Examining the Spontaneous Communication of Minimally Verbal Children with ASD in Supported versus Unsupported Contexts

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Introduction
• Despite access to early intervention, up to 30% of children diagnosed with autism spectrum disorder (ASD) are classified as nonverbal or minimally verbal at age five (Anderson et al., 2007).
• The core deficits that are present in this minimally verbal population makes it difficult to get an accurate assessment of functional use of language.
• Context may have an important influence on the assessment of language in this population.
• Previous research has shown that context is a crucial factor in increasing child spontaneous and frequency of language for this population over the course of an intervention that focused on responsive interactions (Kasari et al., 2014).
• Understanding the differences in child behaviors across contexts that differ in terms of adults language could have implications for measuring communication abilities in a population with low-rates of communication.

Research Questions
• Are there differences in spontaneous communication by minimally verbal children with ASD in relatively supported and unsupported naturalistic language sampling contexts?
• Are there differences in imitated language in these contexts?

Methods
Participants
• 25 children with ASD who participated in an ongoing study comparing the effects of a naturalistic, play-based intervention to a discrete trial intervention (Kasari, Kaiser, Smith & Lord, in progress).
• Inclusion criteria:
  • Minimally verbal (less than 20 words)
  • Ages 5–8 yrs
  • Score of above 20 months on a measure of nonverbal cognitive development
  • At least 2 years of prior intervention

Data were selected from pre-intervention measures during naturalistic language interactions in two contexts:
• Supported context: the adult modeled and expanded language related to the child’s interest.
• Unsupported context: the adult spoke only in response to the child or when making general statements.

Results
Total Child Language
• Including all unprompted, imitated, elicited, and prompted language.
• Rate of language per 10-minute sample.

Spontaneous Unprompted Child Language
• Non-prompted, non-elicited, non-imitated language.
• Rate of language per 10-minute sample.

Spontaneous Unprompted Language Across Contexts

Spontaneous Imitated Child Language
• Any language imitated within 3 s following the adult utterance
• Rate of language per 10-minute sample.

Discussion
• The amount of adult talk influences the frequency of overall child talkativeness and language imitations.
• Presumably, increasing the adult’s language models and expansions increases the child’s imitated language, both in quantity (total number of words) and in content (number of different words).
• These differences in adult talk do not change a child’s quantity or content of spontaneous language.
• Thus, variations in the amount and content of adult talk appear to have limited effects on linguistic measures of child spontaneous language.
• It is important to quantify adult talk, including the quantity and content of language models and expansions to truly understand child language use in naturalistic language interactions.

Conclusions
• Although variations in adult talk may increase overall child communication, they do not immediately affect child use of spontaneous language.
• Understanding adult influences on child language use has important implications in measurement of language in naturalistic contexts.

More Information
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References