

Behaviour and Social Skills in Children Aged 3-5: Relationship with Sensory Processing

Margarida Isabel Araújo Oliveira^{1,*} and Helena Isabel da Silva Reis²

¹*Escola Superior de Saúde do Alcoitão, Rua Conde Barão, 2649-506 Alcabideche, Portugal*

²*ciTechCare, School of Health Sciences, Polytechnic of Leiria, Portugal, Campus 2 - Morro do Lena, Alto do Vieiro - Apartado 4137, 2411-901 Leiria*

Abstract: Children with difficulties in sensory regulation show challenges in many areas, including externalized and internalized behaviour problems.

Methods: This study intended to determine the implications of sensory processing in the behaviour and in the social skills of 100 children, aged from 3-5, with typical development, through *Sensory Processing Measure* and *Preschool and Kindergarten Behaviour Scales*.

Results: Significant associations were found between sensory processing difficulties and behaviour problems, between the total of the spm-p scale and internalized behaviour problems ($p = .000$); and the total of the spm-p scale and externalized behaviour problems ($p = .000$). The study showed a high prevalence of difficulties in sensory processing, not only in the home context but also in kindergarten, in undiagnosed children, with impact on multiple sensory systems. In children with dysfunction in sensory processing, it was possible to detect that hyporesponsive children have greater problems in terms of autonomy and the hyper-responsive ones have more difficulties in behaviour regulation.

Conclusion: It can be concluded that the higher difficulties in sensory processing the higher problems in the behavior are manifested in preschool children.

Keywords: Behaviour, Social skills, Preschool, Sensory processing.

INTRODUCTION

It is in the relation with the social environment that the child starts to find and experience new sensations; senses are the main tool to build sensorimotor development and perceptions, besides providing a solid base for the acquisition of intellectual knowledge, improving sensitivity and harmony with the first contacts with the outside world, that is, the environment in which the child is inserted. The practice of activities related to the sense organs, in addition to developing stimulation on the intellectual, psychological, cognitive and motor fields, addresses the children's emotional and social aspect, where they will learn how to socialize with the environment where they are inserted. [1].

Children who attend preschool should be able to coordinate the seven senses in order to learn about their world and act adequately. If the child does not correctly process the vestibular and proprioceptive information, they will have postural difficulties and fear when interacting with the challenges of the environment [2]. Therefore, school should offer a large

and wide range of stimulations, because the environment contributes to the development of the child. Furthermore, the child's living conditions outside school should also be considered, for contributing to changes in the development [2, 3].

All individuals need a good ability to process sensory information for a good performance in the environment and an effective participation in daily activities. However, behavioural functions can be affected by problems with sensory processing [4-6]. Children who have difficulties in sensory regulation show difficulties in many areas, including problems with externalized behaviour, internalizing behaviour problems, difficulties in emotional and attention regulation, as well as difficulties in many daily life activities and poorly developed adaptive social behaviours. The quality of interpersonal relationships may influence the social development of children of younger ages. Children who are not accepted by their peers are more lonely and more vulnerable to mental health problems in the future [4-10].

Gourley and his collaborators (2012) suggest that the functioning of sensory processing worsens the gravity of behaviour problems [4]. It should be highlighted that, even though there is comorbidity, sensory dysfunction exists regardless of the presence

*Address correspondence to this author at the Escola Superior de Saúde do Alcoitão, Rua Conde Barão, 2649-506 Alcabideche, Portugal; Tel: +351 21 460 7450; E-mail: margaridaisabeloliveira@hotmail.com