

## ABSTRACT

This study examined whether children's use of subject relative clauses differs as a function of their English dialect variety (African American English, AAE; Southern White English, SWE; Mainstream American English, MAE) and clinical diagnosis (Specifically Language Impaired, SLI vs. Typically Developing, TD).

Results showed that child speakers of AAE and SWE presented similar rates of subject relative clauses, although their rates of overt marking and types of relative pronouns varied from those reported for MAE child speakers. Across all three dialects (AAE, SWE, MAE), children with SLI presented lower rates of subject relative clause contexts and lower rates of overt marking than their TD peers.

## INTRODUCTION

A subject relative clause is an embedded clause that modifies a noun and in which the relativized noun is the subject of the relative clause. Within MAE, subject relative clauses are always introduced by a relative marker (*that, who, which*). However, in other dialects of English like AAE and SWE, the subject relative marker may be omitted, and when it is produced, its form may vary from what is typically produced in MAE. Therefore, the first goal of the study was to learn more about the variation that exists in subject relative clause production in children who speak AAE and SWE.

The second goal was to examine, within AAE and SWE, whether children with SLI show limitations in subject relative clause production when compared to their same dialect-speaking TD peers. In MAE, subject relative clauses show promise as a clinical marker of SLI (Schuele, 2000; 2001). Similar work in AAE and SWE has not been completed, although there is some evidence from the normative data reported in the *Diagnostic Evaluation of Language Variation* (Seymour, Roeper & de Villiers, 2005) that children with and without SLI differ in their use of complex syntax, regardless of the English dialect they speak.

Research questions:

- 1) Are there dialectal differences between AAE, SWE, and MAE in subject relative clause production?
- 2) Within these different dialects, are there group differences between children with and without SLI in subject relative clause production?

## METHOD

### Data

The data included language samples collected from 138 children from southeastern Louisiana. Ninety-three came from Oetting and McDonald (2001). An additional 45 were collected as part of two recent dissertations (Garrity, 2007; Pruitt, 2006).

# Subject Relative Clause Production Across Dialects and Disorders

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Eighty-five of the samples were from speakers of AAE and 53 were from speakers of SWE (SLI = 41, TD-6 = 48, TD-4 = 49). The total number of complete and intelligible (C & I) utterances within the samples was 27,307; the average number per sample was 197.87 (SD = 67.61).

Table 1. Characteristics of AAE-speaking participants.

	TD-6	TD-4	SLI
<b>N</b>	29	30	26
<b>Age</b>	73.5 (4)	57.40 (4.64)	77.23 (5)
<b>PPVT</b>	102 (10.01)	97.2 (11)	73.2 (9)
<b>Dialect Rating</b>	4.85 (1.34)	4.85 (1.33)	5.44 (1.21)
<b>TOLD</b>	101.40 (9.17)	98.87 (10.94)	70.08 (7.49)
<b>MLU</b>	6.27 (1.33)	5.37 (.96)	4.89 (.89)

Table 2. Characteristics of SWE-speaking participants.

	TD-6	TD-4	SLI
<b>N</b>	19	19	15
<b>Age</b>	76.1 (6)	48.3 (5)	76.3 (8)
<b>PPVT</b>	104.89 (11.51)	102.21 (7.05)	73.93 (10.77)
<b>Dialect Rating</b>	3.86 (.92)	4.32 (.95)	3.92 (1.10)
<b>TOLD</b>	96.43 (7.37)	104.84 (13.24)	75.47 (9)
<b>MLU</b>	5.80 (.80)	4.85 (.6)	4.83 (.7)

### Identification of Relative Markers and Coding

Using the "Word and Code List" command under the "Explore" option in SALT, all utterances containing relative markers or omitted relative markers were flagged. The entire sample was then combed utterance by utterance to locate relative clauses possibly missed by SALT. All identified relative clauses were then coded according to Schuele (2006).

## RESULTS

As shown in Table 3, across both dialects and TD age groups, rates per utterance for subject relative clauses were low (.003 - .01). Average rate of overt subject relative marking across both dialects and TD age groups ranged from 80 to 89%. For both rate of production and rate of overt marking, differences between the dialects (AAE vs. SWE) and TD age groups (TD-6 vs. TD-4) were not statistically reliable,  $p > .05$ .

Table 3. TD subject relative clause production and rate of overt marking by dialect and age.

	AAE TD-6	AAE TD-4	SWE TD-6	SWE TD-4
<b>N</b>	15	14	15	5
<b>Sum</b>	32	21	39	15
<b>Mean rate per utterance</b>	.01 (.01)	.004 (.01)	.01 (.01)	.003 (.01)
<b>Mean rate of overt marking</b>	.85 (.35)	.89 (.29)	.86 (.01)	.80 (.45)
<b>% of group who marked to criterion:</b>				
0%	13	7	13	20
50%	-	7	-	-
75%	7	-	7	-
100%	80	86	80	80

As can be seen in Table 4, rates per utterance for subject relative clauses were low across both SLI groups (.002). Mean rate of overt marking was also low (.55 - .67). For both rate of production and rate of overt marking, differences between the AAE and SWE SLI groups were not statistically reliable,  $p > .05$ .

Table 4. SLI subject relative clause production and rate of overt marking by dialect.

	AAE SLI	SWE SLI
<b>N</b>	11	6
<b>Sum</b>	12	8
<b>Mean rate per utterance</b>	.002 (.003)	.002 (.003)
<b>Mean rate of overt marking</b>	.55	.67
<b>% of group who marked to criterion:</b>		
0%	45	33
50%	-	-
75%	-	-
100%	55	67

To examine subject relative clause production as a function of clinical diagnosis, two one-way anovas with group (SLI vs. TD) as the independent variable were completed. The dependent variables were rate of subject relative clause per utterance and rate of overt marking. Both analyses showed the rates of the SLI group to be lower than the rates of the TD group (see Table 5).

Rate of Clauses,  $F(1,137) = 5.45, p < .05, \eta^2 = .04$

Overt Marking,  $F(1,65) = 6.26, p < .05, \eta^2 = .09$

Table 5. Subject relative clause production and rate of overt marking by clinical diagnosis.

	TD	SLI
<b>Mean rate per utterance</b>	.01 (.01)	.002 (.003)
<b>Mean rate of overt marking</b>	.86 (.33)	.59 (.51)
<b>% of group who marked to criterion:</b>		
< 100%	18	41
= 100%	82	59

As shown in Table 6, *that* was the most commonly used relative marker for the TD group. For the SLI group, *that* and omitted *that* were the most common. The SLI group also produced a higher percentage of nonstandard markers than the TD group.

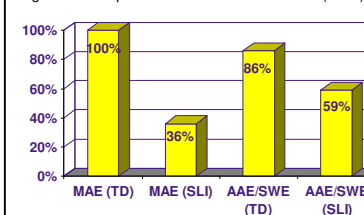
Table 6. Distribution of subject relative clause markers.

	TD	SLI
<b>Relative marker "that"</b>	76%	40%
<b>Relative marker "who"</b>	14%	15%
<b>Relative marker "which"</b>	1%	0%
<b>Nonstandard marker</b>	1%	5%
<b>Omitted "that"</b>	6%	40%
<b>Omitted "who"</b>	2%	0%

## DISCUSSION

Figure 1 compares our findings to those from MAE-speaking children who have been studied by Schuele and Nicholls (2000). As can be seen, rates of overt marking by AAE- and SWE-speaking TD children reflect some optionality when compared to MAE-speaking children, but this optionality is minimal (14%).

Figure 1. Comparison to Schuele and Nichols (2000)



Like their MAE-speaking SLI peers, AAE- and SWE-speaking children with SLI produce lower rates of overt marking within subject relative clauses than their TD peers. Like their MAE-speaking SLI peers, AAE and SWE-speaking children with SLI also produce fewer subject relative clauses within their samples and higher percentages of nonstandard markers than their same dialect speaking TD peers.

The consistency of findings across studies suggest the potential usefulness of subject relative clause weaknesses as a clinical marker of childhood language impairment.

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