A. T., & Fogaça, F. F. S. (2018). *Promove-País. Treinamento de habilidades sociais educativas: Guia teórico e prático*. Hogrefe.
- Bolsoni-Silva, A. T., & Loureiro, S. R. (2010). Validação do Roteiro de Entrevista de Habilidades Sociais Educativas Parentais (RE-HSE-P). *Avaliação Psicológica*, *9*(1), 63–75.



- Bolsoni-Silva, A. T., & Loureiro, S. R. (2019a). Práticas Parentais: Conjugalidade, Depressão Materna, Comportamento das Crianças e Variáveis Demográficas. *Psico-USF*, 24(1), 69–83.
- Bolsoni-Silva, A. T., & Loureiro, S. R. (2019b). Boys with internalizing and externalizing behavior problems: A case control study. *Trends in Psychology*, 27(1), 39–52. <https://doi.org/10.9788/TP2019.1-04>
- Bolsoni-Silva, A. T., & Loureiro, S. R. (2021). Práticas Educativas e Comportamentos Infantis: Avaliações de Mães e Professores. *Psicologia: Teoria e Pesquisa*, 37(e372), 1–11.
- Bolsoni-Silva, A. T., & Mariano, M. (2018). Comportamentos de professores e alunos: Descrições e comparações. *Arquivos Brasileiros De Psicologia*, 70(3), 80–97.
- Bolsoni-Silva, A. T., Loureiro, S. R., & Marturano, E. M. (2016a). Comportamentos internalizantes: Associações com habilidades sociais, práticas educativas, recursos do ambiente familiar e depressão materna. *Psico*, 47(2), 111–120.
- Bolsoni-Silva, A. T., Loureiro, S. R., & Marturano, E. M. (2016b). Roteiro de Entrevista de Habilidades Sociais Educativas Parentais (RE-HSE-P). Manual técnico [Interview Script of Parental Social Educative Skills (RE-HSE-P). Technical manual]. Hogrefe Cetep.
- Bolsoni-Silva, A. T., Falcão, A. P., & Cognetti, N. P. (2021). Intervenções na escola: Promove-Crianças e Promove-Professores. *Educação Em Foco*, 24(43), 291–316.
- Brasil. (2015). Lei n. 13.146, de 6 de julho de 2015. Institui a Lei Brasileira de Inclusão da Pessoa com Deficiência (Estatuto da Pessoa com Deficiência). Brasília, DF. Recuperado de [https://www.planalto.gov.br/ccivil\\_03/\\_ato2015-2018/2015/lei/l13146.htm](https://www.planalto.gov.br/ccivil_03/_ato2015-2018/2015/lei/l13146.htm)
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22(6), 723–742.
- Bronfenbrenner, U. (2011). *Bioecologia do Desenvolvimento Humano: tornando os seres humanos mais humanos*. Porto Alegre: Artmed.
- Cabral, C. S., Falcke, D., & Marin, A. H. (2021). Relação Família-Escola-Criança com Transtorno do Espectro Autista: Percepção de Pais e Professoras. *Revista Brasileira De Educação Especial*, 27, e0156. <https://doi.org/10.1590/1980-54702021v27e0156>
- Camargo, B. V., & Justo, A. M. (2013). IRAMUTEQ: um software gratuito para análise de dados textuais. *Temas em Psicologia*, 21(2), 513–518. <https://doi.org/10.9788/TP2013.2-16>
- Carvalho, R. E. (2019). *Educação Inclusiva: Com os pingos nos "is" (13ª)*. Mediação.
- Cia, F., & Barham, E. J. (2009). Repertório de habilidades sociais, problemas de comportamento, auto-conceito e desempenho acadêmico de crianças no início da escolarização. *Estudos De Psicologia*, 26(1), 45–55.
- Coelho, G., Campos, J. A. P. P., & Benitez, P. (2017). Relatos de pais sobre a inclusão e a trajetória escolar de filhos com deficiência intelectual. *Psicologia Em Revista*, 23(1), 22–41.
- Cunha, K. C., Pontes, F. A. R., & Silva, S. S. C. (2017). Pais de Crianças com Paralisia Cerebral Pouco Estressados. *Revista Brasileira De Educação Especial*, 23(1), 111–126. <https://doi.org/10.1590/S1413-65382317000100009>
- Coulombe, B. R., & Yates, T. M. (2018). Prosocial pathways to positive adaptation: The mediating role of teacher-child closeness. *Journal of Applied Developmental Psychology*, 58, 9–17. <https://doi.org/10.1016/j.appdev.2018.08.003>
- Creswell, J. W., & Plano Clark, V. L. (2013). *Pesquisa de métodos mistos*. Porto Alegre: Penso.
- Del Prette, Z. A. P., & Del Prette, A. (2008). Um sistema de categorias de habilidades sociais educativas. *Paidéia*, 18(41), 517–530.
- Del Prette, Z. A., & Del Prette, A. (2013a). *Psicologia das habilidades sociais na infância: Teoria e prática* (6a ed.). Vozes.
- Del Prette, Z.A.P., & Del Prette, A. (2013b). Educational Social Skills Inventory – Teacher version (IHSE-Prof): Preliminary psychometric data. Report not published by the authors.
- Del Prette, A., & Del Prette, Z. A. P. (2017). *Competência Social e Habilidades Sociais: Manual teórico-prático*. Petrópolis: Vozes.
- Del Prette, Z. A., Freitas, L. C., Bandeira, M., & Del Prette, A. (2016). *Inventário de habilidades sociais, problemas de comportamento e competência acadêmica para crianças - SSRS: manual de aplicação, apuração e interpretação*. São Paulo: Casa do Psicólogo.
- Demirkaya, P. N., & Bakkaloglu, H. (2015). Examining the student-teacher relationships of children both with and without special needs in. *Educational Sciences: Theory & Practice*, 15(1), 159–175.
- Denzin, N. K. (2009). *The research act: A theoretical introduction to sociological methods*. London, UK: Routledge.

- Elias, L. C. S., & Amaral, M. V. (2016). Habilidades Sociais, Comportamentos e Desempenho Acadêmico em Escolares antes e após Intervenção. *Psico-USF*, 21(1), 49–61.
- Elias, L. C., Marturano, E. M., & Motta-Oliveira, A. M. (2012). Eu posso resolver problemas: Um programa para o desenvolvimento de habilidades de solução de problemas interpessoais. *Temas Em Psicologia*, 20(2), 521–535.
- Fernandes, L. M., Leme, V. B. R., Elias, L. C. S., & Soares, A. B. (2018). Preditores do Desempenho Escolar ao final do Ensino Fundamental: Histórico de Reprovação, Habilidades Sociais e Apoio Social. *Trends in Psychology*, 26(1), 215–228.
- Frederickson, N., Simmonds, E., Evans, L., & Soulsby, C. (2007). Assessing the social and affective outcomes of inclusion. *British Journal of Special Education*, 34, 105–115.
- Freitas, L. C., & Del Prette, Z. A. P. (2014). Categorias de Necessidades Educacionais Especiais Enquanto Predictoras de Déficits em Habilidades Sociais na Infância. *Psicologia Reflexão e Crítica*, 27(4), 658–669.
- Garcia, L. M., Cia, F., & Capellini, V. L. M. F. (2022). A relação família e escola na visão de professores após curso de formação continuada. *Revista Educação Especial*, 35, 1–17. <https://doi.org/10.5902/1984686X65571>
- Garrote, A. (2017). The relationship between social participation and social skills of pupils with an intellectual disability: A study in inclusive classrooms. *Frontline Learning Research*, 5(1), 1–15.
- Gavasso, M. S. B., Fernandes, J. S. G., & Andrade, M. S. (2016). Revisão sistemática de estudos sobre habilidades sociais: Avaliação e treinamento. *Ciências & Cognição*, 21(1), 52–58.
- Gresham, F. M., & Elliot, S. N. (1990). *Social skills rating system: Manual*. Circle Pines, MN: America Guidance Service.
- Houston, S., & Griffiths, H. (2000). Reflection on risk in child protection: Is it time for a shift in paradigms. *Child & Family Social Work*, 5(1), 1–10.
- Hukkelberg, S., Keles, S., Ogdén, T., & Hammerstrøm, K. (2019). The relation between behavioral problems and social competence: A correlational Meta-analysis. *BMC Psychiatry*, 19(354), 1–14.
- Lahlou, S. (1994). L'analyse lexicale. *Variances*, 3, 13–24.
- Leme, V. B. R., & Bolsoni-Silva, A. T. (2010). Habilidades sociais e problemas de comportamento: Um estudo exploratório baseado no modelo construcional. *Alethéia*, 31, 149–167.
- Luiz, F. M. R., & Nascimento, L. C. (2012). Inclusão escolar de crianças com síndrome de down: Experiências contadas pelas famílias. *Revista Brasileira De Educação Especial*, 18(1), 127–140.
- Lyons, G. L., Huber, H. B., Carter, E. W., Chen, R., & Asmus, J. M. (2016). Assessing the social skills and problem behaviors of adolescents with severe disabilities enrolled in general education classes. *American Journal on Intellectual and Developmental Disabilities*, 121(4), 327–345.
- Mancini, M. C., Megale, L., Brandão, M. B., Melo, A. P. P., & Sampaio, R. F. (2004). Efeito moderador do risco social na relação entre risco biológico e desempenho funcional infantil. *Revista Brasileira De Saúde Materno Infantil*, 4(1), 25–34.
- Mariano, M., & Bolsoni-Silva, A. T. (2018). Social interactions between teachers and students: A study addressing associations and predictions. *Paidéia*, 28, <https://doi.org/10.1590/1982-4327e2816> (Article e2816.)
- Marturano, E. M., & Ferreira, M. C. T. (2004). A criança com queixas escolares e sua família. In E. M. Marturano, M. B. M. Linhares, & S. R. Loureiro (Orgs.), *Vulnerabilidade e proteção: indicadores na trajetória de desenvolvimento do escolar* (pp. 217–249). São Paulo: Casa do Psicólogo/FAPESP.
- Marturano, E. M. (2013). A criança, a família, a escola e a transição para o ensino fundamental. In E. C. Konkiewitz. (Org.). *Aprendizagem, comportamento e emoções na infância e na adolescência-uma visão transdisciplinar* (pp. 47–69). Dourados: Editora UFGD.
- Maturana, A. P. P. M., Mendes, E. G., & Capellini, V. L. M. F. (2019). Schooling of students with intellectual disabilities: Family and school perspectives. *Paidéia (ribeirão Preto)*, 29, e2925. <https://doi.org/10.1590/1982-4327e2925>
- Minayo, M. C. S. (2008). *Pesquisa social: Teoria, método e criatividade*. Vozes.
- Ministério da Educação. Secretaria de Educação Especial. (2008). *Política Nacional de Educação Especial na Perspectiva da Educação Inclusiva*. Brasília: MEC/SEESP.
- Munhóz, M. A. (2003). *A Contribuição da Família para as possibilidades de Inclusão das Crianças com Síndrome de Down (Tese de Doutorado, Faculdade de Educação, Universidade Federal do Rio Grande do Sul, Porto Alegre)*. Retrieved from <https://lume.ufrgs.br/handle/10183/2252>
- Nascimento, A. R. A., & Menandro, P. R. M. (2006). Análise lexical e análise de conteúdo: Uma proposta de utilização conjugada. *Estudos e Pesquisas Em Psicologia*, 6(2), 72–88.

- Pamplin, R. C. O. (2005). *A interface família-escola na inclusão de crianças com necessidades educacionais especiais: Uma perspectiva ecológica (Dissertação de Mestrado)*. Universidade Federal de São Carlos, São Carlos, SP, Brasil.
- Parreira, V. L. C., & Marturano, E. M. (1999). *Como ajudar seu filho na escola*. São Paulo: Ave-Maria.
- Pizato, E. C. G., Marturano, E. M., & Fontaine, A. M. G. V. (2014). Trajetórias de habilidades sociais e problemas de comportamento no ensino fundamental: influência da educação infantil. *Psicologia: Reflexão e Crítica*, 27(1), 189–197.
- Quiterio, P. L., de Nunes d'Oliveira Paula, L. R., de Lima Camelo, B., da Silva, J. P., & do Brasil do Carmo, M. M. I. (2021). Promoção das Habilidades Sociais de Futuros Professores com foco na Educação Inclusiva. *Estudos E Pesquisas Em Psicologia*, 21(2), 611–631. <https://doi.org/10.12957/ep.2021.6106>
- Rahme, M. M. F., Ferreira, C. M. R. J., & Neves, L. R. (2019). Sobre Educação Política e Singularidade. *Educação & Realidade*, 44(1), 1–13.
- Ratinaud, P. (2009). *IRAMUTEQ: Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires* [Computer software]. Retrieved from <http://www.iramuteq.org>
- Rocha, M. M., & Del Prette, Z. A. P. (2017). Habilidades sociais educativas para mães de crianças com TDAH e a inclusão escolar. *Psicologia Argumento*, 28(60). Recuperado de <https://periodicos.pucpr.br/psicologiaargumento/article/view/19723>
- Rosin-Pinola, A. R., & Del Prette, Z. A. P. (2014). Inclusão escolar, formação de professores e a assessoria baseada em habilidades sociais educativas. *Revista Brasileira De Educação Especial*, 20(3), 341–356.
- Rosin-Pinola, A. R., Marturano, E. M., & Elias, L. C. (2016). Desenvolvendo habilidades sociais educativas junto a professores do ensino fundamental. *Texto final do pós-doc aprovado pela Comissão de pesquisa*. Ribeirão Preto: Faculdade de Medicina da USP, Universidade de São Paulo.
- Rovaris, J. A., & Bolsoni-Silva, A. T. (2020). Práticas educativas maternas e repertórios comportamentais infantis: Um estudo de comparação e predição. *Revista De Psicologia*, 38(1), 243–273.
- Salviati, M. E. (2017). *Manual do Aplicativo Iramuteq (versão 0.7 Alpha 2 e R Versão 3.2.3)*. Planaltina, DF. Recuperado de <http://iramuteq.org/documentation/fichiers/manual-do-aplicativo-iramuteq-par-maria-elisabeth-salviati>
- Silva, E. F., & Elias, L. C. S. (2020). Habilidades Sociais de Pais, Professores e Alunos com Deficiência Intelectual em Inclusão Escolar. *Revista Brasileira De Educação Especial*, 26(4), 605–622. <https://doi.org/10.1590/1980-54702020v26e0142>
- Silva, E. F., & Elias, L. C. S. (2022). Inclusão de alunos com deficiência intelectual: recursos e dificuldades da família e de professoras. *Educação em Revista*, 38, e26627. <https://doi.org/10.1590/0102-469826627>
- Silveira, K. A., Enumo, S. R. F., & Rosa, E. M. (2012). Concepções de professores sobre inclusão escolar e interações em ambiente inclusivo: Uma revisão da literatura. *Revista Brasileira De Educação Especial, Marília*, 18(4), 695–708.
- Sucuoglu, B., Bakkaloglu, H., Demir, S., & Atalan, D. (2019). Factors predicting the development of children with mild disabilities in inclusive preschools. *Infants & Young Children*, 32(2), 77–98.
- Tavares, L. M. F. L., Santos, L. M. M., & Freitas, M. N. C. (2016). A Educação Inclusiva: Um estudo sobre a formação docente. *Revista Brasileira De Educação Especial, Marília*, 22(4), 527–542.
- Teles, F. M., Resegue, R., & Puccini, R. F. (2013). Habilidades funcionais de crianças com deficiências em inclusão escolar: Barreiras para uma inclusão efetiva. *Ciência & Saúde Coletiva*, 18(10), 3023–3031.
- UNESCO. (1994). *Declaração de Salamanca sobre princípios, política e práticas na área das necessidades educativas especiais*. UNESCO.
- Vaz, W. F. (2019). *Da inclusão educacional para a exclusão da aprendizagem*. Judiaí-SP: Paco.
- Vieira, C. M., & Omote, S. (2021). Atitudes Sociais de Professores em Relação à Inclusão: Formação e Mudança. *Revista Brasileira De Educação Especial*, 27, e0254. <https://doi.org/10.1590/1980-54702021v27e0254>
- Vilaronga, C. A. R., & Mendes, E. G. (2014). Ensino colaborativo para o apoio à inclusão escolar: Práticas colaborativas entre os professores. *Revista Brasileira De Educação*, 95(239), 139–151.

Springer Nature or its licensor (e.g. a society or other partner) holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.

## Authors and Affiliations

**Eliza França e Silva<sup>1</sup>**  · **Luciana Carla dos Santos Elias<sup>2</sup>** ·  
**Maria Catarina Leite Rodrigues Grande<sup>3</sup>** · **Anaísa Leal Barbosa Abrahão<sup>4</sup>**

✉ Eliza França e Silva  
elizafs@usp.br

Luciana Carla dos Santos Elias  
lucaelias@ffclrp.usp.br

Maria Catarina Leite Rodrigues Grande  
cgrande@fpce.up.pt

Anaísa Leal Barbosa Abrahão  
anaisa.leal@unesp.br

<sup>1</sup> Faculty of Philosophy, Sciences and Letters at Ribeirão Preto, University of São Paulo, Av. Bandeirantes, 3900 - Vila Monte Alegre, Ribeirão Preto, SP 14040-900, Brazil

<sup>2</sup> Faculty of Philosophy, Sciences, and Letters of Ribeirão Preto, University of São Paulo (USP), Av. Bandeirantes, 3900 - Vila Monte Alegre, Ribeirão Preto, SP 14040-900, Brazil

<sup>3</sup> Faculty of Psychology and Educational Sciences, University of Porto (FPCEUP), Alfredo Allen Street, 4200-135 Porto, Portugal

<sup>4</sup> Faculty of Human and Social Sciences, São Paulo State University “Júlio de Mesquita Filho”, Av. Eufrásia M. Petrágia, Franca, SP 900, 14409-160, Brazil