## International Journal of Health Science

Acceptance date: 24/04/2025

# SCOPING REVIEWEMOTIONAL MANAGEMENT OF PRESCHOOL CHILDREN: STRATEGIES FOR HEALTH PROMOTION

Susete Nunes Pires

Lígia Eduarda Pereira Monterroso



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Abstract: Emotions are fundamental to our uniqueness, and emotional behavior is what sets us apart from others. The early acquisition of socio-emotional skills brings significant benefits, with the literature showing that children who regulate their emotions well tend to have greater social and academic competence. A safe and stimulating environment with consistent emotional support is essential for the development of a solid emotional foundation. Skills such as perseverance, sociability and self-esteem have the potential to impact on the most diverse dimensions of future social life, promoting better health, greater subjective well-being and reducing the likelihood of conduct problems. This scoping review was designed to investigate whether emotion management strategies developed by nurses promote health in pre-school children. The review question was formulated using the PCC strategy: "Do emotion management strategies developed by nurses contribute to health promotion in pre-school children?" The search included quantitative primary studies, mixed studies and systematic reviews, found in the Medline Complete, Nursing & Allied Health Collection, CINAHL Complete and PubMed databases. Several combined expressions were used. The review followed the JBI guidelines for scoping and the criteria of the Scr PRISMA 2020 checklist. A total of three articles were selected from which data was extracted.

**Keywords:** Preschool; Socio-emotional Skills; Emotion Management; Health Promotion; Nurse

### INTRODUCTION

"The ability to achieve goals, work efficiently in groups and deal with emotions will be essential to face the challenges of the 21st century" [Organization for Economic Cooperation and Development (OECD, 2015)].

It is emotions that make us unique beings; it is our emotional behavior that distinguishes us from one another. The nature and extent of our repertoire of emotional responses does not depend exclusively on our brain, but on its interaction with the body and our own perceptions of the body (Tomaz & Giugliano, 1997).

António Damásio says that emotion is a response that we come equipped with naturally and innately. Research in the field of neuroscience tells us that emotions are intrinsic to human beings, regardless of their culture and since the beginning of time (Damásio, 2011).

In addition, neuroscience has highlighted "the importance of early childhood in brain development, learning and the development of life skills" (Gomes & Henriques, 2020). It is known, as advocated by some authors, that during the first years of life the foundations are laid for "socio-emotional skills manifested in empathy, emotional regulation, problem solving, which are essential skills for school readiness" (Vale, 2012).

For Kaur & Sharma (2021) socio-emotional competencies at preschool age are defined as a broader term that refers not only to the way children feel and think about themselves and others, but also to the way they experience, regulate and express their emotions. The first years of life are the foundation for "socio-emotional skills manifested in empathy, emotional regulation, problem solving, skills that are essential for school readiness" (Ordem dos Psicólogos Portugueses, 2014).

Adrego (2023), referring to Bornstein et al., points out that these skills are highly relevant throughout growth, since children who don't have them will have more obstacles during the transition into the pre-school years, more troubled relationships with peers, social and behavioral problems, as well as poorer school performance or developing physical and mental health problems (Adrego, 2023).

The National School Health Plan (PNSE) mentions mental health and socio-emotional skills as its first strategic axis and area of intervention[Direção-Geral da Saúde (DGS, 2015)]. This document states that health promotion is achieved by increasing the participation of the educational community and improving health literacy, these being pillars for well-being, development, health protection and disease prevention in the school context (DGS, 2015).

According to the World Health Organization (WHO) Europe and the American Academy of Child and Adolescent Psychiatry, "one in five children shows evidence of mental problems and of these, about half have a psychiatric disorder." (DGS, 2015). They also stress that "many of the difficulties in terms of learning, attention and psychomotor instability, behavior, indiscipline and violence, whether self-directed or heterodirected, will correspond to manifestations of accentuated emotional suffering" (DGS, 2015, p.13).

In addition to the increase in the number of children diagnosed with mental disorders, there are countless other children with behavioral problems, who are similarly "more likely to suffer persistent mental health difficulties, poor school performance, low wages, early pregnancy, relationship problems (...) become involved in delinquent behavior and criminal activity in the future" (Ordem dos Psicólogos Portugueses, 2014, 2024).

Some authors even point out that mental health issues in childhood and adolescence are still one of the main predictors of mental health problems in adulthood. Around 61.3% of children aged between 8 and 12 diagnosed with a behavioral disorder had had at least one of three mental illnesses in the previous four years (Ordem dos Psicólogos Portugueses, 2024). The impact of these psychological health problems becomes an invaluable economic cost and in 2010, in Europe, the annual

value of childhood and adolescent disorders corresponded to around 21.3 billion euros (Ordem dos Psicólogos Portugueses, 2024).

It is in childhood that the human brain develops the most and that we learn the most, which is why the pre-school age is favored for the beginning of emotional education, for the acquisition and progressive development of emotional literacy (Gomes & Henriques, 2020).

At pre-school age, children learn a lot about themselves and the social world. It is at this age that, as they overcome the limitations of preoperative thinking, they gradually become able to relate different aspects about themselves, particularly discordant feelings (Martins & Borges, 2023).

The pre-school stage is a key period for the development of emotional regulation, because in this period, children may develop crucial skills that are pillars for the regulation and appropriate expression of emotions (Cadima et al., 2016).

It is known that "socially disadvantaged children face many challenges and are more vulnerable to developing emotional regulation difficulties, and it is extremely important to identify protective factors that moderate this vulnerability (...)" (Cadima et al., 2016) . The researchers point out that some of the factors that cause greater vulnerability to development are related to sociocultural risk, such as single parenthood, poverty, parents' low level of education, among others. As such, "understanding which factors, both positive and negative, influence the development of emotional regulation in this crucial period could prove extremely important for intervention and prevention." (Cadima et al., 2016).

The evidence already gathered from the studies carried out is so unequivocal that some authors state, corroborating, that "The importance of emotional education in daycare and kindergarten, more than an obvious co-

rollary, presents itself as a true axiom that cannot be contested in the face of the numerous and conclusive evidence of the studies and research carried out so far in this field" (Gomes & Henriques, 2020).

The same authors argue that when emotional education begins at an early age, children develop greater competence to face daily challenges and interact with others and the environment. This development occurs in a unique way for each person, within a specific context and time, where particular synergies shape and enhance emotional competencies (Gomes & Henriques, 2020).

Research has shown that concern for the development of emotional intelligence and the education of emotions results not only in greater success and better interactions, but also in better preparation for life. As a corollary, it contributes to a fairer, more supportive society with humanizing values (Gomes & Henriques, 2020).

It is therefore extremely important for adults to provide guidance in order to "balance the child's initiative and promote self-regulation in order to adapt it to social expectations" (Martins & Borges, 2023).

Cadima et al. (2016) in their study aimed to: "understand the interinfluences between socially disadvantaged contexts and the interactive and relational processes in the classroom on the self-regulation of children from economically and socially disadvantaged communities, marked by poverty and social exclusion." The authors found that children belonging to the socio-cultural risk group had higher levels of lability and negativity overall. Conflict and closeness between the teacher and the child were also associated with the negative and positive dimensions of emotional regulation. In both groups of children (at risk and not at risk), less conflictual and closer dyadic relationships between teacher and child were associated with higher levels of emotional regulation and lower levels of lability. The authors also assume that children who have greater difficulty regulating their emotions have less supportive relationships with their teachers, unlike those who have closer and more supportive relationships who show greater ability to regulate emotions and emotional expressions.

So if we look at pre-school children, we know that kindergarten is an educational space where they spend long periods of time, so it's essential to be concerned with promoting their well-being, helping them to learn and develop personally, socially and morally.

We know that successful learning is underpinned by mental well-being and vice versa (Ordem dos Psicólogos Portugueses, 2024). "The mission of schools is to educate students to become responsible and competent citizens (...) ensure the mastery of reading skills, writing, (...) promote a good understanding of history, literature (...). However, the educational agenda and a successful school is also one that includes the promotion of young people's social and emotional skills, their mental health (...)" (Ordem dos Psicólogos Portugueses, 2024).

Everyone recognizes the importance of socio-emotional skills such as perseverance, sociability and self-esteem, but there is insufficient awareness of what "works" to improve them.

According to several authors mentioned by Cadima et al. (2016), the physical and structural conditions of the rooms in which pre-school children learn condition their learning and acquisition of social skills, but also "the emotional climate of the room and the relationships between the child and the teacher and between peers can promote autonomy and play a crucial role in emotional regulation".

We can therefore state that everything that happens in kindergarten has a significant impact on the child's education, mental, behavioral and social development (OECD, 2015).

However, more critically, some authors point out that in "pre-school education and beyond, we are still very much focused on preparing children academically for their entry into formal education, pressured by learning targets, exact teacher evaluation formulas and international statistics" (Gomes & Henriques, 2020). According to the same authors, the role of education professionals is indispensable in shaping children's behavior. If an emotionally and socially safe educational environment is provided in kindergarten and early intervention programs are applied, the risk factors that cause poor school performance and certain undesirable behaviors will be reduced.

Given all of the above, it is important to emphasize that socio-emotional skills in pre-school children play a crucial role in their overall development and are influenced by various health determinants. In turn, the health determinants that influence socio-emotional development include factors such as the family environment, the quality of interactions with caregivers/education professionals, access to quality health care and education, and the presence of social support networks.

Thus, "Health Promotion and Education (HPE) plays a central role in the development of healthy, sustainable and happy citizens and societies, which is why it contributes to the goals and objectives set by the World Health Organization for Health and Well-being in Europe - Health 2020, to the EU2020 (European Union) Strategy for sustainable growth and inclusive education and to the United Nations 2030 Agenda for Sustainable Development" (Carvalho et al., 2017).

The National School Health Program (PNSE) "takes an active role in managing the health determinants of the educational community, with the school health teams constituting the interface with the educational system for its implementation", in kindergarten (DGS, 2015). Public policies that promote

children's mental health and well-being, along with educational programs that integrate the teaching of socio-emotional skills, are key to ensuring that all children have the opportunity to grow and thrive in a healthy and inclusive environment.

The role played by nurses in school health teams is considerable and it is known that the "PNSE has been successfully implemented, in part, thanks to the commitment of these professionals in the creation and implementation of creative strategies that help children and young people to understand and develop an attitude critical and reasoned, facilitating the adoption of healthy behaviors", as stated Martins & Borges (2023).

Pooling the efforts of all the professionals and services involved in implementation is essential to effectively achieve greater health gains. This occurs by promoting school environments that are conducive to adopting healthier lifestyles and improving the level of health literacy in the educational community (Martins & Borges, 2023).

In view of the above, the review question was: "Do emotion management strategies developed by nurses contribute to health promotion in pre-school children?

In order to answer the question, a *scoping review* was carried out. In order to obtain evidence, the Population-Concept-Context (PCC) strategy was used, with the Population being: pre-school children; the Concepts being: emotions, socio-emotional skills, health promotion, nurses and education professionals; and the Context being: kindergarten.

### **REVIEW QUESTION(S)**

Do emotion management strategies developed by nurses contribute to health promotion in pre-school children?

## INCLUSION CRITERIA Participants:

• Pre-school children

### **Concept:**

- Emotions
- Socio-emotional competence
- Health Promotion
- Nurse
- Emotion management strategies

### **Context:**

Kindergarten

### Types of sources

This scoping review will consider published quantitative primary studies, mixed studies and systematic reviews. Studies published in English, Spanish and Portuguese, with a publication date between January 2019 and December 2023.

### **METHODS**

The review was prepared in accordance with the JBI's recommendations for scoping reviews and according to the criteria defined in the PRISMA 2020 checklist flow diagram for scoping reviews.

### SEARCH STRATEGY

Initially, the following keywords were designated as MeSH descriptors: "Child, Preschool"; "Early intervention, educational"; "Emotional Intelligence", "Emotions", "School Teachers", "Resiliance, Psycological" validated in MeSh Browser 2024, and then searched in the databases to produce results.

Since it was necessary to carry out more than one search, as there were no articles in the databases that matched the above criteria, two more searches were carried out using an advanced search strategy without MESH terms, using common words in some of the articles consulted.

[Child, Preschool: «A child between the ages of 2 and 5»]

[Early intervention, educational: «Procedures and programs that facilitate the development or skill acquisition in infants and young children who have disabilities, who are at risk for developing disabilities, or who are gifted. It includes programs that are designed to prevent handicapping conditions in infants and young children and family-centered programs designed to affect the functioning of infants and children with special needs.»]

[Emotional Intelligence: «The ability to understand and manage emotions and to use emotional knowledge to enhance thought and deal effectively with tasks. Components of emotional intelligence include empathy, self-motivation, self-awareness, self-regulation, and social skill. Emotional intelligence is a measurement of one's ability to socialize or relate to others.»]

[Emotions: «Those affective states which can be experienced and have arousing and motivational properties.»]

[School Teachers: «Members of staff responsible for TEACHING students in a school from pre-kindergarten through twelfth grade»]

[Resilience, Psychological: «The human ability to adapt in the face of tragedy, trauma, adversity, hardship, and ongoing significant life stressors.»]

The search was carried out in the Medline Complete, Nursing & Allied Health Collection, Medic Latina and CINAHL Complete databases, via the EBSCOhost platform, and PubMed. Three searches were carried out in the same databases in order to find the largest number of articles. Thus, in the first search, the following previously validated descriptors were linked using the boolean AND, combining the following search expression: "Child, Preschool" AND "Early intervention, Educational" AND "Emotional Intelligence" AND "Resilience, Psycological".

In the second search, the following keywords were linked to a MESH descriptor previously validated by the boolean AND, combining the following search expression: "Social Emotional Learning" AND "Kindergarten" AND "Intervention Development" AND "Emotions".

In a third search, the following keywords were linked with a MESH descriptor using the boolean AND, combining the following search expression: "Preschoolers" AND "Emotional Regulation" AND "School Teachers".

The search strategy, including the keywords and indexing terms identified, is adapted according to the database.

The limiting factors used in the Medline Complete database were "abstract available", Language "English, Portuguese, Spanish", Language English, Portuguese and Spanish, Age: "all children". The Nursing & Allied Health Collection and Medic Latina databases used the limiting factor "Full text in pdf". In the CINAHL Complete database, the limiting factors used were "Abstract available", Language "English, Portuguese, Spanish", Language English, Portuguese and Spanish, Age range "child preschool: 2-5years". PubMed used: "TITLE/ABSTRACT"; "Text availability: "Free full text"; "Article type: Clinical Trial, Meta-Analysis, systematic Review"; Publication date [January 2019 - December 2023]; Language: "English, Portuguese, Spanish"; Age: child preschool 2-5 years".

### STUDY SELECTION

The CheckList Scr and PRISMA 2020 were used. In the first stage of PRISMA, regarding the identification of sources, 5 scientific articles were identified from the total of three searches. Of these, we found that one was duplicated or ineligible. In the next stage, Screening, we first read the title and abstracts of the articles, in order to exclude those that did not fall within the scope of the current review or

that did not meet the inclusion criteria of the CCP, specifically the study of the population "pre-school children" regardless of gender, or the mobilization of the concepts of the conceptual map or that takes place in a kindergarten context. After reading the articles in full, we concluded that only one did not meet the conditions, so it was removed, leaving 3. The articles were then read in full text and there were no reasons to exclude them. In the last stage of PRISMA - Inclusion - the 3 articles were identified in terms of their nature (qualitative and quantitative). Thus, 1 is of a qualitative nature and the rest are quantitative Randomized Controlled Trials (RCT), and it can be said that this is a Comprehensive Review.

### DATA EXTRACTION

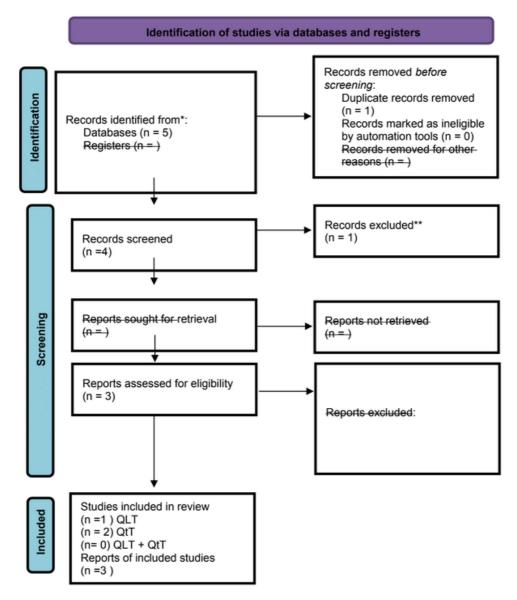
The data was extracted after reading each article in full, using the "Appendix IV: Data extraction instrument". The instrument includes nine variables to identify the study - authors, year of publication, country of origin, objectives, methodology/methods, interpretation, research sources used, interpretation developed, Level of Evidence achieved and contribution to the review question. The data extracted includes specific details about the participants, the concepts, the context, the study methods and the main conclusions relevant to the review question

### DATA PRESENTATION

Research now shows that cognitive skills, along with social and emotional skills, actually improve life, and this applies to both social and individual life (OECD, 2021).

It is known that "the development of children's and pupils' social and emotional skills produces other benefits in addition to cognitive development and academic results." (OECD, 2021) Therefore, mental health is also improved by measures aimed at developing these skills. "Although hardly noticed, social

## PRISMA 2020 flow diagram for new systematic reviews which included searches of databases and registers only



<sup>\*</sup>Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).

*From*: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

<sup>\*\*</sup>If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

and emotional skills have a significant impact, helping to define people's behaviors and lifestyles, which in turn determine their socio-economic outcomes" (OECD, 2021).

In view of this, the presentation and discussion of the results takes as its starting point the mobilization of contributions to the understanding of the issue and their confrontation with the concepts that make up the conceptual map and that were explained in the introduction. In fact, there is clear challenge for society, and specifically for nurses, to develop or participate in the development and implementation of interventions in the school context that enable more and greater health gains to be achieved, especially when we are talking about interventions for the younger generations, such as pre-school children.

Sanders, Welsh, Bierman, & Heinrichs(2020), in their study aimed to "explore the associations between exposure to Adverse Childhood Experiences (ACEs) in early childhood and aspects of socioemotional functioning in adolescence and to examine the moderating impact of a preschool intervention on these associations", and found that interventions implemented in the preschool context can foster resilience after school stressors, helping children to develop skills that support and enable successful adaptation, including the ability to regulate their emotions and form supportive relationships with teachers and peers.

Evidence is provided that "High exposure to EAI in early childhood is associated with increased risk of socioemotional distress and poor school attachment in early adolescence. These findings are consistent with previous research suggesting that high EAI during early childhood will be associated with poorer adjustment in domains of socioemotional functioning (...)" (Sanders et al., 2020) . Effective interventions in schools that mitigate the impacts of ACEs, especially in children from economically disadvantaged backgrounds,

are mentioned as effective in social-emotional learning, "(...)the findings of this quasi-experimental program evaluation are consistent with the hypothesis that strategically designed preschool interventions can have long-term benefits for the social-emotional well-being and school adjustment of young children growing up in high-risk contexts." (Sanders et al., 2020). This type of program proves to be decisive in addressing the negative effects of ACEs on future well-being and school engagement.

The results achieved by Sanders et al.(2020) corroborate what had already been described in other research, with the authors reinforcing that, "From a conceptual point of view, the positioning of interventions to support socio-emotional development in the pre-school years can be highly strategic because this is a period in which fundamental language, and socio-cognitive skills that underpin effective self-regulation and social functioning undergo rapid development and, therefore, in pre-school this intervention can offset the negative impact of EIA on development".

On the other hand, researchers reinforce that trained education professionals can promote resilience, highlighting the need to consistently incorporate these approaches in preschool (Sanders et al., 2020).

It is even stressed that there is an urgent need to explore social programs and policies that address disparities in education and health for children in poverty, emphasizing the importance of a comprehensive perspective and robust research (Sanders et al., 2020).

Interventions such as *Research-Based*, *Developmentally Informed* (*REDI*), applied in preschool, provide some protection for children with high levels of exposure to EAI in early childhood, reducing the prevalence of high socio-emotional distress and weak school attachment experienced in adolescence.

From a conceptual point of view, positioning interventions to support socio-emotional development in the pre-school years can be highly strategic, as it is during this period that the fundamental language skills and socio-cognitive skills that underpin effective self-regulation and social functioning undergo rapid development. Therefore, preschool interventions can offset the negative impact of ASD development (Blair & Raver, 2012).

The results of the *REDI* study stand out as a significant and pioneering contribution that focused on a pre-school intervention to promote Social-Emotional Learning (*SEL*) and followed the children into adolescence, assessing their social-emotional well-being. All the children who received the intervention showed less socio-emotional distress and greater school attachment in adolescence. It has been shown to be especially beneficial for those who were exposed to high levels of EAI early (Sanders et al., 2020).

The REDI program, in one of its approaches, integrated daily interactive reading and the Preschool Promoting Alternative THinking Strategies (PATHS) program, covering themes of pro-social skills, emotional understanding, self-control and social problem solving, both of which showed promising results. The authors even mention that "REDI was a multicomponent intervention that included interventional activities designed to promote emergent language and literacy skills, as well as social-emotional and self-regulation skills." (Sanders et al. 2020). These findings demonstrate the valuable implications that can be achieved for the promotion of socio-emotional well-being, from childhood to adolescence.

In the article by Blewitt et al. (2020), which consisted of a six-step intervention mapping program, based on an online learning tool, designed to assist early childhood educators in promoting children's positive mental heal-

th. This approach made it possible to "(...) address an important public health issue through the lens of early childhood, integrating health and education perspectives to break down the silos that can exist between the disciplines and improve the translation of research into health practice" (Blewitt et al., 2020) .

Educators' needs and capacities were identified in relation to supporting children's socio-emotional development. The steps taken during the mapping process made it possible to establish objectives focused on raising awareness of the preponderant role of educators in the socio-emotional development of children of this age, as well as assessing their perception of the quality of their relationships with children and their self-efficacy in relation to socio-emotional development (Blewitt et al., 2020).

The process that guided this research was fundamental in corroborating "(...) the need for practical and explicit strategies that are based on the current knowledge and experience of educators, so that they can be incorporated into their daily practice and adapted to the social, emotional and behavioral needs of the child". (Blewitt et al., 2020). Importantly, the researchers state that it is important to focus on educators' abilities to promote social-emotional development through their daily interactions, using language, conversational strategies and responsive practices that support preschool children's social-emotional competencies and learning outcomes. However, this is only possible through projects implemented on the basis of theory and evidence, in order to "Facilitate explicit and fundamental knowledge for educator learning (...). Following the intervention mapping process ensured that Cheshire Social-Emotional Engagement and Development (SEED) was a professional learning approach based on theory and evidence." (Blewitt et al., 2020).

The program applied allowed educators to acquire additional information on "(...) why this technique is valuable for children's development, drawing on attachment theory, positive behavior and support, play therapy and positive psychology perspectives(...)", thus contributing to the strengthening of explicit knowledge (Blewitt et al., 2020).

Blewitt et al. (2020), state that "collaborative processes that utilize skills, ideas and experiences across disciplines are more likely to lead to sustainable and scalable change."

In turn, there has been the emergence of numerous evidence-based interventions for kindergarten service providers, due to the growing awareness of the implications that interventions carried out in early childhood, with a focus on mental health, have throughout life (Blewitt et al., 2020) .

Research indicates that strengthening educator-child interactions has benefits for children's social, emotional and cognitive functioning. Also, the behavior of the educator, the caregiver and the family environment are the first and most important influence on children's social and emotional skills, something widely reinforced by the authors.

Badau & Trifan (2022) in their research found that an educational and innovative training program for the Training and Development of Social and Emotional Skills (DeCo-S.E.) culminated in "the reduction of behavioral problems through the application of emotional regulation strategies for preschool children". The results showed significant differences between the two groups (control group and experimental group), with emphasis on the implementation of the program associated with moments of relaxation, which led to significant progress in the acquisition of social skills and behavior problems, this for the experimental group compared to the control group. The increase in the experimental group was significant in terms of social and

emotional skills, with a visible reduction in behavioral problems, 3.3 times more than the children in the control group.

The authors also conclude that "The results of our study contribute to expanding the level of knowledge and understanding of the impact that early socio-emotional education can have on preschool students." (Badau & Trifan, 2022).

It is worth noting that the researchers describe that, "(...) after completing the program, the children rarely presented problems that could cause concern to educators or parents. In the case of attention/hyperactivity problems, there was a decrease. The same type of reframing is determined, from a moderate level to a boderline level, an improvement in the pro-sexual level and isolated manifestations of hyperactivity." (Badau & Trifan, 2022).

In view of these results, the authors state that the interventions applied in this study unequivocally demonstrate a significant improvement in various areas of behavior, this for the group that was the target of the interventions, with a reduction in undesirable behaviors and antisocial and aggressive reactions; in addition, the children's actions were shaped positively and they therefore showed a greater ability to regulate their emotions and with greater ease (Badau & Trifan, 2022) .

The contributions made by this study are numerous and stand out, namely the behavioral changes that have been verified and which are reinforced, in the words of the authors, by "In the case of the antisocial/aggressive component, the decrease in cases (from moderate to threshold) also means changes in the children's behavior, with antisocial and aggressive reactions being significantly reduced" (Badau & Trifan, 2022) . Similarly, episodes of anxiety and somatic problems were reduced in frequency, especially those that manifested themselves as physical complaints, and situations of greater confidence were also obser-

ved, as described in the excerpt: "The children had fewer somatic complaints ("their tummy hurts" or "their head hurts") and were less anxious, approaching new and unfamiliar situations with greater confidence." (Badau & Trifan, 2022).

Therefore, the results show that, in relation to behavioral problems, an effective intervention carried out through a training program on the socio-emotional and behavioral qualities of preschool children has a positive and dynamic effect on the attitudes and skills acquired by these same children, "(...) that if an effective intervention is carried out through a training program on the socio-emotional and behavioral qualities of preschoolers, it will have a positive and dynamic effect on the attitudes and skills of preschoolers." (Badau & Trifan, 2022)

It should be emphasized that training aspects aimed at socio-emotional issues in the first 5-6 years of child development have an impact on adaptation to school and the formation of successful relationships throughout life, as this study has found and which corroborates other results achieved in other resear-

ch (Badau & Trifan, 2022).

The authors also mention that "(...) they consider that in addition to the application of a curriculum aimed at the socio-emotional development of preschoolers, modifying the physical space to support positive emotions represents an additional strategy for the development of socio-emotional behaviors. (...)" These words reflect the importance of education professionals having training in this area. Enriching educators' knowledge by taking part in training courses that highlight strategies and techniques for training and developing socio-emotional behavior in pre--school children is fundamental. In this way, educators will be able to offer the support that children need, especially in the early stages of their education, with a valuable impact throughout their lives.

The authors also point out that in the experimental group there was a consolidation of relationships and communication between the teachers and the children.

### **CONFLICTS OF INTEREST**

The authors declare no conflicts of interest.

### REFERENCES

Adrego, Francisca. (2023). Programa de Promoção de Competências Socioemocionais em Idade Pré-Escolar (Emogenius): Um Estudo Piloto. Tese de Mestrado, orientada por Diana Alves. Faculdade de Psicologia e de Ciências da Educação Programa, Universidade do Porto, Porto .

Badau, A., & Trifan, I. M. (2022). Promote Positive Behaviors in Preschoolers by Implementing an Innovative Educational Program for the Training and Development of Social and Emotional Skills (DeCo–S.E.). *International Journal of Environmental Research and Public Health*, 19(22). https://doi.org/10.3390/ijerph192214931

Blair, C., & Raver, C. C. (2012). Child Development in the Context of Adversity: Experiential Canalization of Brain and Behavior. *Am Psychol.*, 67(4), 309–318. https://doi.org/10.1037/a0027493.Child

Blewitt, C., Morris, H., Jackson, K., Barrett, H., Bergmeier, H., O'connor, A., ... Skouteris, H. (2020). Integrating health and educational perspectives to promote preschoolers' social and emotional learning: Development of a multi-faceted program using an intervention mapping approach. *International Journal of Environmental Research and Public Health*, 17(2), 1–24. https://doi.org/10.3390/ijerph17020575

Cadima, J., Ferreira, T., Guedes, C., Vieira, J., Leal, T., & Matos, P. M. (2016). Risco e regulação emocional em idade pré-escolar: A qualidade das interações dos educadores de infância como potencial moderador. *Analise Psicologica*, 34(3), 235–248. https://doi.org/10.14417/ap.1079

Carvalho, Á., Matos, C., Minderico, C., Almeida, C. T. de, Abrantes, E., Mota, E. A., ... Lima, R. M. (2017). Referencial de Educação para a Saúde. (Ministério da Educação - Direção-Geral da Educação & Direção-Geral da Saúde, Eds.).

Damásio, A.. (2011). E o Cérebro Criou o Homem. Tradução de Laura Teixeira Motta. C. das Letras, Ed, São Paulo.

Direção-Geral da Saúde. (2015). Programa Nacional de Saúde Escolar. (Direção-Geral da Saúde, Ed.).

Gomes, P., & Henriques, S. I. (2020). A Educação Emocional No Pré-Escolar. In I. P. de Bragança (Ed.), *I Congresso Internacional Inteligência Emocional: Livro de Atas*. Bragança. Retrieved from http://hdl.handle.net/10198/12934

Kaur, J., & Sharma, A. (2021). Conceptual ECCE Happiness Framework for Preschools: To Introduce Importance of Happiness to Promote Social and Emotional Competence in Preschool Children. SAGE Open, 11(3), 1–18. https://doi.org/10.1177/21582440211031873

Martins, T., & Borges, E. (2023). Saúde Escolar - Intervenções de Promoção da Saúde. (Lidel, Ed.) (1ª Edição). Lisboa.

OCDE. (2015). Competências para o progresso social: o poder das competências socioemocionais. Competências para o progresso social. Madrid. https://doi.org/10.1787/9789264249837-pt

OCDE. (2021). Inquérito às Competências Sociais e emocionais (SSES): Sintra (Portugal). Beyond Academic Learning: First Results from the Survey of Social and Emotional Skills, OECD Publishing. Paris. https://doi.org/https://doi.org/10.1787/69215e7a-pt

Ordem dos Psicólogos Portugueses. (2014). Investir na prevenção e promoção da saúde mental em contexto educativo. Lisboa.

Ordem dos Psicólogos Portugueses. (2024). Escola Saudávelmente. Retrieved January 12, 2024, from https://escolasaudavelmente.pt/

Sanders, M. T., Welsh, J. A., Bierman, K. L., & Heinrichs, B. S. (2020). Promoting Resilience: A Preschool Intervention Enhances the Adolescent Adjustment of Children Exposed to Early Adversity. *School Psychology*, *35*(5), 285–298. https://doi.org/10.1037/spq0000406.Promoting

Tomaz, C., & Giugliano, L. G. (1997). A razão das emoções: um ensaio sobre "O erro de Descartes." *Estudos de Psicologia*, 2(2), 407–411. https://doi.org/10.1590/s1413-294x1997000200013

Vale, Vera. (2012). Tecer para não ter de remendar: O desenvolvimento socioemocional em idade pré-escolar e o programa Anos Incríveis para educadores de infância. Tese de Doutoramento, orientada por Maria Filomena Ribeiro da Fonseca Gaspar. Universidade de Coimbra, Coimbra.