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## 5 Play in Children with Intellectual Disabilities

Intellectual disability (ID) is characterised by significantly below-average intellectual functioning and limitations in two or more areas of adaptive skills: communication, self-direction, social skills, self-care, personal independence at home or in community settings, school or work functioning, and maintenance of personal safety (Shalock et al., 2010).

Children with ID do not form a homogenous group (Brodin & Stancheva-Popkostadinova, 2009). The differences are based on the severity of intellectual disability (mild, moderate, severe, and profound) and comorbidity. The limitations in some adaptive skills often coexist with the strengths in other skills.

The biggest part of the children with ID face challenges in communication, emotion regulation, language, rapid processing of information, attention, executive functioning, and are more likely to show internalising and externalising problems.

### 5.1 Play in Children with ID

“The studies about medical and physical effects of different kinds of disability are predominant, and until the end of last century very little attention has been given to the way the nature of children’s play is changed by a disability” (Webb, 2003:15).

Play in children with ID is studied from different perspectives: in comparison with children without ID (Blasco et al., 1993; Lieber, 1993; Malone, 2006); home settings versus school settings (Malone, 2009); correlations between specific psychological characteristics and particular types of play (Cunningham et al., 1985; Elias & Berk, 2002; Nader-Grosbois & Vieillevoye, 2012); role of parents in parent-child play interaction (Hauser-Cram & Howell, 2003; Roarch et al., 1998); parents’ perceptions of children’s play (Malone & Landers, 2001).

The severity of ID influences the nature and characteristics of children’s play. Allen (1980) reported that play in children with ID may not emerge so naturally and informally as it does with other children, and may need to be encouraged. Comparing atypically and typically developing (TD) children, Hughes (2009) stressed that children with ID were more interested in the physical characteristics of play materials than in their representational possibilities; they were more likely to simply manipulate and handle play materials; they were more repetitive and less varied in toy play (Lender et al., 1988); finally, children were delayed in the emergence of symbolic play and were less likely to reach higher levels of sophistication.

In contrast with the previous positions, some studies by Malone et al. pointed out that the patterns of play in children with and without ID within the same context

were similar: in fact, both groups of children spent nearly equal time in functional, constructive, and pretend play during home-based independent play situation (Malone, 2009; Malone & Stoneman, 1990). Moreover, Linn, Goodman, and Lender (2000) stated that despite the frequencies of passivity and repetition, children with ID spent the majority of their time engaging in spontaneous, nonrepetitive play. This picture also emerged in a study in which mothers' were requested to describe play in their children with ID (Malone & Landers, 2001).

## 5.2 Cognitive Play

With respect to the cognitive dimension of play, the development of play in children with ID proceeds similarly as for TD children; it is related to the child's level of cognitive functioning; thus, delays are usually present and symbolic play appears later (Beeghly, 1998; Cicchetti & Ganiban, 1990; Fewell et al., 1997; Gowen et al., 1992; Hill & McCune-Nicolich, 1981; Hughes, 2009; Libby et al., 1997; Motti et al., 1983; Turner & Small, 1985). Play of children with ID appears to be more repetitive than TD play because of distractibility and impairment in motivation, perception, learning (Lender et al., 1998; Morgenstern, 1968).

Messier, Ferland, and Majnemer (2008) reported that in a group of children with ID between 6 and 8 years of age, play age was about 2.5 years. Their practice play, involving gross and fine motor skills, their interest in sensory elements of play, and their interest in exploration were well-established, whereas all aspects related to imitation, imagination, and dramatisation abilities were delayed. Singh, Iacono, and Gray (2014) found that 12 two- to five-year-old children with Down Syndrome mainly performed functional play and less complex symbolic play. Thus, symbolic play typically appears later in children with ID (Hughes, 2009). Children with ID between 8 and 12 years of age displayed level of symbolic play similarly to TD children of similar mental age (3-6 years; Beeghly et al., 1989; Hill & McCune-Nicholic, 1981; Motti et al., 1983; Nader-Grosbois & Vieillevoye, 2012). When involved in structured situation, in which, for instance, play objectives are defined by adults, children with ID showed higher pretend play level (Nader-Grosbois & Vieillevoye, 2012). In terms of their play with objects, children with ID seem to prefer structured materials, such as puzzles and jacks, while typical children of the same mental age prefer open-ended materials (e.g., art supplies) that allow them to be creative and imaginative.

In literature, studies on practice and symbolic play in children with ID are present, mainly because these are intended as indicators of cognitive development. On the other hand, studies about constructive and rule play in this population are uncommon because of children with IDs' difficulty in cognitive reasoning, planning of strategies and goals, and so on. In general, children with ID are less likely than other children to combine objects appropriately in play (Hughes, 2009).

It is worth noticing that children with IDs ludic attitude, consisting curiosity, initiative, pleasure, spontaneity, and participation, were found to not being related to the IQ level and cognitive functioning (Linn et al., 2000; Luttrupp & Granlund, 2010; Messier et al., 2008).

### 5.3 Social Play

With respect to the social dimension of play, compared to the TD children, children with ID show higher proportion of solitary play (Guralnick et al., 1996b; Guralnick & Groom, 1987a; 1987b; Kopp et al., 1992), interact less with peers, and exhibit lower levels of complexity in engagement (Guralnick et al., 2006; Luttrupp & Granlund, 2010). Moreover, they have specific problems in ludic interactions, above all, with peers. In general, social interactions are more restricted than those of comparable groups of children (Guralnick, 1997), and children with ID are less likely to initiate play with peers and have difficulties with cooperation (Luttrupp & Granlund, 2010; Messier et al., 2008).

In fact, playing with peers is a high-demanding activity from a linguistic, cognitive, and social point of view: it implies self-regulatory strategies, achieving interpersonal goals, sustaining and coordinating play sequences, resolving conflicts, processing complex social information, and so on (Guralnick 1999a; Luttrupp & Granlund, 2010; Vieillevoye & Nader-Grosbois, 2008). Consequently, with difficulties in complex interactions, children with ID have been found to be more socially included during structured activities in kindergartens (Luttrupp & Granlund, 2010).

Because of these difficulties, during ludic interaction, children with ID also spent more time in passivity, or disengagement from activity than TD children (Krakow & Kopp, 1982, 1983; Lender et al., 1998; Linn et al., 2000). In these children, passive behaviours increased according to the amount of time spent in playing. Moreover, while TD children can quickly coordinate and alternate play and social interaction with the partner, children with ID need to stop playing to interact with the partner, thus reducing the total amount of ludic interactions (Linn et al., 2000).

Children with ID have smaller social networks than TD children and rarely have best friends to play with frequently. Thus, they spend higher percentage of their social activities (including play) with adults (parents, teachers, educators) or siblings, who are more likely to adapt themselves to the cognitive and interactional level of the children with ID and can better understand their communication (de Falco et al., 2008; Luttrupp & Granlund, 2010; Moyson & Roeyers, 2012; Solish et al., 2010). Moreover, it could be difficult for TD children to understand and anticipate the reaction of children with ID, because of their difficulties in complex social interactions and in self-regulation (Ytterhus, 2003), whereas siblings, for instance, can better interpret children with ID communication and behaviour (Moyson & Roeyers, 2012).

IDs influence others' behaviours and specifically parental support during play sessions. For instance, mothers of children with ID tend to be more directive and supportive than mothers of TD children (Hauser-Cram & Howell, 2003; Roarch et al., 1998). This style was functional to support children's play: in fact, it was associated with more object play and vocalisation by children with ID (Roarch et al., 1998). It is worth noticing that among children with ID, great individual differences emerged: degree and type of disability were not strongly correlated with the child's social competence and participation (Luttrupp & Granlund, 2010).

## 5.4 Conclusion

The literature about play in children with ID covered more than 45 years of research and still this topic is of current interest. Some studies compared play in children with and without disabilities, others presented specific aspects of play, or play in specific disability groups.

Even if there are some controversial results, majority of the studies showed that there are more similarities than differences in play of children with ID and without ID. Despite some individual differences, both the cognitive and social complexities of play displayed by children with ID are mostly related to the development of their cognitive and social competences. Thus, supportive environments and supportive partners are important to give children with ID a chance to play for the sake of play.

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