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# ESTUDOS EM DESENVOLVIMENTO MOTOR DA CRIANÇA







# CAPÍTULO V

# A REVIEW ON PLAYGROUND BEHAVIORS – THE CASE OF CHILDREN WITH HEARING LOSS

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# **ABSTRACT**

Play is an important platform for social learning experiences where children can master their social, emotional, communication and motor abilities. Play behaviors occur in many forms (e. g., pretend, exercise, rough-and-tumble play) and patterns (e. g., social, parallel, solitary play) that vary according to the characteristics of the setting, the familiarity with peers, and the characteristics of the child. Research has shown that due to the impairments in hearing and communication, children with a hearing loss (HL) present different behavior patterns at the playground when compared to normally hearing peers (NHP). This paper aims to portrait the current knowledge about playground behaviors of children with HL, presenting some suggestions for future research.

Key-words: Play; social interactions; playground; hearing loss.

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# INTRODUCTION

Communication is one the primary areas affected in children with HLMorse, Ardizzoni, MacDonalds & Pasick, 1980 cit in 1, however social-emotional functioning is also a critical domain<sup>2</sup>, which affects children with HL'<sub>8</sub> peer play interactions Morse et. al., 1980 cit in 1.

Play has a central role in children's development as it provides a Play has a central rose and provides a safety zone in which children feel free to create, repeat and explore safety zone in which children discovering and practicing their different situations, therefore discovering and practicing their competences<sup>3</sup>. Play is also a privileged way of communicating, especially in the early years<sup>4</sup>. However, giving the large amount of auditory and kinetic stimulation during peer play, as well as the velocity of interactions and of rules changes<sup>5</sup> engaging in peer play might be a serious challenge for a child with HL. Although play interactions of children with HL are important to understand their social and emotional development, research on the topic has been lacking over the years. Most papers on this subject already date from more than 20 years ago1,6,8 and although most findings still reflect the current behaviors that these children have, they are not up-to-date with the evolution in technology, especially in what concerns the evolution of hearing aids and cochlear implants. Therefore, the aim of this study is to report the state of the art about the playground behaviors of children with HL.

## LANGUAGE, COMMUNICATION AND PLAY

More than 90 percent of children whit HL are born to hearing families, which means that for the most part of this group there is a mismatch between the communication used by the child, the parents and siblings, which is reported to affect the development of language and the ability to communicate. Communication is a broad concept as it involves the ability to portrait and understand intentions/ideas using various forms (e. g., facial expressions, tone of voice), and not only language itself<sup>9</sup>. The communication impairments that children with HL have, causes them also to be less effective on expressing their feelings, needs, thoughts, problems and desires to others, and also understanding what others want to portray<sup>10</sup>. Not being able to understand and be understood increases the frustration with the social world, interfering with their emotional and behavioral regulation<sup>10</sup>, and affecting how children are perceived and treated by others.

Language emerges early in life, becomes more complex through be years, and it is influenced by the child's experiences with his/her bayears and truities? Verbal interactions are crucial to maintain consistions, argue ideas and rules, exchange information and therefore oresistions, argue ideas and rules, exchange information and therefore establishy, longevity and complexity in the interaction between costs of the complexity in the interaction between costs of the consistency of the cost of the

### PLAYGROUND BEHAVIORS

Interaction with peers

Hearing and communicating are very important within play activities, therefore children with HL might have fewer opportunities for playMone. Antizonii. McDonalda & Paicis. 1980 et al. especially because they might face more difficulties in seabablishing interactions with perexparticularly in large social settings. Research shows that children with III. establish never and shorter social interactions than poremally hearing children. and interact mainly with children with the same hearing status<sup>4</sup>, developing social networks that are much fragile than their HI'II. Nowadays, most children with HL are integrated in mainstream

shoots, which means that they can encounter children with or without HL. When initiating interactions with peers independently of the context, children with HL prefer peers with the same hearing satus, and children with normal hearing (NH) do that as well<sup>20</sup>. This has been connected to the shared communication mode, which means that when two children with HL initiate and maintain interactions they use similar methods, usually nonverbal. When a child with HL tries to initiate interaction with a hearing child, most of the times this attempt is simply ignored, and initiation from HP to a peer with HL is mostly non-existent 1.44%. Therefore children with HL are often excluded from the peer group, especially if the group consists of children with a different hearing status, being ignored and less invited to play1415. Because their social initiations with HF are less successful, children with HL spend more time alone at the playground than their HPs, avoiding group interactions, and preferring peripheral areas of

the playground to avoid peers<sup>1</sup>, which causes them to not take advantage of the full exploration of the playground. The predominant behavior that children with HL show at the playground is reticent behavior, i. e., they hover around, observing others but not joining them. Reticent behavior has been related in previous studies<sup>17</sup> with children with normal hearing (NH) to a lack of emotion understanding, and to emotion dysregulation. Children with HL seem to be interested in interacting with the peers but are mostly fearful of doing so to avoid conflicts and rejection, caused by the constant rejection that they face by their NH peers<sup>18</sup>.

There are different strategies to interact with peers (e. g., joining an ongoing activity, requesting to join verbally, disruptively intruding the activity, hovering)<sup>19</sup> and the most successful manner to enter in a group activity for a young child, is to join the others in the ongoing activity<sup>14</sup>. However, this strategy is less frequently used by children with HL, compared to children with NH. Instead children with HL tend follow two different behaviors: hovering, i. e., standing close to the group waiting for an invitation, or entering in a disruptive way, for example stealing a toy<sup>12</sup>. The tendency to use these strategies seems to be related to a preference for strategies in which they do not need to rely on verbalization<sup>9,14</sup>.

### Forms of Play

In what concerns to the play forms, research has mainly focused two types of play: pretend and constructive play. Pretend play evolves in complexity throughout child development, starting with the child acting upon herself, evolving into make-believe with objects, and then others and is highly dependent on language<sup>4</sup>. Less demanding in terms of the use of verbal clues and exchanges between peers, constructive play relates to the exploration of objects in order to build something, alone or in a group<sup>17</sup>. In the early stages of life, children with HL engage equally in pretend play when compared to their HP, as on this stage pretend play is less complex and less dependent on language<sup>4</sup>. However, throughout development, as pretend play requires more frequent and complex language abilities, children with HL start to fall behind their HP, preferring to engage in constructive play<sup>4,6</sup>. Nevertheless, the development of pretend play follows the same stages as children with NH, which indicates that the progres-

sion just happens at a slower pace, as their language skills also do6. To support this knowledge some comparisons have been done inside To support of children with HL, showing that children with better the group with better communication skills tend to engage more in pretend play, than those who show poorer performances, because their abilities to convert symbols/ideas into language/verbal clues is stronger<sup>6</sup> and also because of their word production skills, which have been reported to be largely related to pretend play<sup>20</sup>.

# CONCLUSION

It is through play that children practice their developmental skills, and primarily communicate with each other. Hearing and communicating are very important when interacting with peers, and for that reason children with HL face more difficulties in establishing and maintain playful interactions with peers, particularly in large settings. Children with HL play more frequently with same hearing status' peers. When joining HP, they are often ignored and less invited to play, which makes them more fearful to interact. Only few studies have examined play behaviors of children with HL, showing that throughout development, as pretend play requires more frequent and complex language abilities, children with HL start to fall behind their HP, preferring to engage in constructive play. New insights about how the involvement in specific types of play is influenced by deafness are crucial for the inclusive education practices and therefore should be the focus of future research.

# BIBLIOGRAPHIC REFERENCES

LEVINE L. M., Antia S. D. The effect of partner hearing status on social and cogni-1 tive play. J Early Interv. 1997.

WIEFFERINK C. H., Rieffe C., Ketelaar L., De Raeve L., Frijns J. H. M. Emotion understanding in deaf children with a cochlear implant. J Deaf Stud Deaf Educ. 2 Pellegrini A. D. Research and Policy on Children's Play. Child Dev Perspect. 2009

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Quintas T., Curti L. M., De Goulart G., Chiari B. M. Caracterização do jogo simbólico em deficientes auditivos: estudo de casos e controles. Pró-Fono Rev Atua-4 lização Científica. 2009; 21(4): 303-8.