# Desenvolvimento Motor da Criança XIV



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UNIVERSIDADE DE ÉVORA

## Estudos em Desenvolvimento Motor da Criança XIV

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## EFFECTS OF BODY-ORIENTED INTERVENTIONS ON PRESCHOOLERS' SOCIAL-EMOTIONAL COMPETENCE: A SYSTEMATIC REVIEW PROTOCOL

EFEITOS DAS INTERVENÇÕES DE MEDIAÇÃO CORPORAL NAS COMPETÊNCIAS SÓCIO-EMOCIONAIS DE CRIANÇAS EM IDADE PRÉ-ESCOLAR: PROTOCOLO DE UMA REVISÃO SISTEMÁTICA

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## Abstract

Several studies support the effectiveness of body-oriented interventions in the educational context, showing positive effects on children's social-emotional competence, such as self-regulation and social competence. Despite the increase of scientific evidence, there is a lack of systematization, specifically regarding preschool years. This chapter summarizes a systematic review protocol that aims to systematize the scientific evidence regarding the effectiveness of body-oriented interventions on preschoolers' social-emotional competence. The review structure follows PRISMA guidelines. The selection criteria were: papers written in English, French and Portuguese, published after the year 2000; participants' age between 3 and 7 years old; intervention programs focused on body-oriented approaches (e.g., play, relaxation) in at least one experimental group; to analyze the effects of interventions on children's social-emotional competence (e.g., self-awareness, social awareness, self-management, relationship skills, responsible decision-making); to evaluate a control or a comparison group. Only RCTs and quasi-RCTs studies carried out in the preschool setting will be included. Systematic review registration: PROSPERO CRD42020172248.

#### Key words

Play; relaxation; social-emotional development; preschool education.

#### Resumo

São já diversos os estudos que sustentam a eficácia das intervenções de mediação corporal em contexto educativo, demonstrando efeitos positivos nas competências sócio-emocionais das crianças, como por exemplo na autorregulação e na competência social. Apesar das crescentes evidências científicas, é clara uma falta de sistematização, sobretudo no que respeita ao período préescolar. O presente capítulo apresenta o protocolo de uma revisão sistemática que tem como objetivo sistematizar as evidências científicas dos efeitos das intervenções de mediação corporal na promoção das competências sócio-emocionais de crianças em idade pré-escolar. A estrutura da revisão segue o modelo PRISMA. Os critérios de seleção são: artigos publicados em inglês, francês e português, após o ano 2000; participantes com idades entre os 3 e os 7 anos; programas de intervenção centrados em abordagens de mediação corporal (e.g., jogo, relaxação) em pelo menos um grupo experimental; integrar a análise dos efeitos da intervenção nas competências sócio-emocionais das crianças (e.g., autoconsciência, consciência social, autocontrolo, competências relacionais, tomada de decisão responsável); avaliar um grupo de controlo ou de comparação. Só serão incluídos estudos experimentais RCTs ou quase-RCTs, que tenham sido desenvolvidos em contexto escolar. Registo da revisão: PROSPERO CRD42020172248.

#### Palavras chave

Jogo; relaxação; desenvolvimento sócio-emocional; educação pré-escolar.

## INTRODUCTION

It is in preschool context that children refine their social-emotional competence. Such development is influenced by children's positive social interactions that allow them to understand, express and regulate their emotions (1). Besides, certain environments (e.g., rich in free play) can also act as facilitators of children's social-emotional development (2,3). In the last decades, several intervention programs have been implemented in educational contexts to promote children's social-emotional competence, involving different approaches, such as body-oriented interventions (4,5). Despite the increase of scientific evidence regarding the effects of body-oriented interventions on children's

social-emotional competence, there is a lack of systematization of the evidence regarding preschool years.

Thus, a systematic review will be developed with the aim of synthesizing the scientific evidence about the effects of body-oriented interventions on preschoolers' social-emotional competence, whose protocol will be presented in this paper.

#### METHOD

This protocol is conducted in accordance with PRISMA statement (6) and is registered in PROSPERO, the International Prospective Register of Systematic Reviews, on July 17th, 2020 (CRD42020172248).

#### Eligibility criteria

Studies will be selected if they are conducted as a randomized controlled trial (RCT) or quasi-RCT, written in French, English, or Portuguese, and published between January 2000 and October 2020. The studies' participants have to attend preschool education, be between 3 and 7 years old and have typical development. The studies have to be focused on body-oriented interventions (e.g., play, relaxation) in at least one experimental group, to be delivered by humans (not computers) and implemented at school (not at home). The effects of the interventions have to be focused on participants' social-emotional competence.

## Search Strategy

Search the following databases: *Pubmed, Scopus, PsycInfo, ERIC, Web of Science, Portal Regional da BVS* e *CINAHL.* Search terms include three components: body-oriented interventions (e.g., "psychomotor intervention", "dance and movement therapy", "relaxation"); social-emotional competence (e.g., "social-emotional", "social", "emotional"); and preschool age (e.g., "preschool", "kindergarten", "nursery").

#### Study Selection

The study selection process follows the plan of PRISMA (6). First, two reviewers independently read all abstracts and classify them as excluded or potentially included. Second, the reviewers read the full texts of the potentially included studies and apply the inclusion criteria. A third reviewer is consulted when there is a disagreement between the two reviewers.

#### Data Extraction

The extracted data include authors, year of publication, study type and design, subjects, intervention used, outcomes measures and key outcomes results. A third reviewer is consulted if there is a disagreement between the two reviewers.

## Methodological Quality

Two independents' reviewers apply the Physiotherapy Evidence Database – PEDro scale (7), which considers the following criteria: specified eligibility criteria, random allocation, concealed allocation, baseline comparability, blinding of subjects, blinding of therapists, blinding of assessors, adequate follow-up, intention-to-treat analysis, between-group statistical comparisons, and point estimates and variability. A PEDro sum score ranging from 1 to 10 is obtained for each included study, with higher scores indicating better methodological quality.

## RESULTS

#### Data Synthesis

The strength of the scientific evidence is measured through the Best Evidence Synthesis – BES (8) by two reviewers. The following criteria are used to grade the strength of the evidence: strong evidence, obtained in case of multiple high-quality RCTs; moderate evidence, obtained in case of high-quality RCTs and one or more low-quality RCT; limited evidence, obtained in case of one high-quality or multiple low-quality RCTs; and no evidence, obtained in case of one low-quality RCT or contradictory outcomes (9).

## CONCLUSION

A growing body of evidence supports the effectiveness of body-oriented interventions in the educational context, showing positive influences on social-emotional competence (2), such as self-regulation (10), and social competence (11). We hope this review contributes to informing researchers, teachers, and other professionals about the importance of implementing body-oriented interventions in the school context.

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## DESENVOLVIMENTO, APRENDIZAGEM E CONTROLO MOTOR

#### REFERENCES

1.Rieffe C, Netten AP, Broekhof E, Veiga G. The role of the environment in children's emotion socialization: the case of deaf or hard of hearing (DHH) children. Em: Knoors H, Marschark M, editores. Educating deaf students: creating a global evidence base. London: Oxford University Press; 2015. p. 369-388. DOI:10.1093/acprof;oso/9780190215194.001.0001

2.Durlak JA, Weissberg RP, Dymnicki AB, Taylor RD, Schellinger KB. The impact of enhancing students' social and emotional learning: a meta-analysis of school-based universal interventions. Child Dev. 2011; 82(1):405-32. DOI: 10.1111/j.1467-8624.2010.01564.x

3.Luo L, Reichow B, Snyder P, Harrington J, Polignano J. Systematic review and meta-analysis of classroom-wide socialemotional interventions for preschool children. Top Early Child Spec. 2020. DOI:10.1177/0271121420935579

4.Waters LE, Barsky A, Ridd A, Allen K. Contemplative Education: A Systematic, Evidence-Based Review of the effect of Meditation Interventions in Schools. Educ Psychol Rev. 2014; 27(1):103–134. DOI:10.1007/s10648-014-9258-2

5.Gibson JL, Cornell M, Gill T. A systematic review of research into the impact of loose parts play on children's cognitive, social and emotional development. School Ment Health. 2017; 9(4):295-309. DOI: 10.1007/s12310-017-9220-9

6.Moher D, Liberat A, Tetzlaff J, Alktman, DG. Preferred reporting items for systematic reviews and meta-analysis: the PRISMA statement. *PLos Med. 2009;* 6(7):e1000097. DOI:10.1371/journal.pmed1000097

7.de Morton NA. The PEDro scale is a valid measure of the methodological quality of clinical trials: a demographic study. Aust J of Physiother. 2009; 55(2): 129-133. DOI:10.1016/s0004-9514(09)70043-1

8.Slavin RE. Best-evidence synthesis: an alternative to meta-analytic and traditional reviews. Educ Res. 1986; 15(9):5-11. DOI:10.3102/0013189X015009005

9.Van Tulder MW, Koes BW, Bouter LM. Conservative treatment of acute and chronic nonspecific low back pain: a systematic review of randomized controlled trials of the most common interventions. Spine. 1997; 22(18):2128-2156. DOI:10.1097/00007632-199709150-00012.

10.White LS. Reducing stress in school-age girls through mindful yoga. J Pediatr Health Care. 2012; 26(1):45-56. DOI:10.1016/j.pedhc.2011.01.002

11.Loukatari P, Matsouka O, Papadimitriou K, Nani S, Grammatikopoulos V. The effect of a structured playfulness program on social skills in kindergarten children. Int J Instr. 2019; 12(3):237-252. DOI:10.29333/iji.2019.12315a