To determine the ability of both black and white children to repeat sentences which conform to the grammatical rules of standard versus nonstandard English, and to examine how attendance at racially and socioeconomically integrated versus segregated schools affected performance in standard and nonstandard English, third and fourth graders were divided into four groups. Groups 1 and 2 consisted of 80 black children from low-income homes. About half of these children had attended an integrated school in a suburban area since their entrance into school. The remaining children had attended an all-black school in their own neighborhood. Groups 3 and 4 consisted of 60 middle-income, mostly white children, who had attended a segregated school in their own neighborhood. Results revealed that black, low-income children performed significantly better than white, middle-class income children in recalling nonstandard sentences. Black, low-income children who had attended an integrated school were both better on standard and poorer on nonstandard sentences than similar children who had attended a segregated school. (SW)
THE EFFECTS OF INTEGRATED VERSUS SEGREGATED SCHOOL ATTENDANCE ON SHORT-TERM MEMORY FOR STANDARD AND NONSTANDARD ENGLISH

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Many black children in the United States speak a dialect which is different from the form of English spoken by most white children. Historically, this black English dialect has often been considered an ungrammatical approximation to standard English. Recent examination of black dialect, however, has led some theorists to argue that black dialect is as grammatically adequate as standard English (Paratz, 1970; Dillard, 1972; Fasold & Wolfram, 1970; Houston, 1970; Labov, 1970; Stewart, 1959, 1970). If black dialect (henceforth referred to as nonstandard English) does represent a separate system with consistent rules, the linguistic incompetence in standard English often shown by black children might be a simple reflection of a conflict between familiar and unfamiliar rules. Indeed, speakers of standard English might likewise experience difficulty in responding to sentences which conform to unfamiliar rules, such as those of nonstandard English.

The present study examined the ability of both black and white children to repeat sentences which conform to the grammatical rules of standard versus nonstandard English (see Baratz, 1970; Fasold & Wolfram, 1970). Initiation was chosen as a measure of competence because it appears to be a good indicator of underlying grammatical processing rules when utterances exceed the capacity of immediate acoustic recall. The present study also examined how attendance at racially and socioeconomically integrated versus segregated schools influences performance in standard and nonstandard English.
Method

Subjects

Subjects were third- and fourth-grade children, divided into four groups. Groups 1 and 2 consisted of 30 black children from low-income urban homes. Approximately half of these children (n = 36) had attended an integrated school in a suburban area since their entrance into school. The remaining children (n = 44) had attended an all-black school in their own neighborhood. Groups 3 and 4 consisted of 60 middle-income children from suburban homes. Most of these children were white and most had attended a segregated school in their own neighborhood. A small group of 15 of these children, however, (9 white, 7 black) had attended the integrated school. Socioeconomic status for all groups was defined by parental occupation. For low-income homes, the head of the household was an unskilled worker or unemployed; in middle-income homes the head of the household was a skilled worker, clerical or managerial, or professional.

School Programs

The integrated school was an experimental project located on the grounds of a former college campus to which all children attending the school were transported by bus. Student diversity within each classroom was maintained through a deliberate policy. Diversity was high with an approximate 50-50 split between socioeconomic groups and races in the first two years, but only moderate during the children’s last two years at the school because of loss of white middle-income children. The school employed an open-classroom model in which children were free to interact extensively with each other. The segregated urban school’s population was 95% black and 100% low-income. The suburban school’s population was nearly 100% white and 100% middle-income.
Apparatus and Procedure

Each child was tested individually by a young white woman. The linguistic task was presented at the conclusion of several gamelike tasks. The child first listened to tape-recorded comments spoken by each of two imaginary animals, one of which spoke standard English, while the other spoke nonstandard English. The examiner pointed out that the two animals sounded 'a lot alike but not exactly alike' and explained that the child was to try to say exactly what the animals said. Each child was pretrained on two sentences of each type and then listened to and repeated 20 sentences, 10 each in standard and nonstandard English, presented in counterbalanced order. The stimulus sentences were an adaption of sentences used by Baratz (1969). Standard and nonstandard sentences were equated for the number of critical constructions each contained and were approximately equated for length. The sentences were recorded by a bi-dialectal female black college student from a Northeastern urban area.

Sentences were scored for nine features: (a) copula; (b) past tense; (c) if-did versus did-he flip; (d) treatment of negation; (e) pronomial opposition; (f) third-person singular; (g) possession; (h) use of 'be,' and (i) plural markers. The total number of possible errors for each type of sentence was 34.

Reliability was checked by having two persons independently score 24 taped protocols. The Pearson $r$ for errors on standard sentences was .96 and for errors on nonstandard sentences, Pearson $r$ was .92.

Data for the first three groups were analyzed by a Group X Sex X Type of Sentence unweighted means analysis of variance with repeated measures on type of sentence. Data for Group 4 were analyzed separately because of the small number of subjects. The main effect for type of sentence was significant.
(F = 531.88, df = 1/117, p < .001), as was the Group X Type of Sentence interaction (F = 60.29, df = 2/117, p < .001). No other main effects or interactions were significant. Table 1 presents the means and standard deviations for all groups.

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As Table 1 shows, the nonstandard sentences were significantly more difficult than the standard sentences for each group (p < .001). Comparisons of the three groups of subjects by the Newman-Keuls method indicated that on standard English sentences, segregated black children made the most errors, integrated black children made significantly fewer errors, and middle-class white children made the fewest errors (all p's < .01). For nonstandard sentences, the pattern was reversed: Segregated black children made the fewest errors, integrated black children made significantly more errors, and middle-class children made the most errors (all p's < .01). Although the average error rate was greater for nonstandard sentences, nine children made fewer errors on nonstandard than on standard sentences. All these children were black and low-income. One child had attended the integrated school, the remaining eight had attended the segregated school (p = .04 by Fisher's Exact Test).

In Group 4, white children did not differ significantly from black children on either the standard or nonstandard sentences (t = -.47, and t = -.23, respectively, df = 14). Comparison of these 16 middle-income, integrated school children with the 44 middle-income, segregated school children also indicated no significant difference in total errors on standard or nonstandard sentences (t = 1.24, and t = 1.29, respectively, df = 58).

Discussion

In replication of earlier studies (Baratz, 1969; Fall & Freedle, 1973), black, low-income children performed significantly better than white middle-
income children in recalling nonstandard sentences, and they performed significantly more poorly in recalling standard sentences. Effects of integration were also found. Black, low-income children who had attended an integrated school were both better on standard and poorer on nonstandard sentences than similar children who had attended a segregated school. Surprisingly, for middle-income children, the effects of attending an integrated school were virtually nonexistent. One might speculate that family pressure not to acquire nonstandard English speech patterns may have been particularly strong for these children. Within the middle-income group there was also no effect of race, with black and white middle-class children showing identical performance.

In the comparison of standard with nonstandard sentences, all groups, though not all individual subjects, found the nonstandard sentences more difficult. An analysis of specific features indicated that some features of nonstandard English are relatively uncommon. For example, black children found unmarked plurals almost as hard to repeat as did white children. Responses to nonstandard negation, especially to the word 'ain't,' more probably reflects a second consideration, an awareness of stigma, since many children actively avoided repeating this word.

The effects of integration were seen most clearly for features which were relatively subtle, involving changes in portions of words rather than inclusion or deletion of entire words. Since attention to such relatively minute detail as possessive and third-person singular markers is of much importance in producing speech which is judged adequate by others, school integration may be of considerable advantage to children in helping them to avoid social stigma.

An implication of the present findings is that low-income black children who have difficulty in recalling the grammatical details of standard English
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should not therefore be considered intellectually incompetent. Even middle-
class children of above-average IQ find it difficult to recall the grammatical 
features of material presented in a dialect other than their own. In exploring 
the full meaning of attempting to educate a child using grammatical rules other 
than those familiar to him, bi-dialectalism may be found to constitute an 
even greater cognitive challenge to a child than bilingualism because of the 
relative subtleties of interference between dialects as compared with languages.
References


Footnotes

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Seitz Integrated vs. Segregated School Attendance and Memory for Standard and Nonstandard Sentences

Table 1
Repetition Errors on Each Type of Sentence

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>N</th>
<th>SD</th>
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<tr>
<td>Black, low-income, integrated</td>
<td>35</td>
<td>6.87</td>
<td>3.24</td>
<td>17</td>
<td>4.52</td>
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<tr>
<td>Black, low-income, segregated</td>
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<td>9.23</td>
<td>3.20</td>
<td>14</td>
<td>4.72</td>
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<td>2.25</td>
<td>1.50</td>
<td>21</td>
<td>4.95</td>
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<td>3.06</td>
<td>2.38</td>
<td>18</td>
<td>6.80</td>
</tr>
</tbody>
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*Note. Data from one subject were lost due to malfunction of recording equipment.*