

RELATIONSHIP BETWEEN REAL AND PERCEIVED MOTOR COMPETENCE, PARENTAL FACTORS AND CHILD TYPE OF PLAY IN PRE-SCHOOLERS

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Abstract

The childhood period is considered the most critical to motor competence (MC) development, being that good motor performances in children are related to better cognitive, linguistic, social, emotional results, high levels of physical activity, and MC perception in adolescence. Several variables play a fundamental role in MC development in the first years of life, with strong evidence that children's MC could be influenced by the interaction between their temperament and the family environment characteristics. Theoretical models suggest that parent's beliefs and cognitions influence their parental practices, which, in turn, impact their children's development throughout life. In fact, parental factors (such as parental stress, styles, expectations and alliance) and children type of play have been studied individually regarding their influence in the psychological, cognitive and linguistic development. However, research has given little attention to the relationship between these variables and real and perceived MC of children in preschool age, as studies have mainly focused on variables related to intrinsic aspects of the child. In this sense, emerged the need to understand this relationship, being in progress an investigation project in which in the present work, a theoretical framework is developed and future lines of investigation are suggested.

Key words

Motor competence; parental behavior; childhood play; preschool age.

Resumo

O período da infância é considerado o mais crítico para o desenvolvimento da competência motora (CM), sendo por isso que bons desempenhos motores em crianças estão relacionados com melhores resultados cognitivos, linguísticos, sociais e emocionais, melhores níveis de atividade física, e percepção de CM na adolescência. Diversas variáveis desempenham um papel fundamental no desenvolvimento da CM nos primeiros anos de vida, com fortes evidências de que a CM das crianças pode ser influenciada pela interação entre o seu temperamento e as características do ambiente familiar. Modelos teóricos sugerem que as crenças e percepções dos pais influenciam as suas práticas parentais, o que, por sua vez, têm impacto no desenvolvimento da criança ao longo da vida. De facto, os fatores parentais (como o stress, estilos, expectativas e aliança), e o tipo de jogo da criança têm sido estudados individualmente em relação à sua influência no desenvolvimento psicológico, cognitivo e linguístico. Contudo, a investigação tem dado pouca ênfase à relação entre estas variáveis e a CM real e percebida de crianças em idade pré-escolar, sendo que os estudos se têm focado principalmente nas variáveis relacionadas com aspetos intrínsecos à criança. Neste sentido, surge a necessidade de entender esta relação, estando em progresso um projeto de investigação, sendo que no presente trabalho é desenvolvido um referencial teórico e são sugeridas futuras linhas de investigação.

Palavras chave

Competência motora; comportamento parental; jogo na infância; idade pré-escolar.

INTRODUCTION

Motor competence (MC) refers to a set of fundamental motor skills (FMS), which encompass gross movement patterns (Webster, 2019) and indicates the level of individual's quality movement (Robinson et al, 2015). The early childhood period is considered extremely important in the acquisition of these skills (Webster, 2019). Greater FMS quality is related to higher levels of physical activity (PA), physical condition and perception of MC in adolescence (Barnett, Beurden, Morgan, Brooks & Beard, 2008), healthier weight (Robinson et al., 2015), as well as better results in social, cognitive and emotional development (Piek, Dawson, Smith & Gasson, 2008). The competence motivation theory (Harter, 1981), understands that individuals are attracted to participate in activities at which they feel competent. Gao and colleagues (2019) refer to this theory to justify that child behavior can be predicted by perception of MC. Perception of MC refers to children's self-perception about their ability to complete some tasks, while MC is the child's actual competence. Gao and colleagues (2019) understands that according to Harter's theory, successfully performing tasks will increase MC, which will increase the levels of motivation for engaging in motor activities leading to higher levels of PA and motor performance. Stodden and colleagues (2008) presented a developmental approach to address the potential role of MC in promoting positive or negative trajectories of PA, physical condition, and weight. They propose that MC has a fundamental role in the promotion of PA participation of children. During childhood, MC development is influenced by the child's growth and maturation characteristics (morphological, physiological, and neuromuscular). Since motor development occurs in a specific social context, the environment in which a child develops must be considered, as specific contexts will bring different challenges for each child (Venetsanou & Kambas, 2010). Also, the society in which a child belongs can favor or bring prejudicial aspects to children's motor development. Elements like school

environment (where children spend a lot of time) and family characteristics, such as socioeconomic status, educational level of the mother, and the presence of siblings, are important developmental factors (Venetsanou & Kambas, 2010). The participation in movement programs can also help improve child motor development, avoiding negative consequences of unfavorable genetic and environmental factors (Venetsanou & Kambas, 2010). Parents have a major influence on child development (Venetsanou & Kambas, 2010). Therefore, it is expected that parental factors like parental stress, styles, expectations and alliance could influence a child's motor development, but the current knowledge on the theme is limited. It is known that parental stress levels are influenced by certain parental characteristics (e.g., social isolation) and children's characteristics (e.g., temperament, behavior problems) and will determine the overall level of pressure a parent might feel in the parenting role, which will affect child's development (Abidin, 1976). In turn, parental styles – set of attitudes aimed at children (Torres, Veríssimo, Monteiro, Ribeiro & Santos, 2015) – intervene in cognitive and language development and in the risk of child injury (Ojala, 2000). Also, parental expectations, that is to say, the beliefs about children's achievement in the future (Yanamoto & Holloway, 2010), greatly influence the children's development of preschool age (Ojala, 2000). Research about the parental alliance, (e.g. the degree of commitment, and cooperation between husband and wife in parenting), has also been shown to be important to understand children's psychological functioning (Abidin & Brunner, 1995). Despite the influence of parental factors in children's overall development, few investigations have been carried out on the relationship between these factors and MC or PMC. Another factor that is known to be related to child development is the type of play in which they are involved. Literature shows that children's type of play is extremely important for healthy development (Lindsey, 2014). Besides, playing allows children a series of opportunities to learn and develop their social and cognitive skills, such as conflict resolution and cooperation, and provide them moments to pretend to be some else than themselves, where they can face different characters (Lindsey, 2014). PA play is the type of play that predominates in the preschool's playgrounds and brings numerous benefits to social skills, self-regulation. Rough and tumble play, which emerges around two years of age, involves the fighting dimension, like grabbing and pushing, and chase ou being chased. This type of play may have benefits in establishing and maintaining social relationships between peer groups (Lindsey, 2014). Children's type of play needs further investigation, regarding its influence on MC and PCM in preschool children, as there is few research about this relationship. As seen before, there is a lack of information on several aspects that could influence children's MC and PMC. Therefore, a reseach project is in progress using different study designs (e.g., integrative review and cross-sectional study) to understand the relationship between parental factors (parental stress, parental style, parental expectations, and parental alliance), children type of play, and real MC and PMC of preschool, adding information for orienting future developmental and therapeutical interventions.

CONCLUSION

There are several health and developmental benefits associated with the quality acquisition of motor skills in children. Numerous factors influence both MC and PMC, and, in particular, there is a lack of information on their relationship with parental - stress, style, expectations, alliance - and children's type of play. This research line seems relevant to a better understanding of the factors underlying children's development.

BIBLIOGRAFHY

- Abidin, R. R. (1976). *Parenting stress model (Unpublished Manuscript)*. University of Virginia, Charlottesville, VA.
- Abidin, R., & Brunner, J. (1995). Development of a Parenting Alliance Inventory. *Journal of Clinical and Child Psychology*, 24, 31-40
- Barnett, L., Van Beurden, E., Morgan, P., Brooks, L., & Beard, J. (2008). Does childhood motor skill proficiency predict adolescent fitness? *Medicine & Science in Sports & Exercise*, 40, 2137-44.
- Gao, Z., Zeng, N., Pope, Z., Wang, R., & Yu, F. (2019). Effects of exergaming on motor skill competence, perceived competence, and physical activity in preschool children. *Journal of Sport and Health Science*, 106-113.
- Harter, S. (1981). A model of intrinsic mastery motivation in children: individual differences and developmental change. In: Collins A, editor. *Minnesota symposium on child psychology*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Lindsey, E. (2014). Physical activity play and preschool children's peer acceptance: Distinctions between rough-and-tumble and exercise play. *Early Education and Development*, 25, 277-294. DOI: 10.1080/10409289.2014.890854
- Ojala, M. (2000). Parent and teacher expectations for developing young children: A cross-cultural comparison between Ireland and Finland. *European Early Childhood Education Research Journal*, 8, 39-61, doi: 10.1080/13502930085208561
- Piek, J., Dawson, L., Smith, L., & Gasson, N. (2008). The role of early fine and gross motor development and later motor and cognitive ability. *Human Movement Science*, 27(5), 668-81. doi: 10.1016/j.humov.2007.11.002.
- Robinson L. et al. (2015). Motor competence and its effect on positive developmental trajectories of health. *Sports Medicine*, 45, 1273-84.
- Stodden. D., et al., (2008). A developmental perspective on the role of motor skill competence in physical activity: An emergent relationship. *Quest*, 60, 2, 290-306.
- Torres, N., Veríssimo, M., Monteiro, L., Ribeiro, O., & Santos, A. (2015). Domains of father involvement, social competence and problem behavior in preschool children. *Journal of Family Studies*, 20, 188-203, doi: 10.1080/13229400.2014.11082006
- Venetsanou, F., & Kambas, A. (2010). Environmental factors affecting preschoolers' motor development. *Early Childhood Education Journal*, 37, 319-327 DOI 10.1007/s10643-009-0350-z
- Yanamoto, Y., & Holloway, S. (2010). Parental expectations and children's academic performance in sociocultural context. *Educational Psychology Review*, 22, 189-214. doi: 10.1007/s10648-010-9121-z