



Research paper

Assessing pragmatic communication in children with Down syndrome



Elizabeth Smith^a, Kari-Anne B. Næss^{b,*}, Christopher Jarrold^a

^a University of Bristol, United Kingdom

^b University of Oslo, Norway

ARTICLE INFO

Keywords:

Communication
Pragmatics
Down syndrome
Social functioning
Vocabulary
Nonverbal cognitive ability

ABSTRACT

Purpose: Successful communication depends on language content, language form, and language use (pragmatics). Children with Down syndrome (DS) experience communication difficulties, however little is known about their pragmatic profile, particularly during early school years. The purpose of the present study was to explore the nature of pragmatic communication in children with DS.

Method: Twenty-nine six-year-old children with DS were assessed, in the areas of 1) initiation, 2) scripted language, 3) understanding context and 4) nonverbal communication, as reported by children's parents via the Children's Communication Checklist-2 (Bishop, 2003). Additionally, the relationships between pragmatics and measures of vocabulary, nonverbal mental ability and social functioning were explored.

Results: Children with DS were impaired relative to norms from typically developing children in all areas of pragmatics. A profile of relative strengths and weaknesses was found in the children with DS; the area of nonverbal communication was significantly stronger, while the area of understanding context was significantly poorer, relative to the other areas of pragmatics assessed in these children. Relationships between areas of pragmatics and other linguistic areas, as well as aspects of vocabulary and social functioning were observed.

Conclusions: By the age of six children with DS experience significantly impaired pragmatic communication, with a clear profile of relative strengths and weaknesses. The study highlights the need to teach children with DS pragmatic skills as a component of communication, alongside language content and form.

Learning outcomes

- Obtain knowledge of the pragmatic profile of relative strengths and weaknesses in six-year-old children with Down syndrome, and the significant degrees of impairment in different sub-areas of pragmatics in these children relative to TD norms.
- Gain an understanding of the degree to which various other factors (vocabulary, nonverbal cognitive ability, and social factors) relate to different sub-areas of pragmatics in six-year-olds with Down syndrome.
- Understand the importance of teaching pragmatic aspects of communication to children with Down syndrome, alongside linguistic aspects.

* Corresponding author at: Department of Special Needs Education, University of Oslo, Postboks 1140 Blindern, 0318 Oslo, Norway.
E-mail address: k.a.b.nass@uv.uio.no (K.-A.B. Næss).

1. Introduction

Communication involves the expression and sharing of information between people, via mediums such as speaking and gesture, providing a means for people to connect. Shared intentionality and cooperation are fundamental to human communication (Grice, 1969; Tomasello, 2010). During development, children's communication abilities strongly contribute to their ability to form social relationships, in turn impacting on well-being and self-esteem (Hartup, 1983; Hemphill & Siperstein, 1990; Leary, Tambor, Terdal, & Downs, 1995). Any communication difficulties can therefore have a considerable negative impact upon development in children (Hadley & Rice, 1991; Rice, Sell, & Hadley, 1991).

Children who have developmental disabilities are often at particular risk of experiencing communication difficulties, and specific communication profiles of relative strengths and weaknesses tend to be associated with given populations (Geurts & Embrechts, 2008; Laws & Bishop, 2003). The most prevalent developmental disability worldwide is Down syndrome (DS), with approximately 1 in every 737 live births affected (Parker et al., 2010). A characteristic cognitive profile tends to be observed in individuals with DS. Silverstein, Legutki, Friedman, and Takayama (1982) found strengths in individuals with DS on tasks involving figural content, and tasks of a visual nature, relative to weaker performance on tasks involving semantic content, comprehension, social intelligence, and reasoning ability. The gap between individuals with DS and their typically developing (TD) peers in intellectual functioning has been found to increase over time (Carr, 1985; Patterson, Rapsey, & Glue, 2013), indicating that it may be valuable to target areas of difficulty early in development. A particular pattern of difficulty tends to be observed in the language domain in those with DS (see Chapman and Hesketh (2001), for a review), with expressive language difficulties reported across numerous studies (e.g., Abbeduto et al., 2001; Chapman, 1997; Chapman, Seung, Schwartz, & Bird, 1998). Receptive language skills tend to be less impaired relative to expressive language abilities in those with DS (Abbeduto et al., 2003; Chapman, Schwartz, & Bird, 1991). A less clear picture has been reported in the literature with regards to pragmatic communication in individuals with DS (see Abbeduto (2008); Martin, Klusek, Estigarribia, and Roberts (2009), Roberts, Price, and Malkin (2007), for reviews).

Pragmatics refers to ones' use of and understanding of appropriate verbal and nonverbal language, in the communication context in which it occurs (Bishop, 1997). There is little existing research mapping out the landscape of pragmatic communication skills in age cohorts of children with DS, or exploring possible explanations behind their given profile. The primary aim of the current study was to determine the extent of any impairments or strengths in areas of pragmatic communication in six-year-old children with DS. A secondary aim was to explore various potential correlates of pragmatic communication in these children with DS. Understanding the pragmatic profile in this age group of children with DS allows us to determine whether certain areas of pragmatic communication need to be supported in children with DS in the early school years, to allow for successful communication. Additionally, understanding what underlies any pragmatic impairments in six-year-old children is important for the development of education and intervention routes in the early school years.

1.1. Measuring pragmatic communication skills and impairment

Effective communication requires appropriate language use, from turn taking, to staying on topic, as well as nonverbal behaviour such as giving appropriate levels of eye contact to a communication partner. The rules governing appropriate language use also vary depending on the situation one is in (Abbeduto, 2008; Clark, 2004; Ninio & Snow, 1999). For instance, while it may be appropriate for a child to shout out loud in a playground setting with their peers, this would not be appropriate behaviour at a doctor's appointment. Therefore the ability to adapt one's verbal and nonverbal language use from one situation to another is important for successful communication.

There are various verbal and nonverbal behaviours in children that are indicative of difficulty in mastering certain components of pragmatic communication. Bishop (1998) noted that various pragmatic difficulties in children are reported in clinical accounts, but are difficult to observe with traditional tests. Standardized tests such as the Test of Pragmatic Language (Phelps-Terasaki & Phelps-Gunn, 1992) involve showing the child pictures of situations and asking them to generate an utterance that is appropriate to explain the picture (see e.g., Volden & Phillips, 2010). However, as noted by Bishop (1998) children may show less impairment when provided with clear instructions regarding a concrete context, compared to how they might perform in natural settings. Observing children in their natural context is another option for researchers (Pellegrini, Symons, & Hoch, 2014). However, Bishop (1998) notes that how a child behaves or responds in a clinical test or an observation situation may not reflect a child's day to day pragmatic skills in different situations, and that behaviours reflective of pragmatic impairments might not occur within the time frame of the test session. Individuals who spend a lot of time with the child will be familiar with the child's abnormal communicative behaviours. Thus teacher or parental rating scales are particularly useful for assessing the nature of children's pragmatic profile (see e.g., Laws & Bishop, 2004).

In a study of children's communication, Bishop and Adams (1989) explored the features of language that led to a judgment of inappropriate language use (see also Adams and Bishop (1989)). Signs of inappropriate language use included providing too much or too little information, using scripted language, and problems using context for comprehending utterances; these findings informed Bishop's (1998) development of a Children's Communication Checklist (CCC) to distinguish between different types of language difficulties in children, including pragmatic difficulties.

Bishop (2003) developed a revised version of the Children's Communication Checklist (CCC-2) to identify communication difficulties in children, based on parental observation. Along with assessing structural language and autistic traits, there are four components of pragmatic behaviour measured in the CCC-2, these are initiation (i.e., inappropriate initiation behaviours), scripted language (i.e., with scripted language use leading to inappropriate pragmatic communication), understanding of context, and

Download English Version:

<https://daneshyari.com/en/article/5039112>

Download Persian Version:

<https://daneshyari.com/article/5039112>

[Daneshyari.com](https://daneshyari.com)