



THE DESIGN OF A THERAPY GARMENT FOR PRESCHOOL CHILDREN WITH SENSORY INTEGRATION DYSFUNCTION

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A design process developed by Joann Boles was used to develop a therapy garment for three four-year-old boys with sensory integrative dysfunction who participated in occupational therapy using sensory integrative methods. The design process framework had four stages: (a) problem development, (b) needs assessment, (c) prototype development, and (d) evaluation. The problem was developed through observations, interviews, experiences, and literature review.

The needs were assessed for the wearers, the activity, and the environment through observations, interviews, and document reviews. The research design was multiple case studies. Data collection and analyses followed the grounded theory procedures of open and axial coding.

The resulting needs were translated into garment specifications and criteria. The four garment specification categories were (a) movement, (b) sensory integration, (c) motor development, and (d) play.

Prototypes were generated to meet garment specifications in terms of garment structure, materials, and assembly. The resulting prototype consisted of a sleeveless pullover top, cape, and weights and featured a bug superhero theme.

The prototype garment was evaluated against garment specification criteria in the field through observations, interviews, and an evaluation form. The prototype garment satisfied categories of movement, sensory integration, motor development, and play.