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Emotional competence in children with Autism Spectrum Disorder: a pilot intervention study

Competência emocional em crianças com Transtorno do Espectro Autista: um estudo piloto de intervenção

Competencia emocional en niños con Trastorno del Espectro Autista: un estudio piloto de intervención

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Abstract

Introduction: Emotional competence is a developmental process that is progressively built throughout childhood. In children with Autism Spectrum Disorder (ASD), characteristics such as cognitive rigidity, social difficulties, and repetitive behaviors can hinder the development of skills related to the recognition and regulation of emotions. **Objective:** To compare, in a pilot study, the performance of children with ASD on skills related to emotional recognition and regulation before and after training in emotional self-regulation. **Method:** Six participants of both genders, aged between five and 10 years and 11 months, diagnosed with ASD, took part in the study. The participants were assessed using an Emotional Intelligence questionnaire. For the intervention, which lasted from three to six sessions, an emotion regulation material titled "How Do I Feel?" was used. **Results:** When comparing pre- and post-intervention measures, a trend toward improvement was observed in the children's performance on skills related to emotional competence, particularly in emotion recognition, along with variable improvements in emotional regulation. **Conclusion:** The findings suggest that training in emotional self-regulation may promote the development of skills related to emotional competence in children with ASD, reinforcing its potential as an intervention strategy.

Keywords: Autism Spectrum Disorder; Emotional regulation; Practice Guideline.

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LMS: methodology; data collection; article outline.
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Resumo

Introdução: A competência emocional é um processo desenvolvimental construído progressivamente ao longo da infância. Em crianças com Transtorno do Espectro Autista (TEA), características como rigidez cognitiva, dificuldades sociais e comportamentos repetitivos podem dificultar o desenvolvimento de habilidades relacionadas ao reconhecimento e à regulação das emoções. **Objetivo:** Comparar, em um estudo piloto, o desempenho de crianças com TEA em habilidades relacionadas ao reconhecimento e à regulação emocional antes e após um treinamento em autorregulação emocional. **Método:** Participaram seis sujeitos de ambos os gêneros, com idades entre cinco a 10 anos e 11 meses com diagnótico de TEA. Os participantes foram submetidos à avaliação de um questionário de Inteligência Emocional. Para intervenção, que durou de três a seis sessões, utilizou-se de um material de regulação das emoções intitulado "Como eu me sinto?". **Resultado:** Na comparação entre os momentos pré e pós-intervenção, observou-se tendência de melhora no desempenho das crianças em habilidades relacionadas à competência emocional, com destaque para o reconhecimento das emoções e avanços variáveis na regulação emocional. **Conclusão:** Os achados sugerem que o treinamento em autorregulação emocional pode favorecer o desenvolvimento de habilidades relacionadas à competência emocional em crianças com TEA, reforçando seu potencial como estratégia de intervenção.

Palavras-chave: Transtorno do Espectro Autista; Regulação emocional; Guia de Prática Clínica.

Resumen

Introducción: La competencia emocional es un proceso de desarrollo que se construye progresivamente a lo largo de la infancia. En niños con Trastorno del Espectro Autista (TEA), características como la rigidez cognitiva, las dificultades sociales y las conductas repetitivas pueden obstaculizar el desarrollo de habilidades relacionadas con el reconocimiento y la regulación emocional. **Objetivo:** Comparar el desempeño de niños con TEA en habilidades relacionadas con el reconocimiento y la regulación emocional antes y después del entrenamiento en autorregulación emocional. **Método:** Participaron seis sujetos de ambos sexos, de entre cinco y diez años y once meses de edad, diagnosticados con TEA. Los participantes fueron evaluados mediante un cuestionario de Inteligencia Emocional. Para la intervención, que duró de três a seis sesiones, se utilizó un material de regulación emocional titulado "¿Cómo me siento?". **Resultados:** En la comparación entre los momentos pre y post-intervención, se observó una mejora en el desempeño de los niños en habilidades relacionadas con la competencia emocional, con énfasis en el reconocimiento de emociones y avances variables en la regulación emocional. **Conclusión:** Los hallazgos sugieren que el entrenamiento en autorregulación emocional puede promover el desarrollo de habilidades relacionadas con la competencia emocional en niños con TEA, reforzando su potencial como estrategia de intervención.

Palabras clave: Trastorno del Espectro Autista**;** Regulación Emocional**;** Guía de Práctica Clínica**.**

Introduction

Autism Spectrum Disorder, according to the World Health Organization (2019)[1] is characterized by persistent *deficits* in the ability to initiate and maintain reciprocal social interactions and social communication, and by a range of restricted, repetitive, and inflexible patterns of behavior, interests, or activities that are clearly atypical or excessive for the individual's age and sociocultural context.

These *deficits* are severe enough to cause impairment in personal, social, occupational, or other important areas of functioning, and are generally a pervasive feature of the individual's functioning, observable across all situations, although they may vary. Individuals across the spectrum exhibit a wide range of intellectual functioning and language skills[1].

Difficulties in social interaction and communication can be explained by a deficit in social cognition (SC)[2], which is, in turn, a set of cognitive skills involved in processing and interpreting the social world[3].

According to Happé and Frith[2], social behavior develops around age five, when children are able to differentiate their own internal states from those of others[4]; however, it is important to note that children with ASD have difficulty understanding the mental states and perspectives of others[2].

Among the most debilitating aspects of ASD are difficulties related to emotional competence, understood as a multidimensional construct involving the skills of recognizing, understanding, expressing, and regulating emotions[5,6].

Emotional regulation (ER), the focus of this study, can be defined as the set of processes through which individuals influence which emotions they experience, when they experience them, and how they experience and express them[5,7]. It therefore refers to the ability to monitor, evaluate, and modulate emotional experiences in response to internal or external/environmental stimuli, as well as the way in which they are processed and expressed[8].

Although difficulties with ER do not constitute a diagnostic criterion for ASD, evidence suggests that characteristics associated with the disorder, such as cognitive rigidity, social difficulties, and repetitive behaviors, may contribute to the development of difficulties in regulating emotions[9].

The development of ER begins in the first months of life and occurs progressively through interactions between the child and their caregivers[10]. Children capable of regulating their emotions respond to situations in a socially appropriate manner, while those with difficulties in this skill tend to exhibit greater emotional reactivity and impairments in adaptive functioning[11].

Studies show that children with ASD experience greater difficulties with emotional regulation and more frequently employ less adaptive patterns of regulatory strategies[9,12]. For this reason, the concept of emotional dysregulation (ED) refers to the inability to use the modulatory mechanisms involved in emotional regulation and has attracted interest in the scientific literature[9].

In addition to emotional regulation, emotional recognition constitutes another important component of emotional competence. This ability allows individuals to identify and understand emotional states and is associated with social adaptation and the quality of interpersonal interactions[5,6].

Research points to difficulties with emotional recognition in individuals with ASD[13], although results vary depending on the characteristics of the participants and the tasks used[14,15].

Given the importance of recognizing and regulating emotions for emotional and social development, and the need to expand approaches specifically focused on emotional regulation in children with ASD, investigating therapeutic strategies in this area is clinically relevant[16,17].

It is important to note that the challenges faced by children with ASD not only hinder the formation of meaningful relationships but also contribute to social isolation, poor academic performance, and comorbid mental health conditions[18], such as anxiety and depression[19]. Consequently, the development of social-emotional competence has emerged as a key focus for interventions aimed at improving functional outcomes and quality of life for individuals with ASD[20].

However, it is known that despite growing interest in this area, emotional regulation remains understudied as a primary objective and outcome in interventions targeting young children with autism[16].

Therefore, the objective of this study was to compare, in a pilot study, the performance of children with ASD on skills related to emotional recognition and regulation before and after training in emotional self-regulation.

Methods and Materials

This is a quasi-experimental, single-group pilot study with a pre- and post-intervention design.

Participants

Six participants of both genders, aged 5 to 10 years and 11 months, diagnosed with Autism Spectrum Disorder according to the criteria of the DSM-5 (APA, 2013) and ICD-11 (WHO, 2019), and who receive speech-language therapy at a teaching clinic, participated in this study. This research project was submitted to the Research Ethics Committee of the Faculty of Philosophy and Sciences (CEP/FFC/UNESP) (CAAE: 24129419.5.0000.5406) and was conducted after its approval. The parents and/or guardians of the selected participants were informed about the study and signed the Informed Consent Form, in accordance with National Health Council Resolution CNS 196/96, to authorize the study.

Inclusion Criteria

As inclusion criteria, subjects were selected who had been diagnosed with Autism Spectrum Disorder requiring Level 1 or 2 support, according to DSM-5 criteria[21], children aged between five and 10 years and 11 months, and who were capable of verbal communication.

Exclusion Criteria

As exclusion criteria, subjects without a prior ASD diagnosis, nonverbal individuals, and those who did not complete the training were excluded from this study.

Materials

I - Emotional Intelligence Test (or emotional regulation)

- To assess the level of emotional intelligence among the study participants, the Emotional Intelligence Test for Children was used, including only questions that were easy for the participants to understand (Appendix A). This test includes some of the basic emotions and feelings proposed by Plutchik in 2003, such as: Sadness, Joy, Disgust, Fear, Acceptance, Surprise, and Anger[22]. For each emotion, there were short stories and questions about the events described in them, with several answer options, so that the child could choose the one they felt was most appropriate for that particular situation.

Test Administration Instructions:

1. Read the stories to the child and ask a few questions about them.
2. Show the answer options and help the child explain the events, determining which answer they consider most appropriate in that context.

Hypothetical scenarios were also presented to the children, with the aid of colorful images. The purpose of this test is to analyze the subjects' interpretations of the emotions and feelings in each of the stories. At the end of each session, the results were reported to the parents and/or guardians.

II - Emotional Regulation Cards

To train emotional regulation skills, the "How Do I Feel?" emotion cards (example in Appendix B), previously developed by the Laboratory for the Study of Children's Language (LEALI), were used. These cards feature ten emotions: Anxious, Angry, Tired, Sick, Amused, Happy, Frustrated, Afraid, Sad, Satisfied. For each emotion, the cards offer four self-regulatory options, such as: "Ask for a hug," "Drink some water," "Rest," "Ask for help," "Talk about my feelings," "Listen to music," etc., depending on the emotion in question.

Instructions for using the cards:

1. Show the cards with the emotions facing up and ask the child or teen how he or she is feeling (you can try to guess).
2. Flip the card over and ask which of the options they'd like to try to feel better.

Hypothetical situations were used with the children, supported by thematic charts and pre-written stories, with the aim of validating the characters' feelings and utilizing the self-regulation strategies presented on the cards. At the end of each session, parents were instructed to continue the work of raising awareness about emotions at home, also using the emotional regulation cards as a resource.

Data Collection Procedure

The researcher presented the study to the parents and/or guardians of the selected participants on a previously scheduled date. Upon agreeing to participate in the study, they signed an Informed

Consent Form, specifically designed for this study. Data collection took place at the Laboratory of Studies of Children's Language (LEALI), located at the Center for Education and Health Studies (CEES) at Unesp in Marília.

Data collection took place in a consultation room, where the participants took the Emotional Intelligence Test prior to the intervention. This test lasted approximately 50 minutes, depending on the accuracy of the participants' responses; this time could be extended or reduced. Data were collected on a printed copy of the test, unique to each participant, and were also stored on a computer for post-intervention comparison.

In addition, the training phase was carried out using emotion cards ("How do I feel?") so that the children could work on emotional self-regulation with the help of the therapist/researcher, along with playful activities tailored to the interests of the research participants. This phase lasted approximately 30 minutes, until all the cards depicting their respective emotions and the explanations for each one had been presented. Finally, to compare the effectiveness of the cards, the Emotional Intelligence Test was administered again, totaling an average of 10 sessions to complete the procedure: one or two sessions for the pretest, three to six sessions for the use of the cards, and one or two sessions for the posttest, depending on the child's needs.

On average, two sessions were held per week, thus taking approximately three months to complete the signing of the Informed Consent Form, the administration of the pre-intervention Emotional Intelligence Test, training, and the administration of the post-intervention Emotional Intelligence Test, in addition to accounting for possible absences and unforeseen events that might prevent the participants from completing any of the planned stages.

All procedures were performed by the researchers under the supervision of their advisor at the CEES teaching clinic at Unesp.

Data Analysis Procedure

The criteria for evaluating the results were based on Mayer and Salovey (1997)[23], who define emotional intelligence as the ability to process information derived from emotions through the following basic skills: perception, understanding, regulation of emotions, and the use of emotion to facilitate thinking.

In each story, one of the emotions proposed by Plutchik[22] was evoked and the questions addressed competencies associated with emotional intelligence[23]. For example, the story below describes a situation of injustice that leads one of the characters to experience the emotion of anger, but this feeling is not explicitly mentioned or described.

"Paulo and Marcos are in the same class and always sit together. One day, they are drawing and need to share their colored pencils. At one point, both want to use the same color. Paulo is faster than Marcos and grabs the pencil right away. Paulo says to Marcos, 'Now you wait—who told you to be so slow?!'"

The questions that follow highlight the organization of the emotional information embedded in the story, for example: "How did Marcos feel?" (Perception of emotions); "What could Marcos do to feel better?" (Emotional regulation).

Thus, the complete instrument consisted of seven stories, each representing one of Plutchik's seven basic emotions[22]. Following a content analysis, the responses to each item were classified into categories, which served as the criterion for assigning points to the children's responses. Points were assigned to responses to items related to emotion perception (i1, i3, i5, i8, i9, i11, i13, i14, i16, i19, and i20) and emotion regulation (i4, i7, i12, i15, i18, and i21). It was decided to exclude items i2, i6, i10, and i17, as they lacked an appropriate response classification.

For items related to the perception of emotions, responses were categorized as inappropriate, partially appropriate, and appropriate, which received zero, one, or two points, respectively. Chart 1 presents a description of these three scoring categories.

As with the previous skill, the items related to emotional regulation also resulted in three possible scores: two, one, or zero points. The scoring criteria are shown below in Chart 2.

Chart 1. Scoring criteria for emotion perception items.

Criteria	Scores
Name the expected emotion or an equivalent emotion. (If the perception of the emotion is not compromised)	2 points
An unexpected emotion, but one related to the context. (If the perception of the emotion is compromised)	1 point
Describe an emotion in more general terms, without naming it, but indicating whether it is negative or positive. An unexpected emotion unrelated to the context. Inappropriate responses.	0 points

Chart 2. Scoring criteria for the emotional regulation items.

Criteria	Scores
Independent and efficient problem-solving.	2 points
Dependent problem-solving, resulting in some form of financial loss.	1 point
Inappropriate responses, lacking strategy; fanciful, vindictive, or competitive solutions.	0 points

Statistical Analysis

The data were analyzed using descriptive statistics, specifically the median and interquartile range (IQR), given the small sample size. To compare the scores obtained before and after the intervention, the Wilcoxon signed-rank test was used, with a significance level of 5% ($p < 0.05$). The analyses were performed using Jamovi software, version 2.6.44.

Due to the small sample size, inferential results were interpreted in an exploratory manner.

Results

The following presents the results obtained through the Emotional Intelligence Test, used to assess skills related to emotional competence in the domains of emotion perception and regulation. The data from the six participants were analyzed individually and compared between the pre- and post-intervention time points; they are presented in Table 1, identified by the numbers 1 through 6.

Table 1. Index of emotional perception and regulation before and after the intervention.

Participant	Pre-intervention			Post-intervention		
	Emotion Perception	Emotion Regulation	Total	Emotion Perception	Emotion Regulation	Total
1	13	7	20	19	7	26
2	19	10	29	21	10	31
3	19	8	27	18	12	30
4	19	8	27	15	6	21
5	17	11	28	18	12	30
6	12	4	16	11	6	17

In the individual analysis, an increase in the total score was observed in five of the six participants after the intervention. The gains ranged from one to six points, while only one participant showed a decrease in the total score. Regarding emotion perception skills, three participants showed an increase in their scores (participants 1, 2, and 5), while three showed a decrease (participants 3, 4, and 6). For skills related to emotional regulation, three participants showed improvement (participants 3, 5, and 6), two maintained the same score (participants 1 and 2), and one showed a decrease (participant 4).

In addition to the individual analysis, a descriptive analysis was conducted of the scores obtained before and after the intervention.

The descriptive analysis showed a slight increase in the median scores after the intervention, particularly for the total score and for emotional regulation skills (Table 2).

Table 2. Descriptive statistics of the scores obtained before and after the intervention.

Variable	Pre-intervention Median (IQR)	Post-intervention Median (IQR)
Perception of emotions	18.0 (14.0–19.0)	18.0 (15.8–18.8)
Emotion Regulation	8.0 (7.3–9.5)	8.5 (6.3–11.5)
Total score	27.0 (21.8–27.8)	28.0 (22.3–30.0)

In the individual analysis, an increase in the total score was observed in five of the six participants after the intervention. The gains ranged from one to six points, while only one participant showed a decrease in the total score.

Regarding emotion perception skills, three participants showed an increase in their scores and three showed a decrease. For skills related to emotional regulation, three participants showed improvement, two maintained the same score, and one showed a decrease.

The individual variation in scores is presented in Table 3.

Table 3. Individual change (Δ) between the pre- and post-intervention time points.

Participant	Δ Perception	Δ Regulation	Δ Total
1	+6	0	+6
2	+2	0	+2
3	−1	+4	+3
4	−4	−2	−6
5	+1	+1	+2
6	−1	+2	+1

In the inferential analysis, conducted using the Wilcoxon signed-rank test, no statistically significant differences were observed between the pre- and post-intervention time points for emotion perception ($W = 9.0$; $p = 0.844$), emotion regulation ($W = 2.5$; $p = 0.500$), and total score ($W = 5.5$; $p = 0.344$).

Despite the lack of statistical significance, a trend toward improvement in overall performance was observed among most participants, as evidenced by an increase in the total score in five of the six cases evaluated.

The following graph provides an integrated view of the results obtained by the participants before and after the intervention. For this representation, the scores for Emotion Perception and Emotion Regulation were added together, resulting in a total score for each participant.

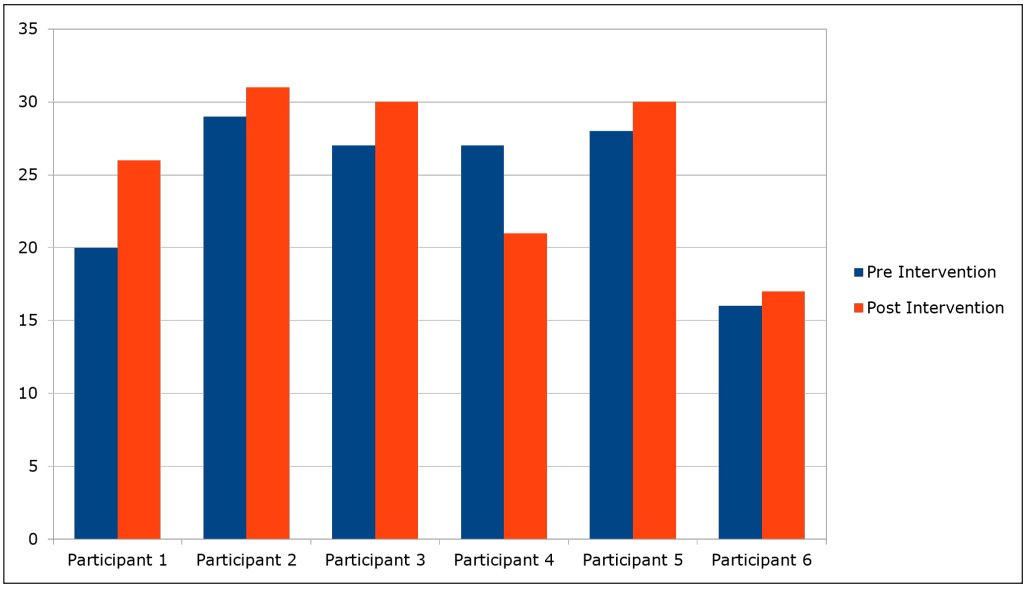


Figure 1. Participants' Scores Before and After the Intervention

Discussion

This study has important limitations, including the small sample size, the absence of a control group, heterogeneity in age and level of support, and the short duration of the intervention. Furthermore, no longitudinal follow-up was conducted, making it impossible to verify the maintenance of the observed gains over time. These characteristics prevent generalizations of the results and reinforce that the findings should be interpreted with caution, consistent with the exploratory nature of this pilot study.

The aim of this pilot study was to compare the performance of children with ASD in skills related to emotional recognition and regulation before and after training in emotional self-regulation. Although no statistically significant differences were observed between the pre- and post-intervention time points, an increase in the total score was observed in five of the six participants, suggesting a favorable trend in the scores following the intervention. Individual responses, however, were heterogeneous, especially regarding skills related to emotional recognition and regulation, which is consistent with the exploratory design of this pilot study. These findings suggest that different components of emotional competence may respond differently to short-term interventions.

Emotional recognition depends primarily on the identification and interpretation of emotional cues, whereas emotional regulation involves more complex cognitive processes, including emotional monitoring, cognitive flexibility, inhibitory control, and the selection of adaptive strategies[7,12]. Thus, it is expected that brief interventions will initially promote improvements in emotion recognition, while consistent changes in emotional regulation will require a longer training period.

Recent analyses indicate that individuals with higher levels of autistic traits exhibit significant *deficits* in emotional recognition[24]. Although it is not possible to establish this relationship based on the present sample, it was observed that the only participant classified as requiring Level 2 support (Participant 4) performed worse on both assessed skills.

Regarding this same participant, it was noted that, during the post-intervention assessment, he showed less engagement and sought to finish the activity quickly. These situational factors may have influenced his performance, considering that his score was higher at the pre-intervention stage. In this regard, it is known that emotional and cognitive engagement plays an important role in learning outcomes[25] and may also have contributed to the observed findings.

An important observation is that subjects 3 and 5 had the highest scores on skills related to emotional competence as assessed by the Emotional Intelligence Test, and they are also the oldest participants in this study, both aged 10 years. These results can be interpreted in light of the development of emotional competence, since advancing age is associated with improvements in the recognition of emotions and in aspects of social competence[26]. Although this observation should be interpreted with caution due to the small number of participants, it reinforces the importance of considering age as a potentially relevant variable in future intervention studies.

It was observed that Subject 6 exhibited poor concentration and high distractibility during the assessments. This behavior may be related to difficulties with executive functions, which are frequently described in individuals with ASD[27].

Regarding the training provided using the "How Do I Feel?" emotional regulation cards, the results obtained may also be related to the characteristics of the material used during the intervention. According to Cai et al.[12], the use of regulation strategies and flexibility in their application are crucial for emotional regulation in autism, and adaptive strategies act as protective factors for psychological well-being. In addition to introducing self-regulatory strategies, the cards facilitate the identification and naming of emotions through visual support, a resource frequently used in interventions with children with ASD due to its predictability and organized presentation of information.

From a clinical perspective, the results suggest that structured and visual strategies may constitute potentially useful therapeutic resources for therapists and family members in teaching skills related to emotional competence. Although the present study was conducted in a speech-language pathology setting, the material used can be adapted for different therapeutic and educational environments.

Considering the study design adopted, it is worth noting that pilot studies represent an important step in the planning of clinical trials, allowing for the evaluation of the feasibility of the intervention, methodological procedures, and instruments used prior to conducting larger-scale studies[28]. In this context, despite the limitations inherent in this type of design, this study contributes to an area that remains largely unexplored in Brazilian speech-language pathology. While most interventions targeting ASD focus on language, communication, and social skills, few studies specifically investigate strategies for developing emotional competence.

Thus, the findings presented here can serve as a basis for the development of clinical trials with greater methodological rigor, contributing to the strengthening of the evidence base regarding interventions aimed at developing emotional competence in children with ASD.

Conclusion

The results of this study reinforce the importance of emotional competence as a key target for intervention in children with Autism Spectrum Disorder, given its close relationship with social and adaptive development. Although no statistically significant differences were observed, an increase in the total score was noted in five of the six participants after the training, particularly in skills related to emotion recognition, while improvements in emotional regulation showed greater variability among the children. These findings suggest that training with the *"How Do I Feel?"* cards may contribute to the development of skills related to emotional competence in children with ASD.

Although the results are promising, they should be interpreted with caution due to the small sample size and the clinical variability among the participants. Future studies with larger samples, more homogeneous groups in terms of age and level of support, as well as longer-term interventions and longitudinal follow-up, may help confirm the effectiveness of this therapeutic approach and expand our understanding of the development of emotional competence in children with ASD.

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APPENDIX A
Emotional Intelligence Test for Children
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Name: Age:

Gender: Grade: School:

A. Mario really wanted to go to the amusement park, but he didn't have enough money to get in. The next day, his dad said he'd won some tickets and that they could go to the park.

i1. How is Mário feeling?
( ) He's excited about going to the park ( ) He's feeling good ( ) He's happy
i2. This feeling is:
( ) Calm ( ) Excited

i3. The next day, when they arrived at the park, there was a sign saying that the park was closed that day for repairs. Mário started screaming, crying, and kicking because he felt a mixture of:
( ) Disappointment and anger ( ) Sadness and unhappiness ( ) Anger and fear

i4. What could he do to feel better?
( ) Try to exchange the tickets ( ) Go play with his friends and forget about the park ( ) Kick and scream until they open the park so they can play

B. Carol had a little puppy she received as a Christmas gift. The puppy's name was Pepeto, and they played a lot together. Carol played with Pepeto every day, and Pepeto already knew what time Carol would get home from school and would wait for her at the gate. But one day Pepeto got sick and had to go to the vet (a vet is a dog doctor) and stayed there for several days. During that time, Pepeto wasn't at home to wait for Carol.

i5. How did Carol feel during that time? ( ) Sad ( ) Disappointed ( ) She felt bad

i6. This feeling is:
( ) Clear ( ) Dark

i7. What could Carol do to feel better?
( ) Visit Pepeto at the vet whenever possible ( ) Cry because she misses him ( ) Go play and forget about the problem

i8. One day, she received the news that Pepeto had died, but her father had brought her another puppy. So, she felt a mixture of:
( ) Sadness and joy ( ) Anger and disappointment ( ) Fear and joy

C. Ciça wore her new little shoe to school that day. But when she got there, her friends thought her shoe was really ugly and weird, and they kept making fun of her. Realizing that Ciça was upset, Mileine sat down next to her and said, "Don't pay any attention to them! That shoe looks really cute on you!"

i9. How did Ciça feel when Mileine told her that the little shoe looked good on her?
( ) That her friend liked her ( ) She felt good ( ) She felt pretty

i10. This feeling is:
( ) Calm ( ) Agitated

D. Paulo and Marcos are in the same class and always sit together. One day, they're drawing and have to share their colored pencils. At one point, they both want to use the same color. Paulo is faster than Marcos and grabs the pencil right away. Paulo says to Marcos, "Now you wait—who told

you to be so slow?!"

i11. How did Marcos feel at the end of the story?
( ) He felt bad ( ) He was scared ( ) He was angry

i12. What could Marcos do to feel better?
( ) Cry and tell the teacher ( ) Take Paulo's pencil by force ( ) See if anyone else had the pencil he wanted

E. Tiago was playing ball with his friends in the backyard. He accidentally kicked the ball into the neighbor's yard. He leaned over the fence and saw that the ball had landed near the neighbor's dog, which was very aggressive, ugly, big, and had already bitten other people.

i13. What was Tiago feeling?
( ) Pain ( ) Sadness ( ) Anger ( ) Fear

i14. When Tiago climbed over the wall, a friend started saying that he was weak, cowardly, and wouldn't be able to get the ball. What did Tiago start to feel?
( ) Fear and anger ( ) Anger and sadness ( ) Fear and sadness

i15. What could Tiago do to resolve the situation?
( ) Cry ( ) Fight with his friend ( ) Grab the ball and try to run before the dog catches him ( ) Ask the dog's owner for help

F. Ana has a doll that she loves, and she talks to it as if it were a person. One day, the doll answered her with a human voice! Ana said, "Wow, the doll is talking!"

i16. How did Ana feel when she saw that the doll was talking? ( ) She felt good ( ) She was scared ( ) She was happy

i17. This feeling is:
( ) Calm ( ) Agitated

i18. What could Ana do?
( ) Cry ( ) Tell her mother and take care of the doll ( ) Destroy the doll without telling anyone

i19. During the conversation, the doll said she really liked Ana and that she felt very sad when Ana played with other toys. Ana felt a mixture of:
( ) Love and guilt ( ) Disappointment and anger ( ) Sadness and fear

G. When Clara got sick, her doctor prescribed a special meal to help her get better, but she hated that food. That day, when her mother put that food on her plate, she had to eat it.

i20. How did Clara feel?
( ) She felt disgusted ( ) She felt sad ( ) She felt afraid

i21. What could Clara do?
( ) Cry and not eat the food ( ) Try to eat little by little ( ) Argue with her mother

APPENDIX B
Examples of "How Do I Feel?" cards

