Intervention of communication in children with intellectual disabilities

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Abstract

This article is the result of a longitudinal cooperation between Sweden and Bulgaria in the framework of Erasmus teacher exchange program in education and research. Early intervention in communication is an essential and today vital part of support in child development. Focus is on children with intellectual disabilities and the communicative competence. Some basic tools for assessment of the communicative ability are presented in the article.

Keywords: early intervention, communication, communicative competence, children with multiple disabilities, intellectual disabilities

Introduction

Communication is no longer a question of transferring information from a sender to a receiver as it was before the 80-ties – it is a dialogue based on sharing and making together, i.e. social interaction. Communication thus means to share feelings, experiences, actions and activities and it is a process based on mutuality and social interplay (Brodin, 1991, 2008; Lind, 2003; von Tetzchner, 2005). Communication is thus a social process and the ability to communicate develops in interaction with persons in the immediate environment and both physical and social factors are of equal importance. “For children with disabilities, communication skills are among the most crucial social skills. Communication skills provide the primary means of controlling social environment, be it friends, siblings, classmates, parents, caregivers, relatives or teachers” (Goldstein & Kaczmarek, 1992, p.82). However, for children with

disabilities communication is not a question about control, it is a question of raising their voices to express their wishes and influence their daily life.

The first communication partners for the little child are often the mother and/or the father, and they interpret the child's communication intentionally, i.e. 'as if' it was intentional. By doing so, the child learns how to express him/herself to get the best effects and to reach the goals, which might be based on their needs (Brodin, 2005; Brodin & Stancheva, 2002). When the parents are caring the child, for instance changing diapers, there are natural opportunities to play and communicate with the child and parents in common use these occasions to build up a close relation to the child. In this context the child learns to take initiatives and his/her turn in communication which one of the most essential actions in communication and decisive for the communication development (Björck-Åkesson, Brodin & Fälth, 1997; Lind, 2003; Pickl, 2008).

When children with profound intellectual disabilities are in focus communication often includes gestures, mimic, vocalisation, body positioning, and breathing. Wilder (2008) states that "Researchers have postulated cautions against basing intervention for children with profound multiple disabilities on research from typically developing children" (p. 36). However, research shows that interaction interventions involving children with profound disabilities are limited, often individualized and the outcomes are not always obvious. Snell, Chen and Hoover (2006) are concerned about interventions with these children as the outcomes are difficult to generalize and the skills learnt vary and are not stable over time. They suggest that long-term maintenance of intervention should be performed in natural contexts in order to give the best results. For this reason many researchers suggest that communication should always be studied in the child's everyday life and in natural situations and contexts (e.g. Brodin, 2008). Wilder (2008) stated that children with cognitive disabilities

related to their context differently and in another way than typically developing children and this is also supported by other researchers for instance Dunst (1998) and Light (l989). This is however depending on the type and degree of the disability of the child.

Research on communication disorders has shown that the ability and motivation to interact with others vary from person to person and from one situation to another (Light, 1989). Therefore the communication partner and the context affect a child's communication both qualitatively and quantitatively. A majority of the children with intellectual disabilities have difficulties to communicate and for children with profound and multiple disabilities almost one hundred per cent have difficulties in communicating.

Children with intellectual disabilities

For many children with intellectual disabilities communication is difficult and about 70 per cent of this population has no or a poorly developed spoken language and has to rely on augmentative and alternative communication (AAC) (Brodin, 1991, 2008; Conti-Ramsden, 1997; Granlund, 1993). Children with intellectual disabilities have difficulties to receive, process and store information, they have longer time for learning and limitations of *what* and *how much* they can learn. Furthermore they have a low level of abstraction and therefore need a concrete reality. They experience what can be described as 'here and now'. Intellectual disability is normally innate or acquired by accidents or illness later in life. Intellectual disability is commonly categorized as mild, moderate, severe or profound. About two thirds are boys, having multiple disabilities and more or less severe communication disorders, and consequently need support to express themselves. Almost 100 per cent of all children with profound intellectual disability have communication disorders (Brodin & Thurfjell, 1996; Granlund, Björck-Åkesson, Brodin & Olsson, 1995). Children with intellectual disabilities

have major difficulties in understanding concepts concerning time, space, quality, quantity and cause-effect and this is due to the low level of abstraction (Brodin, 2005; Johansson, 2007).

Common difficulties in everyday life are that they often are regarded as passive as they take no or few initiatives, which is based on their earlier experiences in life and how they have been met by persons around them. Interaction also varies with different communication partners and at different moments of the day (the daily form is decisive). The context and the immediate environment are for this reason of great importance for children with intellectual disabilities (Johansson, 2007). There are many factors that influence interaction for instance characteristics of the communication partner and the environment (social factors), the world around them and the situation (contextual factors), characteristics in the child (personal factors) and the dynamic in the interaction (interactional factors). Both children and adults with disabilities always use the quickest way to express themselves and they use many different ways to communicate simultaneously (Björck-Åkesson, Brodin & Fälth, 1997). As a matter of fact verbal and non-verbal communication always exist parallel. The non-verbal language consisting of smiles, glances, and nods, supports the spoken language which is essential. The importance of eye contact is stressed by many researchers (e.g. Conti-Ramsden, 1997; Meltzoff & Moore, 1994; Pickl, 2008; Tomasello, 2003).

Communicative competence

Communicative competence is a concept that have been discussed since many years in communication research (e.g. De Saussure, 1974; Hymes, 1972; Newcomb, 1953). Today communication is often described in terms of form, content and use and the following questions should be asked when early intervention is conducted:

Form – how does the child express him/herself?
Content – what does the child really say?
Use – in what contexts does the child communicate and with whom?

Form, content and use constitute the basis of the communicative competence. Competence is a dynamic concept and is constructed in relations between a person, the goal of an action and the environment. The communicative skills of a non-verbal person can e.g. be increased by training the care providers to interpret 'body language' efficiently or to introduce a communication system based on low or high technology (Brodin, 2005; Pickl, 2008). In intervention it is important to keep in mind that the general competence of a person changes over time and looks differently with different communication partners. The central concepts according to Light (1989) are: *the functional aspects* (depends on the context, the ability of the child and the communication partner), *the adequacy* (to adapt the language to the communication partner, e.g. a child) in order to be understood, and *knowledge and skills* (linguistic, operational, social and strategic).

Communicative competence means to be able to understand what people say and to be able to express yourself in an adequate way and Light (1989) defines competence for AAC (augmentative and alternative communication) users as 'the ability to functionally communicate within the natural environment and to adequately meet daily communication needs'. Our interpretation of this is that it takes two to make a tango, i.e. communication is based on mutuality and shared experiences. Disturbances in communication with the primary caregiver (e.g., mother, father, siblings, teachers) often arise early in life of a child with severe and profound disabilities as the child does not answer in the way the mother or father expects. The use of medicine also influences the child's behaviour and sometimes makes the child

non-attentive (Brodin, 2008; Lind, 2003). Communicative competence is thus a key concept with regard to intervention in children with disabilities

Early communicative intervention of children with disabilities

Assessment and intervention can be measured on different levels, e.g. child level, dyadic level or parental level. In many processes all these aspects are involved.The communicative intervention always starts with an assessment of the present ability of the child and what the child needs (Brodin & Stancheva, 2002; Stancheva-Popkostadinova, 1999). The communicative intervention can be based on *new skills approaches* aimed at developing new communication skills to the child by training, or *adaptation approaches* aimed at reducing the severity of the disability. A majority of the intervention models for persons with profound disabilities stress the developmental approach in assessment (Brodin & Thurfjell, 1996).

When assessing the communicative ability in persons with intellectual disabilities, clinicians e.g. speech therapists or pathologists and other persons carrying through the formal communicative assessment face many difficulties (Brodin & Thurfjell, 1996; Pickl, 2008) as the child with intellectual disability often lacks conventional modes to communicate. The individual expressions are often difficult to understand and are only familiar to persons in the immediate environment, i.e. relatives and a few of the staff members in preschools and schools (Lind, 2003). The unwillingness to communicate with unfamiliar persons also varies among children and many professionals working with these children report that communication functions well in daily life and in well-known contexts (Brodin, 2008; Stern, 2003). However, when focusing on the formal communicative assessment the outcome is often different and contradictory. The formal assessment measures more the ability to respond to the assessment in the present situation than to the genuine ability to interact in daily life.

The assessment can be measured within a norm-referenced or a task-referenced framework. The most important question is to survey how the communicative competence is best shown and for persons with intellectual disabilities the task-reference method is therefore preferable (Granlund, 1993; Sommer, 2005); von Tetzchner, 2005). Many researchers thus emphasize a functional approach for assessment e.g., the Early Social Communication Scales [ESCS] (Seibert & Hogan, 1982) where the communicative behaviour and frequency are measured. The ESCS consists of ordinal scales measuring social interaction (e.g., body language, gestures, signals and natural reactions), joint attention and behaviour regulation as well as goal attainment scales. In order to meet the special needs of a specific child a test form for measuring the ability in everyday situations is recommended to be used as a complement.

This form can cover communication/function, communicative use/aim, to understand and be understood/to ask and inform (Brodin & Thurfjell, 1996). The communication assessment may form the basis of the continual work. From the prerequisites of each child an individual goal setting with sub-goals must be set. The goals can either be quantitative or qualitative depending on the prerequisites of the child and his/her family. The results of the goal setting and goal attainment are used in the goal attainment scales. The scale has five options: Optional in this context, better than expected, as expected, worse than expected and as inferior as possible in the context. The scales will then give information is the goals are set too low or too high and could after the evaluation be adopted and changed (ibid.).

The principles for communicate intervention discussed in this paper have shown to be useful as a complement to other forms of data collection, e.g. interviews with parents, staff and the children (if and when possible) and observations. It will give a good view partly of the participants communicative ability both on a generic and specific level, partly of the opportunities to use the assessments to form the goal attainment scales for future work.

There are of course also many other different types of scaling to assess the child's communication. Some of these instruments include developmental scales for the children from infancy up to age of three years are designed to be cursory measures of early communication skills. Some of the issues of these instruments are:

- form of communication (e.g., presence of words, gestures)
- analysis of preverbal communication
- social signals to get attention and to maintain attention
- listing of strengths and weaknesses of the child
- assessment of the child (should not only be based on parent information)
- avoid to push the child into a respondent role - listen to the child's voice
- involve parents and other caregivers in the whole process.

What kind of instrument you choose depends on the child and his/her family and what the aim of the intervention is.

Conclusions

It appears from research that the ability to communicate is related to personal factors, intelligence, communicative intention, in other words the ability to take initiatives, to show a willingness to talk to other persons and to the physical and mental prerequisites of the child. For children in need of special support it is essential that they have persons around them with a sensitive ear and an understanding environment. They need attentiveness for all expressions and they need to get responses to both conscious and unconscious expressions, as it is never possible to be sure of the correct interpretation. Children with intellectual disabilities also need time – time to be able to answer and time to interpret what is said. Communication is the

most basic need in all human beings and for this reason all children have the right to get a way to communicate and express themselves.

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