

Preschool Teacher Talk: What Relates to More Complex Syntax

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Introduction

There is general agreement on the importance of both high-quality and varied opportunities of exposure to language-rich experiences for children from at-risk backgrounds in the preschool years (Snow, Burns, & Griffin, 1998). The preschool learning environment is essential to children's acquisition of academic readiness skills, including literacy skills (Justice, 2004).

The key role of oral language skills in children's long-term academic success has motivated research on language input in preschool classrooms. Recent research has emphasized the importance of oral language abilities and children's later reading and writing success (Dickinson, Golinkoff, & Hirsh-Pasek, 2010; Dickinson, 2001). The majority of research examining language input in the preschool classroom has focused on the role of vocabulary input as it relates to children's overall language and literacy abilities (Hart & Risley, 1995; Senechal, Thomas, & Moniker, 1995).

The narrow focus on the vocabulary aspect of classroom language input can be viewed as a limitation on research on preschool teacher talk. The grammatical structure of teacher talk, and in particular, complex syntax, may also be a key contributor to preschool children's oral language proficiency. Preschoolers from lower SES families produce less complex syntax than preschoolers from higher SES families (Vasilyeva et al., 2006), and this discrepancy is evident even in the earliest emerging form of complex syntax, infinitival complements (Schuele & Fisher, 2012).

Thus, the need for research in preschool teacher talk stems from the high risk for academic failure among children from lower SES families and the lower language achievement in these children as compared to their more socio-economically advantaged peers.

Purpose

The purpose of this study was to examine preschool teachers' production of complex syntax and the relationship between production of complex syntax and more general linguistic measures of teacher talk.

Research Questions

- What is the proportion of complex syntax in total utterances?
- What is the number of complex syntax types in total utterances?
- What is the proportional distribution of all the complex syntax tokens across three categories of complex syntax?
- What is the correlation between proportion of complex syntax and lexical diversity, mean length of utterance, diversity of complement taking verbs, and diversity of subordinate conjunctions?

Participants

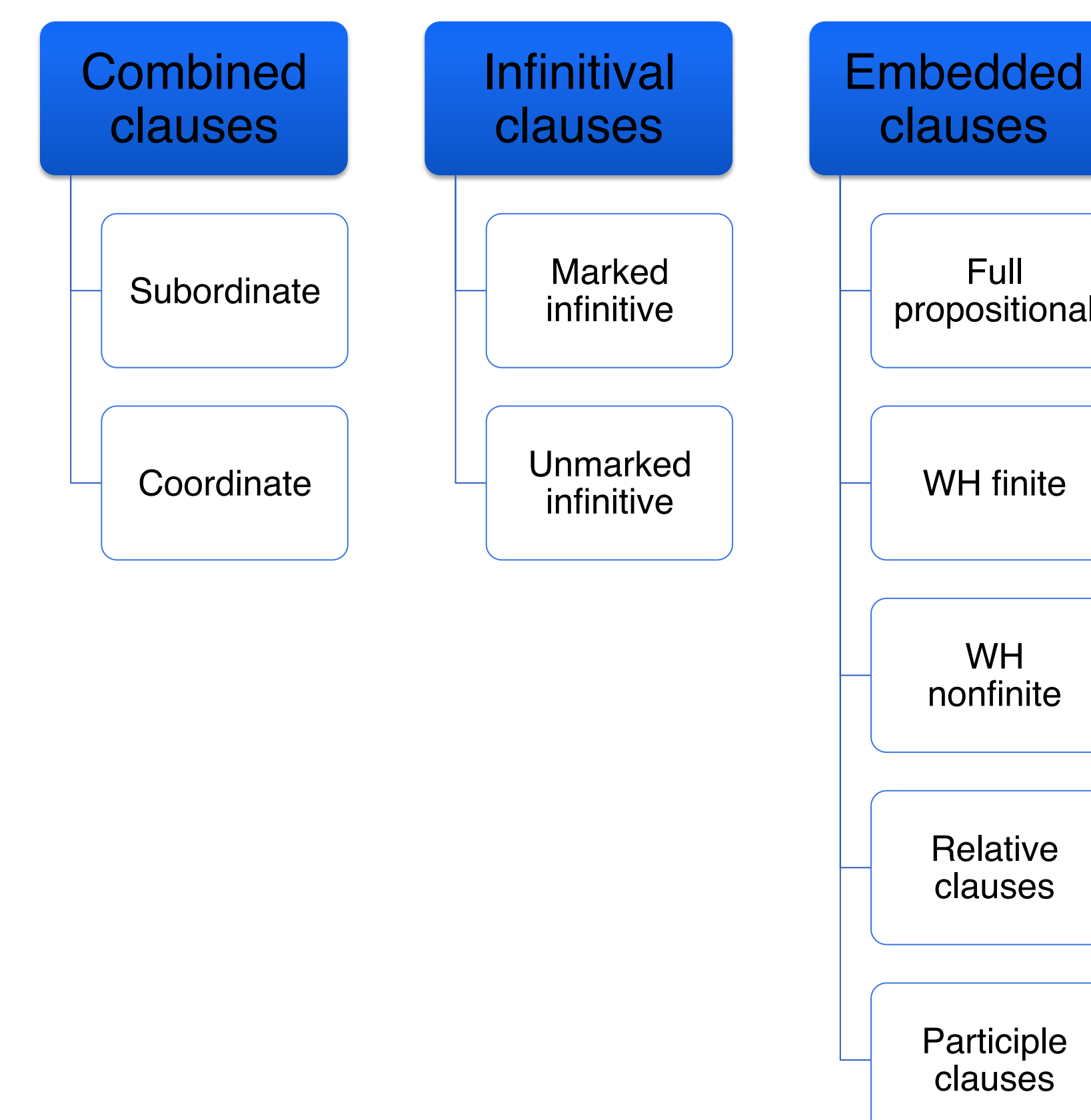
Teachers (n = 60) were recruited from preschool programs serving the urban areas of Philadelphia, Cincinnati, and Birmingham.

Procedures

Teachers were video-taped in the natural classroom setting during regularly scheduled activities, involving art, dramatic play, book reading, or multiple-center activities.

Teacher utterances were transcribed and coded for complex syntax (Schuele, 2009). Analysis was completed with Systematic Analysis of Language Transcripts (SALT) software. Reliability was calculated on 10% of transcripts. Transcription reliability was 91% and complex syntax coding reliability was 97%.

COMPLEX SYNTAX TYPES



Results

PRODUCTION OF COMPLEX SYNTAX TYPES

Teachers produced an **average of 152.05 (SD = 101.39) total verbal utterances**, with an **average of 35.17 (SD = 27.35) utterances** including at least one complex syntax token. The **mean proportion of teacher utterances that included complex syntax was 0.19 (SD = 0.09), with a range of 0.05 to 0.53**. There was substantial variability across teachers as illustrated by the large standard deviations for total complex syntax tokens. There was also variability in the length of each teacher sample (range of 6.02 minutes to 36.31 minutes). Therefore, **mean proportion of teacher utterances that included complex syntax per minute was calculated at 3.49 (SD = 2.73), with a range of 0.10 to 14.58**.

The **mean number of complex syntax types was 7.03 (SD = 2.04)**, with a range of 2.0 to 10.0 out of a possible minimum of 0.0 and maximum of 11.0.

The **mean proportion of complex syntax tokens within the categories of complex syntax included: infinitival clauses 0.40 (SD = 0.18), embedded clauses 0.35 (SD = 0.19), and combined clauses 0.20 (SD = 0.10)**.

PEARSON CORRELATIONS OF COMPLEX SYNTAX AND LEXICAL MEASURES

	Mean (SD)	Complex Syntax Token Per Minute
NDW (50)	100.45 (22.20)	0.567**
MLU (50)	5.22 (0.82)	0.749**
Number of different complement taking verbs in embedded clauses	3.55 (2.21)	0.596**
Number of different complement taking verbs in infinitival clauses	5.23 (3.04)	0.707**
Number of different subordinate conjunctions	3.65 (2.25)	0.627**

** Correlation is significant at the 0.01 level (2-tailed).

Discussion and Implications

The results of this study indicated that although there was great variability in teachers' use of complex syntax across samples, less than 25% of all utterances included complex syntax. In addition, when examining the number of complex tokens, infinitival clauses accounted for the majority. Results also indicated that complex syntax was highly correlated with common lexical measures. Teachers that produced utterances with increased lexical diversity tended to use more complex syntax. Previous research indicates that the focus of classroom language input is primarily on vocabulary, particularly nouns and adjectives. The results of this study suggests that increasing vocabulary beyond nouns and adjectives, such as coordinate conjunctions and complement-taking verbs, may have an impact on the frequency and diversity of complex syntax in the classroom setting.

Because teachers contribute significantly to children's oral language skills, the results of this study may point to specific ways in which professional development can help teachers optimize language input for at-risk preschool children in curriculum-based activities (Hart & Risley, 1995; Snow, Burns, & Griffin, 1998). Perhaps language use can be increased in activities by engaging children with critical thinking comments and questions. Further research is needed to discern the definitive relationship between this input and children's language outcomes. Examining language use for a given unit of time could also provide further insight into teachers' productions and how they can be modified to enhance children's language development.

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