



# “Didn’t I just say that?” Comparing parent report and spontaneous speech as indicators of grammatical development



Manya Jyotishi\*, Deborah A. Fein, Letitia R. Naigles

Department of Psychology Sciences, University of Connecticut, 406 Babbidge Road, Unit 1020, Storrs, CT 06269-1020, USA

## ARTICLE INFO

### Article history:

Received 9 June 2016  
 Received in revised form  
 20 December 2016  
 Accepted 21 December 2016  
 Number of reviews completed is 2

### Keywords:

Vineland  
 ASD  
 Spontaneous speech  
 Language assessment  
 Grammatical items

## ABSTRACT

**Background:** The Vineland Adaptive Behavior Scales use parental report to examine communication and social skills in children with typical and atypical development, and exhibit high reliability when compared against overall direct testing. However, findings are mixed comparing Vineland communication/language scores with experimenter-administered tests of language.

**Methods:** The current study breaks new ground in comparing Vineland reports with direct observation of children’s speech by (a) individual items and (b) level of child functioning, focusing on usage of wh-questions, verb tenses, negation, pronouns and noun-verb combinations. Both ‘high-verbal’ (HV) and ‘middle-verbal’ (MV) children with ASD are included, as well as a language-matched TD group.

**Results:** The results revealed that parent report on the Vineland varies in accuracy of capturing the production of grammatical items by young children with ASD and TD children. While parents’ assessment of their child’s production of noun-verb combinations and ‘who/why’ was highly accurate, children’s production of pronouns was under-rated by parents. Additionally, parents of HV children also under-rated their child’s production of past regular verbs.

**Conclusion:** Underestimation of these grammatical elements could lead to mistaken conclusions about their development in ASD or in individual children.

© 2016 Elsevier Ltd. All rights reserved.

## What this paper adds:

This paper investigates the level of agreement between parent report and child speech in TD children and children with ASD. Previous research has found good reliability between experimenter assessments and parent reports; however, earlier studies have not examined parent report of children’s use of *specific* grammatical items. The present study conducted a detailed comparison of children’s usage of grammatical constructions in their spontaneous speech and as reported by parent report on the *same* day. The results found that parents of TD and high-verbal-ASD children confirmed children’s productions at high rates at both visits whereas parents of Middle-verbal children with ASD confirmed fewer of their child’s productions at both early and later visits. With respect to individual grammatical items, pronouns were the most challenging, as mothers frequently reported ‘does not say’ for these when their children did produce pronouns at the same visit. Parents of

\* Corresponding author.

E-mail address: [manya.jyotishi@uconn.edu](mailto:manya.jyotishi@uconn.edu) (M. Jyotishi).

High-verbal children with ASD also frequently missed when their children produced past tense verbs. Our findings indicate that this level of inaccuracy puts limits on interpreting parent reports of children's emerging language.

## 1. Introduction

Researchers and clinicians interested in the language of children with Autism Spectrum Disorder (ASD) rely on both direct testing of children's skills and parent report. Direct evidence of children's language production and/or comprehension is frequently desirable so as to enable detailed analyses of specific construction and/or word usage. Such analyses inform both researchers interested in the language competence of children with ASD and clinicians concerned with their interventions. However, parent report about children's language may be desirable in a number of situations; for example, some children, particularly very young children or those who have not yet had any intervention, may lack the ability to sustain attention in a testing situation or may have decreased motivation to comply with adult requests (Koegel, Koegel, & Smith, 1997). Parent report about their children's receptive and expressive competence may need to be relied on in such situations. Furthermore, some language behaviors are more likely to be demonstrated in social settings such as school or home, rather than in a laboratory or clinic; thus, parent report may be the only way to document these. Researchers and clinicians thus usually choose the language assessments that yield the most data relevant to their questions. Multiple studies have demonstrated a reasonable degree of agreement between total receptive and expressive scores as measured by direct assessment and parent report (e.g., Dale, 1991; Luyster, Kadlec, Carter, & Tager-Flusberg, 2008); however, what is less often studied is how consistent are these different modes of assessment at the level of specific aspects of language. In the current study, we examined same-day agreement between parent report and child speech, for seven grammatical constructions.

A number of studies have documented that parental assessments of their child's cognitive, reading, and/or language ability are generally reliable with experimenter (direct) assessments for both typically developing (TD) and developmentally disordered children. For example, parental assessments yield similar rankings of the children in terms of ability. Oliver et al. (2002) compared TD 3-year-olds' performance on the McCarthy Scales (McCarthy, 1972) with their parents' at-home assessment of memory, perception, verbal, and quantitative tasks, and found that the McCarthy Scales and parent report correlated robustly and significantly ( $r_s = 0.31\text{--}0.49$ ) (see also Glaun, Cole, & Reddinough, 1999). Similarly, Feldman et al. (2005) compared parental report on the MacArthur Communicative Development Inventory (MCDI; Fenson et al., 1993) with TD 3-year-olds' performance on the McCarthy Scales and the Peabody Picture Vocabulary Test (PPVT; Dunn & Dunn, 1981), and found that all three MCDI measures (vocabulary, sentence complexity, using language) correlated significantly with the McCarthy ( $r_s = 0.47\text{--}0.49$ ) and PPVT ( $r_s = 0.41\text{--}0.49$ ). Dale (1991) found concurrent validity for parent report on the MCDI against standardized testing (e.g., Expressive One-Word Picture Vocabulary Test,  $r_s = 0.34\text{--}0.73$ ) and a language sample (to judge MLU,  $r_s = 0.33\text{--}0.76$ ), with 24-month old children. With school age children, too, parent observations of their TD children's language and reading correlated significantly with experimenter administrations of the Clinical Evaluation of Language Fundamentals (CELF; Semel, Wiig, & Secord, 1995; CELF Receptive:  $r = 0.55$ , CELF Expressive:  $r = 0.60$ ) with those same children (Massa, Gomes, Tartter, Wolfson, & Halperin, 2008).

Furthermore, with children with developmental disorders such as Autism Spectrum Disorder (ASD) and Fragile X Syndrome (FXS), parental assessments of language and reading using the Vineland Adaptive Behavior Scales (Sparrow, Cicchetti, & Balla, 2005) have been found to yield high levels of agreement with experimenter administered tests such as the Mullen Scales of Early Learning (Mullen, 1995; Mullen Receptive:  $r = 0.53$ , Mullen Expressive:  $r = 0.85$ ), the Neale Analysis of Reading Ability (NARA; Neale, 2007; Passage-level accuracy:  $r = 0.81$ , Passage-level comprehension:  $r = 0.88$ ), the Early Language Milestones Scales (Coplan, 1993;  $r_s = 0.24\text{--}0.50$ ), the Receptive-Expressive Emergent Language Scale (Bzoch & League, 1991;  $r_s = 0.47\text{--}0.67$ ), and the Wide Range Achievement Test (WRAT; Wilkinson & Robertson, 2006,  $r = 0.70$ ) (Arciuli, Stevens, Trembath, & Simpson, 2013; Kover, McCary, Ingram, Hatton, & Roberts, 2015; Luyster et al., 2008). Additionally, researchers have demonstrated that parent reports can yield similar categorizations of developmental delay. For example, Johnson, Wolke, and Marlow (2008) found high sensitivity and specificity between their parent report instrument and the Bayley Scales of Infant Development (Bayley, 2006), with their identifications of developmental delay in 2-year-olds born premature. This agreement has some limits, though. For example, Feldman et al. (2005) reported that parent assessments of 2-year-olds' vocabulary on the MCDI were only 'fair to good' predictors of children's categorization as clinically language delayed at the age of 3; moreover, while Duff, Reen, Plunkett, and Nation (2015) found that vocabulary size by parental report during infancy predicted vocabulary and reading performance during school age, infant vocabulary accounted for only a modest percent of the variance (under 20%).<sup>1</sup>

There are also some indications that parent report is not a reliable substitute for all measures of child development. For example, Feldman et al. (2005) found that parent assessments of their two-year-olds' grammatical levels (i.e., sentence complexity on the MCDI-WS), did not correlate with any other concurrent or longitudinal language measures. Furthermore, parent estimates of the developmental ages of their children with ASD seem to be consistently overestimated (Geiger, Smith, & Creaghead, 2002). Interestingly, even though children's Vineland and Mullen scores are reported to be correlated, Vineland reports of expressive language in toddlers with ASD have yielded consistently lower age-equivalent scores than the experimenter-administered Mullen whereas Vineland reports of receptive language have yielded consistently higher

<sup>1</sup> Of course, the low levels of longitudinal predictability need not be the result of parental report measures in particular.

Download English Version:

<https://daneshyari.com/en/article/4941162>

Download Persian Version:

<https://daneshyari.com/article/4941162>

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