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ABSTRACT

This experiment deals with a test of auditory discrimination between standard Black English and nonstandard Black English. The test consists of two sections, one emphasizing phonological variables and the other emphasizing grammatical variables. It was administered to 83 black and 71 white children who were second, fourth, and sixth graders in schools attended primarily by children from lower to lower middle class socioeconomic backgrounds. The analysis of variance of the test results showed that: (a) test scores increased with maturation; (b) girls performed generally better than boys; and, (c) black children performed better than white children. For black children, achievement on the tests correlated significantly with scores on standardized reading achievement tests at all grade levels. For white children, the correlations were significant only at the sixth-grade level. The results of the experiment indicate that the awareness of the standard/nonstandard difference is more highly developed in black children than in white children--perhaps as a result of training, perhaps as a result of greater exposure to both standard and nonstandard black speech. They also suggest that for black children recognition of the difference is related to reading achievement in standard language from the beginning of their school career. (Author/JM)

STANFORD CENTER
FOR RESEARCH AND DEVELOPMENT
IN TEACHING

Research and Development Memorandum No. 83

THE DEVELOPMENT OF AWARENESS OF THE BLACK STANDARD/BLACK NONSTANDARD DIALECT CONTRAST AMONG PRIMARY SCHOOL CHILDREN: A PILOT STUDY

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Introductory Statement

The Center is concerned with the shortcomings of teaching in American schools: the ineffectiveness of many American teachers in promoting achievement of higher cognitive objectives, in engaging their students in the tasks of school learning, and, especially, in serving the needs of students from low-income areas. Of equal concern is the inadequacy of American schools as environments fostering the teachers' own motivations, skills, and professionalism.

The Center employs the resources of the behavioral sciences--theoretical and methodological--in seeking and applying knowledge basic to the achievement of its objectives. Analysis of the Center's problem area has resulted in three programs: Heuristic Teaching, Teaching Students from Low-Income Areas, and the Environment for Teaching. Drawing primarily upon psychology and sociology, and also upon economics, political science, and anthropology, the Center has formulated integrated programs of research, development, demonstration, and dissemination in these three areas. In the Heuristic Teaching program, the strategy is to develop a model teacher training system integrating components that dependably enhance teaching skill. In the program on Teaching Students from Low-Income Areas, the strategy is to develop materials and procedures for engaging and motivating such students and their teachers. In the program on Environment for Teaching, the strategy is to develop patterns of school organization and teacher evaluation that will help teachers function more professionally, at higher levels of morale and commitment.

This study was undertaken as part of the Center's program on Teaching Students from Low-Income Areas and contributes specifically to that program's efforts to provide tests, training materials, and information dealing with the teaching of standard English to speakers of nonstandard English.

Acknowledgments

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Abstract

This experiment deals with a test of auditory discrimination between standard Black English and nonstandard Black English developed at the Stanford Center for Research and Development in Teaching. The test, referred to as the Standard Discrimination Test (SDT), consists of two sections, one (SDTA) emphasizing phonological variables and the other (SDTB) emphasizing grammatical variables. It was administered to 83 Black and 71 white children who were second, fourth, and sixth graders in schools attended primarily by children from lower- to lower-middle-class socioeconomic backgrounds. The analysis of variance of the test results showed quite clearly that (a) test scores increased with maturation; (b) girls performed generally better than boys; and (c) Black children performed better than white children. For Black children, achievement on the tests correlated significantly with scores on standardized reading achievement tests at all grade levels. For white children, the correlations were significant only at the sixth-grade level.

The results of the experiment indicate that the awareness of the standard/nonstandard difference is more highly developed in Black children than in white children--perhaps as a result of training, perhaps as a result of greater exposure to both standard and nonstandard Black speech. They also suggest that for Black children recognition of the difference is related to reading achievement in standard language from the beginning of their school career.

THE DEVELOPMENT OF AWARENESS OF THE BLACK STANDARD/BLACK NONSTANDARD DIALECT CONTRAST AMONG PRIMARY SCHOOL CHILDREN: A PILOT STUDY

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Purpose of the Experiment

This paper represents the logical follow-up to another published report concerning the developmental aspects of the awareness of the standard/nonstandard dialect contrast (Politzer, 1971). While the previously published report dealt with the measurement and the developmental aspects of this awareness in bilingual Mexican-American children, this one is concerned with standard/nonstandard dialect awareness in children who are to varying degrees bidialectal in Black nonstandard and Black standard English. That the ability to differentiate standard from nonstandard speech is an important prerequisite for performing various tasks connected with reading and language arts is almost a common-sense assumption. The fact that an awareness of the standard/nonstandard distinction is a prerequisite for the acquisition of standard speech patterns has been stressed by various scholars (e.g., Feigenbaum, 1970; Johnson, 1971).

The purposes of this study, then, were threefold: to develop and experiment with an instrument for measuring the ability to differentiate standard from nonstandard Black dialect; to determine whether and in what ways Black children speaking primarily nonstandard Black dialects develop this ability differently from white children; and to investigate the relation of this ability to the most important area in language arts, reading.

The Instrument

The instrument used in this study, the Standard Discrimination Test (SDT), went through several stages of development. Initial attempts to

develop an instrument composed of single items to be rated either standard or nonstandard proved unsuccessful because groups of college students used to validate the test items often could not agree sufficiently on whether a given sentence represented standard or nonstandard speech. The confusion of nonstandard with Black speech may very well have been responsible for the lack of agreement even among educated speakers of standard English. It was finally decided that the validation of the instrument by raters could be accomplished only if the test items consisted of a pair of sentences, one standard and one nonstandard. In its final form the test had 27 items, each validated by at least seven out of eight judges. The judges were a group of graudate students in education at Stanford and a group of undergraduate students in education at Nairobi College.

We want to stress that the SDT was designed to test the ability to differentiate standard speech from nonstandard speech--but not necessarily white speech from Black speech. As the Black linguist Orlando Taylor (1971, p. 15) has pointed out, there is a variety of speech that can be considered Black standard English. In Taylor's words, Black standard English "is characterized primarily by a standard syntax, plus a few black syntactic elements....The remainder of black standard English may include varying degrees of black vowel patterns, ethnically marked suprasegmental features and black lexical items." In the development of the instrument used in this study, at least the marked suprasegmental features were accepted as part of standard English. All the sentences used in the test were spoken by educated Black speakers capable of speaking both standard and nonstandard dialects. But none of the speakers was asked to try to sound "white" while speaking standard English, and all the subjects used in the experimental development of the test as well as in the experiment itself were told that all the items recorded on the test tape had been spoken by Black speakers.

The test is presented in two sections, A and B. Section A (SDTA) consists of ten items in which the difference between standard and nonstandard speech is primarily phonological. Section B (SDTB) consists of 17 items in which the difference is primarily grammatical (morphological,

syntactical). Of course, the differentiation between the phonological and the morphological level is not always easy to make and may vary according to different linguistic interpretations; but such difficulties do not bear directly on the main purposes of this study.

In most items dealing with phonological contrasts, phonetic transcription rather than English orthography has been used to indicate critical features of nonstandard Black dialect.

SDTA

1. a. It sure is cold today.
   b. [šo] is cold today.
2. a. The [nəmbə] is [fo fai sɛbm], [əlɛbm] hundred.
   b. The number is four five seven, eleven hundred.
3. a. Do your [tif] hurt [wɪf] the braces on?
   b. Do your teeth hurt with the braces on?
4. a. Did they take their driving tests?
   b. Did they take they drivin' [tɛsəz]?
5. a. [næə wən əvəm] came to the meetin' [sæ?ərde].
   b. Not one of them came to the meeting Saturday.
6. a. We're through with these extra papers so throw them away.
   b. We [θu wɪt] these extra papers so [θoəm] away.
7. a. The door to the grocery store had posters on it.
   b. The [do] to the grocery [sto] had posters on it.
8. a. They [æksk] me to go.
   b. They asked me to go.
9. a. The [dɛnəs wənə] go to the shoppin' [sɛnə].
   b. The dentist wants to go to the shopping center.
10. a. Help yourself to some coffee and doughnuts.
    b. [hɛp yəsɛf] to some coffee and doughnuts.

SDTB

1. a. I spent about ten dollars.
   b. I spent around about ten dollars.
2. a. Too bad we can't have nothing.
   b. Too bad we can't have anything.
3. a. John might could do it.
   b. John might do it.
4. a. He walks fast and talks a lot.
   b. He walk fast and talk a lot.

5. a. Don't this suppose to be in the box?
   b. Isn't this supposed to be in the box?

6. a. My uncle Jack works all the time.
   b. My uncle Jack he be working all the time.

7. a. I dranked it all up before she came.
   b. I drank it all up before she came.

8. a. Bonnie's pencil is on the teacher's desk.
   b. Bonnie pencil on the teacher desk.

9. a. My brother he went to the store.
   b. My brother went to the store.

10. a. Why did he do that?
    b. Why he do that?

11. a. Some of the women liked it.
    b. Some of the womens liked it.

12. a. I'm going to go home.
    b. Ah mo go home.

13. a. Is this the door to the closet?
    b. Dis here the door to the closet?

14. a. Bobby ain't come yet.
    b. Bobby hasn't come yet.

15. a. He's been gone a long time.
    b. He been went to the store.

16. a. They teacher went to they house for dinner.
    b. Their teacher went to their house for dinner.

17. a. Are you going to make that call for me?
    b. You go make that call for me?

The nonstandard features in the individual test items can be described as follows:

SDTA

1. Deletion of final -r.
2. Deletion of final -r; substitution of -b- for -v-.
3. Substitution of -f for final -th (θ).
4. Fall of -t in -st and plural formation based on -s rather than -st ([tɛsəz] for tests).
5. Deletion of -t- or replacement by glottal stops.
6. Deletion of r after th (ð); final -th (θ) replaced by -t.
7. Deletion of final -r.

8. Metathesis of -sk- to -ks- in asked.
9. Retrogressive assimilation of t to n in nt combination.
10. Deletion of l before another consonant.

SDTB

1. Use of two qualifying adverbials.
2. Negation of verb used with nothing.
3. Use of double auxiliary.
4. Third person singular without -s marker.
5. Use of don't as negation instead of isn't (deletion of -d in supposed).
6. Use of subject pronoun with a noun subject; use of invariant be.
7. Nonstandard past tense dranked.
8. Possessive case formed without -s.
9. Use of subject pronoun with a noun subject.
10. Use of do instead of does; affirmative word order kept in question.
11. Nonstandard plural form womens.
12. Use of go for going (monophthongization of I /ai/ to ah /æ/).
13. Deletion of copula is (substitution of d- for th- /ð/).
14. Passed negation expressed by ain't.
15. Use of emphatic been to indicate past action with past tense form went (rather than participle gone).
16. Replacement of their by they (possibly a purely phonological phenomenon, r-deletion).
17. Replacement of going by go (phonological deletion of -ing?); deletion of copula are.

It will be noted that some test items contain more than one contrast between standard and nonstandard speech. If the investigators had intended to analyze the relative difficulty of items from a purely linguistic point of view, it would have been preferable to have each item contain only one linguistic contrast. For the purposes of this study, however, a more important consideration was that each nonstandard item be a genuine sample of natural speech--a goal that would have been difficult if not impossible to reach if the nonstandard sentences had been limited to only a single nonstandard feature.

The Experiment

The Population and the Administration of the Instrument

The 154 subjects taking part in the experiment were elementary school children in the second, fourth, and sixth grades. The Black children (34 boys, 49 girls) were attending school in a predominantly Black elementary school district in the San Francisco Bay area. The white children (33 boys, 38 girls) were attending a predominantly white school in a different district. No precise data on the socioeconomic status of the subjects are available, but the school districts in question, both the Black and the white, are primarily lower to lower-middle class.

The instrument was administered to the Black children by a Black experimenter, and to the white children by a white experimenter. Both the Black and the white children were told that all the speakers they heard on the tape were Black. The Black children were asked to identify each sentence as either "school talk" or "everyday talk." The white children were asked to identify each as either in "standard 'school-type' English" or in "dialect." "School talk" and "standard English" were both defined as the kind of language one is supposed to use in the classroom and in school when talking to the teacher or the principal. "Everyday talk" and "dialect" were defined as the kind of language that one might use or hear outside of school, but that usually would not be used by a teacher in school or by a student in talking to a teacher. Both the Black and the white children were told that each test item consisted of a pair of sentences, one in everyday talk or dialect, and one in school talk or standard English.

Variables

The independent variables in the experiment were the pupil's grade (second, fourth, or sixth); his sex; his race; and his raw score on the standardized reading test most recently administered to him. For the Black children this test was the Stanford Achievement Reading Test. For the white children the tests were the McHugh-McPorland Reading Test (second grade), the Stanford Achievement Reading Test (fourth grade), and the Lorne-Thorndyke Comprehensive Test of Basic Skills (sixth grade).

The dependent variables in the experiment were the pupil's SDTA and SDTB scores.

Hypotheses

The hypotheses in the experiment were as follows:

1. Achievement on the SDTA and SDTB will increase with grade level (from the second to the fourth to the sixth grade).
2. Girls will achieve differently from (probably better than) boys on both the SDTA and the SDTB.
3. White children will achieve differently from Black children on both the SDTA and the SDTB.
4. For both white and Black children, SDTA and SDTB scores will correlate significantly with scores on standardized achievement tests in reading.

Results

Hypotheses 1, 2, and 3

The main results of the experiment are summarized in tables 1, 2, and 3, and by Figure 1. A detailed analysis of variance table is to be found in Appendix A. The analysis of variance was carried out for race, grade, and the interaction of race and grade as sources of variance. The sex of the pupil was not included because it would have introduced the problem of extremely different cell sizes. The differences due to the pupil's sex are significant, however, just as are the differences due to grade and race (see Appendix B). Clearly all of the first three hypotheses are sustained:

1. Achievement on both the SDTA and the SDTB increased from grade level to grade level.
2. The overall pattern shows girls achieving better than boys on both tests, though it is broken by the scores of fourth graders, both Black and white, on the SDTB, and by the scores of the white fourth graders on the SDTA.
3. Black children achieved better than white children on all three grade levels.

TABLE 1

Mean Scores on SDTA and SDTB by Grade, Race, and Sex

Grade, race, and sex	N	SDTA Mean	SDTA S.D.	SDTB Mean	SDTB S.D.
Grade 2					
Black					
Boys	16	5.69	1.49	8.38	1.67
Girls	10	6.20	2.70	9.80	3.32
White					
Boys	10	3.60	3.44	5.50	4.40
Girls	10	4.60	3.27	5.50	2.68
Grade 4					
Black					
Boys	14	7.79	1.81	12.86	2.48
Girls	7	8.00	1.73	11.86	1.07
White					
Boys	14	5.14	3.68	8.29	5.76
Girls	18	4.89	3.09	7.11	5.05
Grade 6					
Black					
Boys	4	9.50	1.00	14.00	1.41
Girls	32	8.47	2.20	14.19	2.44
White					
Boys	9	6.11	3.22	10.33	4.77
Girls	10	6.70	1.25	12.40	1.43

TABLE 2

Mean Scores on SDTA and SDTB by Sex and by Race (All Grades)

Sex, race	N	SDTA Mean	SDTA S.D.	SDTB Mean	SDTB S.D.
Boys	67	5.99	3.03	9.47	4.54
Girls	87	6.78	2.90	10.83	4.55
Black	83	7.55	2.29	12.11	3.29
White	71	5.13	3.15	8.04	4.90

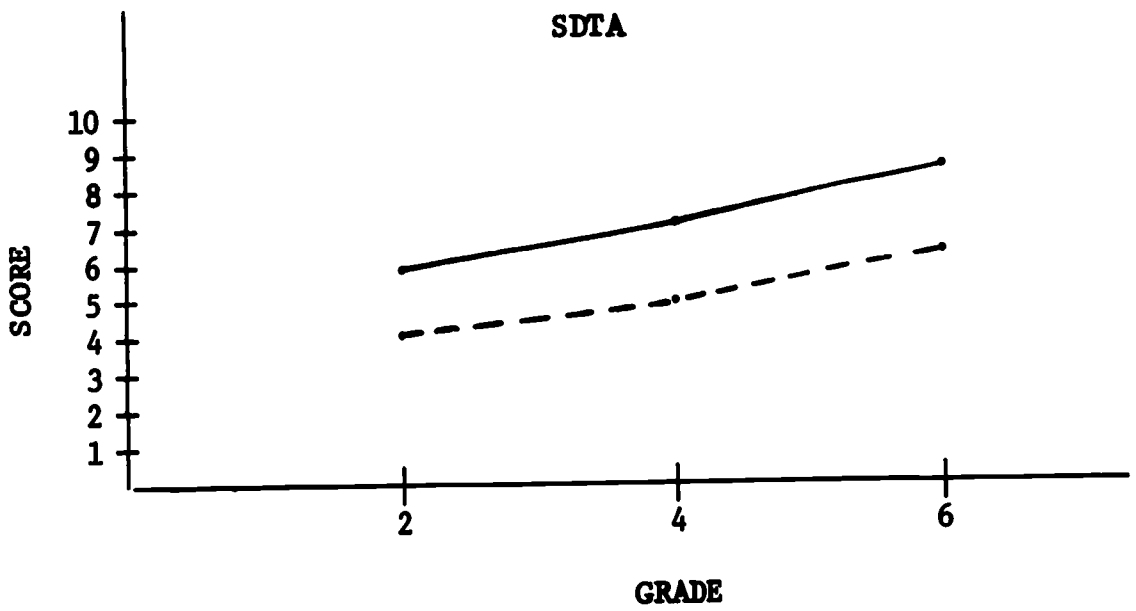

Fig. 1. Mean scores on SDTA and SDTB by grade and race.

TABLE 3

Mean Scores on SDTA and SDTB by Grade and Race

Grade and race	N	SDTA Mean	SDTA S.D.	SDTB Mean	SDTB S.D.
Grade 2					
Black	26	5.89	2.01	8.92	2.72
White	20	4.10	3.31	5.50	3.55
Grade 4					
Black	21	7.06	3.03	12.53	2.14
White	32	5.00	3.30	7.63	5.31
Grade 6					
Black	36	8.58	2.12	14.17	2.34
White	19	6.42	2.34	11.42	3.51

Hypothesis 4

Table 4 shows the correlations between the scores on the SDTA and SDTB and the raw scores on the standardized reading tests by race and grade level. Hypothesis 4 is clearly sustained for all of the Black children;

TABLE 4

Intercorrelation of SDTA and SDTB Scores and Correlations with Reading Scores, by Race and Grade

Race and grade	N	SDTA/ SDTB	SDTA/ Reading scores	SDTB/ Reading scores
Whites				
Grade 2	20	0.70**	-0.05	0.19
Grade 4	32	0.75**	-0.17	0.15
Grade 6	19	0.63**	0.32	0.62**
Blacks				
Grade 2	26	0.39*	0.49**	0.62**
Grade 4	21	0.47*	0.48**	0.45*
Grade 6	36	0.40**	0.32*	0.48**

*p < .05

**p < .01

the correlations between reading scores and SDTA scores are 0.49**, 0.48**, and 0.32* for the second, fourth, and sixth grades, respectively. The corresponding correlations between reading scores and SDTB scores are 0.62**, 0.45*, and 0.48**. Interestingly enough, for the white children these correlations do not show the same pattern. Evidently a significant correlation exists only at the sixth-grade level (reading/SDTB 0.62**; reading/SDTA 0.32, slightly below the $p < .05$ level).

Discussion

Of all the results obtained by this experiment, the confirmation of hypotheses 1 and 2 is the least surprising. That the awareness of a standard/nonstandard distinction should increase with maturation was, indeed, to be expected. The results of this study parallel, in this respect, the previous findings of a similar study dealing with the developmental aspects of the awareness of the difference between standard English and a hispanized nonstandard dialect (Politzer, 1971). Similarly, the overall superiority of girls over boys reflects a well-known pattern found in most experimentation dealing with reading and language arts. Why there should be some exceptions to this pattern (for example, boys scoring higher than girls on SDTB in Grade 4) is difficult to explain.

That Blacks quite clearly performed better than whites at all grade levels may be explained by two factors. First, all children taking part in the experiment were told that they were going to listen to standard and nonstandard English spoken by Blacks. The task of differentiating between two kinds of English spoken by Blacks may have been interesting and motivating for the Black children but relatively uninteresting for the white children taking part in the experiment. Second, it must be emphasized again that the test required the children not to recognize the racial background of the speakers but to determine whether or not they spoke standard English. Itcould be expected that this particular task would be more difficult for white children than for Black children. Some of the Black children participating in this study had been taught by Black teachers, and some of them may have been exposed to standard English

as spoken by Blacks in their home environment. In other words, the Black children had had an opportunity to hear the two types of English (nonstandard Black English and standard English spoken by Blacks) they were asked to differentiate. For the white children, the standard English spoken by Blacks may have introduced an element of confusion.

In general, the results of the study confirm the observation made by other investigators that children at the kindergarten and primary levels are not good judges of grammatical correctness (e.g., Cervenka, 1967). If Black children even at the second- and fourth-grade levels develop the ability to tell standard from nonstandard English ("school talk" from "everyday talk"), the reason is evidently that their schoolwork in reading and language arts implies or presupposes some sort of training in making the distinction, and that they are exposed to both varieties of speech.

Perhaps the most interesting difference between the Black and white children is to be found in correlating the SDTA and SDTB scores with the reading scores. For the white second and fourth graders, no significant correlation appears. Making the distinction between standard and nonstandard English is evidently irrelevant to performance in reading for white children during the primary grades. It becomes relevant for them only at the sixth-grade level, when they begin to develop a greater awareness of grammatical correctness. For Black children, by contrast, making the distinction between standard and nonstandard English is related to reading achievement from the very beginning of their school career. The significant and rather high correlations between SDTA and SDTB scores and reading scores for Black children seem to indicate that the Black child must become highly skilled in recognizing the standard/nonstandard distinction in order to succeed in a standard English reading program. The white child apparently does not face a comparable task.

The test used in this study promises to be a helpful diagnostic instrument for assessing an ability that is significantly connected with the reading achievement of Black children.

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APPENDIX A

Analysis of Variance

Source	Sum of squares	D.F.	Mean square	F
SDTA				
Mean	5781.58942	1	5781.58594	889.09888
Grade	149.70306	2	74.85152	11.51075**
Race	186.86912	1	186.86911	28.73694**
Grade x race	7.16811	2	3.58405	0.55116
Error	962.40685	148	6.50275	
SDTB				
Mean	14608.77936	1	14608.77734	1199.02393
Grade	738.25792	2	369.12891	30.29646**
Race	494.42801	1	494.42798	40.58046**
Grade x race	30.41538	2	15.20769	1.24818
Error	1803.21583	148	12.18389	

**$p < .01$

APPENDIX B

Significance of Difference in Test Scores of Boys and Girls

Test and group	N	Mean	S.D.	t-test t-value	t-test D.F.
SDTA					
Boys	67	5.99	3.03	-1.66*	152
Girls	87	6.78	2.90		
SDTB					
Boys	67	9.46	4.54	-1.85*	152
Girls	87	10.83	4.55		

*$\alpha = 0.05$

APPENDIX C

Percentage of Incorrect Answers for Each Test Item by Race

Item	SDTA		Item	SDTB	
	Black	White		Black	White
1	20.5	38.0	1	48.2	73.2
2	15.7	38.0	2	26.5	52.1
3	24.1	46.5	3	39.8	67.6
4	30.1	56.3	4	25.3	52.1
5	18.1	42.3	5	30.1	64.8
6	22.9	56.3	6	19.3	50.7
7	28.9	63.4	7	45.8	62.0
8	24.1	45.1	8	15.7	29.6
9	26.5	40.8	9	24.1	56.3
10	33.7	60.6	10	31.3	54.9
			11	45.8	50.7
			12	20.5	42.3
			13	19.3	42.3
			14	25.3	40.8
			15	24.1	49.3
			16	26.5	47.9
			17	21.7	59.2

APPENDIX D

The Reliability of the SDTA and the SDTB for Black and White Subjects and Total Population

Coefficient and test	Black	White	Total population
Coefficient Cronbach α			
SDTA	0.72	0.84	0.83
SDTB	0.73	0.88	0.86
SDTA and SDTB combined	0.82	0.92	0.91
Hoyt's Reliability Coefficient			
SDTA	0.72	0.84	0.83
SDTB	0.73	0.88	0.86
SDTA and SDTB combined	0.82	0.92	0.91