



## **Study 1: Critical Review**

### ***Methods***

#### **Search Strategy**

Computerized databases including PubMed and CINAHL as well as ASHA publications were searched using the following search strategy: [(preschool\*) OR (early intervention) OR (toddler\*) OR ([communication impairment\*] OR [communication disorder\*]) OR (speech disorder\*) OR (language disorder\*)] AND [(participation) OR (APCP) OR (leisure and recreation) OR (ICF\*) OR (play)]. Reference lists of previously searched articles were also used to obtain other relevant studies.

#### **Selection Criteria**

Studies selected for inclusion in this review were required to measure or describe

leisure activities and acquiring skills were identified as least difficult for these children. Items that were frequently reported as being difficult were factor analyzed to determine categories of impairment that drew on the ICF-CY domains (e.g., *Interpersonal Interactions and Relationships*). Results from the factor analysis revealed that parents identified *Communication* and *Learning and Applying Knowledge* as the most difficult areas followed by *General Tasks and Demands*. *Interpersonal Interactions and Relationships* was rated

communication ability, and that children with physical disabilities participate in fewer activities than their typically developing peers. Limitations of this study include its sampling methodology as it was a convenience sample and it evaluated children with physical disabilities which do not directly reflect outcomes of children with communication impairment. If the study had provided ANCOVA measures, then the unique effects of communication abilities could have been discussed and allow the data to be better related to communication literature. This paper provides compelling evidence that participation is a multidimensional construct and suggests that communication ability is a factor in determining children's outcomes on participation measures.

### *Discussion*

Taken together, the results of the four reviewed studies are suggestive that speech and/or language impairment in preschool children has a significant and negative impact on some aspects of life participation. These studies support findings from the disability literature

physical recreation and social activity subscores. No significant effect was found for the multivariates together (Hotelling's T). However, results of the

interactions and relationships were not impaired for these children.

The relationship between communication ability and social competence is described by Brinton and Fujiki (2005) as an “omelet model” where ingredients such as language may function within a larger batch of ingredients, including temperament and socioeconomic status. This model is supported by results from the third study by Carson et al. (2007) who demonstrated that preschoolers with communication impairment have a higher incidence of detached, aloof and withdrawn temperaments. These unfavourable temperaments may hinder their success in communicating with others during social activities in addition to their deficits in communication. Interestingly, previous research on older children with language impairment has shown that they also interact less with peers and are more withdrawn than their typically developing classmates (Fujiki, Brinton, Isaacson, & Summers, 2001). These results suggest a stability of participation levels across the lifespan and support the suggestion that the foundation for meaningful participation is formed in the first few years of life (Bult et al., in press).

The roles of parents and parental temperament were also detailed as factors to decreased participation levels; Carson and her colleagues found that parents of toddlers with speech/language delay provided less opportunity for their children to participate in a variety of activities than did

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