

BACHELOR THESIS ABSTRACT

Name, Surname: Bernadeta Looney

Thesis Supervisor: MUDr. Markéta Janatová

Thesis consultant: Bc. Monika Šťastná Kohoutová

Title: The Design and Construction of Aids for the Development of Sensory Functions and Testing Their Usability in Preschool Children

Abstract: This thesis focused on the design and creation of aids for the development of sensory functions and then tested their usability in preschool children with various neurodevelopmental diagnoses. The first, theoretical part of the thesis briefly introduces the field of occupational therapy and the main goals of paediatric occupational therapy. It then focuses on the topic of play, summarizing the main theoretical perspectives on play and discussing the role of play in human development. The following subchapter describes play from the perspective of an occupational therapist, including ways of using play in therapy. Next the issue of sensory functions is addressed. The individual sensory systems, their role in individual development, and manifestations of their dysfunction are described. The main methods focused on the development of sensory perception used in occupational therapy are then introduced, primarily the Ayres Sensory Integration method and hippotherapy. In the practical part of the thesis, the design and manufacture of sensory aids (or toys), which were subsequently tested during hippotherapy workshops, is described. Detailed instructions for making the tools discussed in the thesis are provided as well as suggestions for the use of each tool in therapy. The aids were tested using a qualitative research method based on observation. Ten children with difficulties in various areas of sensory perception participated in the research. Observation focused on the way of interaction (or play) with the tools and the time spent with them. The research found that children prefer toys with an open-ended play goal that they can adapt according to their interests. The sensory properties of the toys were observed to be a limiting factor in the way of play, this is consistent with the findings of published literature on the subject and highlights it as an issue that occupational therapists should address in their practice.

Key Words: sensory development, sensory integration, sensory toys, pediatrics, preschool age, hippotherapy