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ABSTRACT

This study investigated the relationship between dialect usage and performance on four language tasks designed to reflect features developmental in nature: articulation, grammatical closure, auditory discrimination, and sentence comprehension. Predictor and criterion language tasks were administered to 90 kindergarten, first-, and second-grade children randomly selected from a Northcentral Florida elementary school with a racial group ratio of 40 percent black and 60 percent white. All children were from rural families of low and lower-middle socioeconomic status backgrounds. When the variance attributed to cognitive development and language facility scores was systematically covaried, results indicated that dialect usage was significantly related to receptive performance but not significantly related to expressive performance. This finding bears two interpretations: (1) the basilect speaking child is deficient in comprehending developmental language forms; and (2) he is in addition demonstrating a basic deficiency in comprehending standard dialect. The later interpretation would contend that the kindergarten through second grade basilect-speaking children examined in this study have not as yet acquired the skill of bi-dialectic comprehension, i.e., the ability to translate standard English into their own dialect for processing. The question of dialect interference, then, appears to be a locallizing phenomenon. The amount of basilect used seemingly interferes with some specific language skills, and not with others. (Author/SB)



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Dialect Usage as a Factor in Developmental Language

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Performance of Primary Grade School Children

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The purpose of this study was to investigate the relationship between dialect usage and the acquisition of developmental morphologic and phonologic forms across both expressive and receptive language modes. More specifically, this study investigated the relationship between the percentage of dialect used (a derived measure from Anastasiow and Hanes Sentence Repetition Task, 1973) and performance on four language tasks designed to reflect features developmental in nature: articulation, grammatical closure, auditory discrimination, and sentence comprehension. The major research questions asked the following: Is a measure of dialect usage significantly related to articulation, grammatical closure, word-pair discrimination, and sentence comprehension scores, when the variance attributable to cognitive development and language facility is held constant?

The predictor and criterion language tasks were administered to 90 kindergarten, first, and second grade children randomly selected from a Northcentral Florida elementary school with a racial group ratio of 40 percent black and 60 percent white. All children were from rural families of low and lower-middle socioeconomic status backgrounds.











The relationship between dialect usage and performance on the four criterion tasks was analyzed by partial correlation techniques, controlling for differences due to cognitive development and general language facility socres. In these analyses the samples were combined across grade, race and sex.

The results of the partial correlation analyses indicate relating dialect to performance on expressive and receptive developmental language tasks. When the variance attributed to cognitive development and language facility scores was systematically covaried, dialect usage was significantly related to receptive performance but not significantly related to expressive performance.

In terms of expressive language performance, the facility with which the basilect speaking child acquires developmental phonemes and morphemes is encouraging. These findings suggest that while the basilect child is acquiring the phonologic and morphologic forms exclusive to his dialect, he is also acquiring the developmental phonemes and morphemes common to both basilect and standard dialect.

At the receptive level, however, the basilect speaking primary grade school child appeared to be at a marked disadvantage in the discrimination of developmental phonemes in word-pairs of minimal contrasts, as well as the comprehension of developmental morphemes in sentences presented in standard dialect. The apparent influence of dialect usage on receptive processing is in contradiction to the findings of a majority of studies reported in the recent literature.

This finding bears two interpretations: 1) the basilect speaking child is deficient in comprehending developmental language forms; and



2) he is in addition demonstrating a basic deficiency in comprehending standard dialect. The later interpretation would contend that the kindergarten through second grade basilect speaking children examined in this study have not as yet acquired the skill of bi-dialectic comprehendion, i.e., the ability to translate standard English into their own dialect for processing.

The question of dialect interference, then, appears to be a locallizing phenomenon. The amount of basilect used seemingly interferes with some specific language skills, and not with others. Dialect Usage as a Factor in Developmental Language
Performance of Primary Grade School Children*

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A major concern in the education of the young basilect user is the effect that language difference has on the child's success in developing language and comprehending standard dialect. Of particular interest is the influence of language difference in the acquisition of developmental forms common to both standard and basilect dialects. In general, research on dialects has focussed on the phonological and grammatical distinctions between basilect and standard speech, rather than examining the language acquisition commonalities across dialectal groups, to determine the possible influence of basilect on language development.

A number of studies have emphasized that although the basic grammatical patterns of basilect resemble those found in standard English, basilect is a sophisticated linguistic system which differs from standard English in predictable ways. For example, the research of Bailey (1965), Baratz and Povich (1967), Dillard (1967), Houston (1969), Labov and Cohen (1966) and Labov (1967) provide ample listings of the specific phonologic, morphologic, and syntactic distinctions between standard English and Black lower class language.

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Consistent with the trend to validate basilect as a linguistic system, studies of language performance in young basilect speakers have attempted to demonstrate that dialect distinctions are maintained throughout performance on expressive tasks. For example, the evidence from studies using grammatical closure techniques suggest that the lower-socioeconomic status Black child exhibits a significantly greater number of basilect forms in comparison to the lower-socioeconomic status white child (Marwit, 1972; Ramer, 1973). Similarly, when asked to repeat sentences presented in standard dialect, lower-socioeconomic status Black children systematically shift the phonology and syntax of the sentences into their own dialect (Baratz, 1969; Osser, 1967; Hall and Turner, 1972, 1973).

On a receptive level, a number of studies have focussed on discrimination ability as a means of determining the extent to which lower-socio-economic children are able to differentiate phonemic distinctions in standard dialect. In essence the results suggest that children from different subcultural groups can readily perceive sound distinctions which are not roduced in basilect (Deutsch, 1967; Elenbogen, 1972; Labov, 1967). In addition Gootesman (1972) concluded that differences found in discrimination performance between racial and socioeconomic status levels appear to be localized to specific word pairs that are pronounced as homonyms in basilect and contrasts in standard dialect.

In summary, then, the studies of expressive and receptive language performance present distinctly different results concerning the influence of basilect on language processing. Expressively, basilect-speaking children adhere to the phonologic, morphologic, and syntactic rules of their language system. Receptively, basilect-speaking children are able-to-comprehend standard dialect, except in those incidences where standard dialect contracts are produced as homonyme in basilect. However, these



studies were not specifically designed to examine the developmental progress of the basilect speaking child. They were primarily concerned with the verification of the identified dialect distinctions as manisfested in expressive performance as well as the position that dialect difference does not effect comprehension of standard dialect. Moreover, a number of methodological and theoretical issues can be raised with regard to each of the studies.

First, racial group membership and socioeconomic status have been confounded with dialect in the major studies. Studies have used samples of low-income Blacks and middle class whites in their investigations of language performance differences. In this way, low-income Black speech and middle class white speech have been automatically operationally defined as nonstandard dialect and standard dialect, respectively. Consequently, dialect usage independent of race and socioeconomic class membership has not been isolated and operationalized. Dialect as a single measure has not been quantified so that statistical analyses may be appropriately applied. Therefore, the relationship between dialect usage, in terms of the varying amounts of nonstandard forms exhibited in expressive language, and language performance has not been empirically researched.

Secondly, research has typically employed the use of language tasks that focus on either a sole aspect of language performance, i.e., expression or reception, or performance on features that represent dialect distinctions as opposed to features that are developmental in nature. Few studies have taken full advantage of investigating performance across complementary levels of reception and expression of phonological and morphological features that reflect language development in general.

Finally, most studies examining the effect of dialect on language processing, fail to covary group performance differences that may be attributed to differences in cognitive development and/or general language facility. Since variance in language performance may indeed be a function of differences in cognitive and language development inherent within the samples of children studied, performance differences found between groups may be mistaken for dialect interference.

The purpose of this study was to investigate the relationship between dialect usage and the acquisition of developmental morphologic and phonologic forms across both expressive and receptive language modes. More specifically, this study investigated the relationship between the percentage of dialect used (a derived measure from Anastasiow and Hanes Sentence Repetition Task 1973) and performance on four language tasks designed to reflect developmental features: articulation, grammatical closure, auditory discrimination, and sentence comprehension. The major hypothesis stated that a measure of dialect usage is significantly related to articulation, grammatical closure, word-pair discrimination, and sentence comprehension scores, when the variance attributable to cognitive development and language facility is held constant.

Method

Sample

The sample consisted of 30 children randomly selected from each of three grade levels: kindergarten, first and second grade. The total sample of 90 children were selected from a north central Florida elementary school with a racial group ratio of 40 percent Black and 60 percent white. All children were from rural families with low-and lower middle socioeconomic status backgrounds.



Procedures

All children were administered the experimental tasks individually. The tasks were administered by two examiners with each child receiving half of the tasks from one examiner and the remaining half of the tasks from the second examiner. Tasks were randomly assigned to examiners with the exception of the articulation task which was transcribed into phonemics during the session by a certified speech pathologist. Approximately 30 minutes was required to administer all tasks to each child.

Instruments

Sentence Repetition Task (SRT)

The complete Anastasiow and Hanes Sentence Repetition Task (Anastasiow and Hanes, 1973) was administered to all subjects. The 28 stimulus sentences were pre-recorded on cassette using a white male standard dialect speaker. Child responses were taped and scored according to procedures reported by Anastasiow and Hanes (1973).

Sentence repetitions were scored for function word omissions and function words correct. Function word ommission scores (fo) were obtained by summing the number of function words the child omitted across all 28 sentences. Function word correct scores (fc) were obtained by summing the number of function words the child repeated verbatim across all 28 sentences. Previous work with the Sentence Repetition Task indicates that function word omissions are significantly related to cognitive development, while function word correct scores are significantly related to other measures of language facility.

The measure of dialect usage was derived from children's sentence repetitions in terms of a ratio of the number of valid reconstructions to the sum of the number of valid reconstructions, verbatim responses and

errors. Valid reconstructions were defined by Anastasiow and Hanes as basilect substitutions for standard dialect which maintain the meaning of the sentence,

Articulation

A modified version of the <u>Photo Articulation Test</u> was administered. Subject responses were immediately transcribed in phonemics (IPA style). The articulation task is an expressive language task in which the subject's ability to pronounce certain phonemes in varying positions in the word was determined. The subject was shown a series of individual photographs and asked to "Tell me what you see." The task primarily included phonemes that are not usually mastered by children until age six. These phonemes were selected to increase the discriminating power of the task. One point was given for each correctly articulated phoneme with a possible total score of 46.

Grammatical Closure Task

A modified version of the ITPA grammatical closure subtest was administered to each child. This task is an expressive language task that examined the child's ability to use morphologic forms. Stimulus presentation was live and children's responses were tape recorded. As a scoring procedure one point was given for each correct morpheme supplied with a psosible total score of 18. Task items assessed the following forms: passive voice, direct/indirect object, derivational inflection -er and -ist, noninflected comparative and superlative, inflected comparative -er, noninflected past tense, singular and plural objective case + self, singular and plural objective case pronoum. Auditory Discrimination Task

The complete Wepman Test of Auditory Discrimination was administered to each child. The Wepman is a receptive language task in which the subject's ability to discriminate auditorily between word-pairs was measured. Word-pairs were presented on



cassette (white femal standard dialect speaker). The subject was asked to indicate whether the word-pairs presented were the same or different. Pretraining in the concepts of same and different employed the use of items from the Carrow Test of Auditory Comprehension of Language (1973). One point was given for each correct discrimination with a possible total score of 40. Sentence Comprehension Task

The sentence comprehension task required the subject to choose a picture that best represented the stimulus sentence from a set of three pictures. For each set of three pictures, two target responses and one foil was represented. Sentences used in the sentence comprehension task included items that reflect developmental morphologic features. The stimulus sentences were pre-recorded on cassette (white female standard dialect speaker). The subject was asked to "Point to the picture that tells the story." The subject's responses were immediately recorded by the examiner on prepared answer sheets. One point was given for each correct picture identification with a possible total score of 18. Task items assessed the receptive knowledge of the identical forms included on the grammatical closure task.

Reliability of Tasks

Reliability for each criterion task was established by applying the Kuder Richardson formula. Reliability coefficients ranged from .73 to .88.

The reliability for function word scores and reconstruction word scores was reported by Anastasiow and Hanes (1974) as .92 and .94 respectively.

Results "

In order to justify the use of function word omissions and function word correct scores as covariates, a 3 factor analysis of variance was performed for each variable. The three factors included grade (three levels), sex (two levels) and race two levels). A complete factorial model including

Table 1 summarizes the analysis of variance for function word omissions.

Statistically significant F values were found for the main effects grade and race with a significant 2 way interaction of grade and sex.

Insert Table 1 about here

Table 2 summarizes the anal sis of variance for function word correct scores. The results indicated significant main effects for grade and race with no significant interactions.

Insert Table 2 about here

In general these results indicate that the sample of Black children tended to omit more function words and repeat fewer function words correctly than did the sample of white children. In both racial groups, children omitted fewer function words and repeated more function words correctly with increased grade placement. These results suggest that covariance procedures are justified if the purpose of the statistical analyses of language performance on the four criterion tasks is to determine the amount of unique variance attributable dialect usage.

Therefore, the relationship between dialect usage and performance on the four criterion tasks was analyzed by partial correlation techniques, controlling for differences due to function word omission and function word correct scores. In these analyses the samples were combined across grade, race and sex. Table 3 presents the results of the partial correlation analyses.

Insert Table 3 about here

The results of the partial correlation analyses indicate that articulation performance on items reflecting developmental phoneme acquisition and grammatical closure performance on items reflecting developmental morphologic acquisition are not significantly related to the percentage of dialect used.

- In contrast the percentage of dialect used was significantly related to auditory discrimination performance on developmental contrast (r=-.27, df=86) and sentence comprehension performance (r=-21, df=86).
- relating dialect to performance on expressive and receptive developmental language tasks. The significant effects for factors grade and race, revealed in the analyses of function word omissions and function word correct scores, justified the use of these variables as covariates for the subsequent analysis examining the relationship of dialect to criterion task performance. When the variance attributed to function word omissions and function word correct scores was systematically covaried, dialect usage was significantly related to receptive performance but not significantly related to expressive performance.

Discussion

In terms of expressive language performance, the facility with which the basilect speaking child acquires developmental phonemes and morphemes is encouraging. These findings suggest that while the basilect child is acquiring the phonologic and morphologic forms exclusive to his dialect, he is also acquiring the developmental phonemes and morphemes common to both basilect and standard dialect.



school child appeared to be at a marked disadvantage in the discrimination of developmental phonemes in word-pairs of minimal contrasts, as well as the comprehension of developmental morphemes in sentences presented in standard dialect. The apparent influence of dialect usage on receptive processing is in contradiction to the findings of a majority of studies reported in the recent literature.

The significant negative relationship between dialect usage and auditory discrimination is particularly critical in view of the positive relationship reported between auditory discrimination and reading achievement. Equally important are the educational implications of the significant negative relationship between dialect usage and sentence comprehension. This finding bears two interpretations: 1) the basilect speaking child is deficient in comprehending developmental language forms; and 2) he is in addition demonstrating a basic deficiency in comprehending standard dialect. The later interpretation would contend that the kindergarten through second grade basilect speaking children examined in this study have not as yet acquired the skill of bi-dialectic comprehension, i.e., the ability to translate standard English into their own dialect for processing.

The translatability phenomenon has been described by Moore (1974), Hall and Turner (1974), and Anastasiow and Hanes (1976), in the basilect speaking child's imitation of sentences presented in standard speech. The basilect user is said to translate when he systematically shifts the phonology and syntax of the stimulus sentence into his own dialect. According to Moore, when a child is asked to imitate "Ask Alvin if he wants to play basketball," and responds "Ask Alvin do he want to play basketball," it is clear that he has understood the sentence and has shifted to a semantic and

tratare to bis our language evetom



Unlike the expressive tasks of sentence imitation, grammatical closure and articulation, where the response choice is automatic to the speech of the child, the receptive tasks use in this study, confined both the stimulus and the child's response solely to a linguistic environment of standard dialect. This may have created a set of conditions too difficult, at least not conducive, for initiating translatibility.

While it may be informative enough to conclude that the primary grade language different child is deficient in his reception of isolated developmental language forms, the possibility exists that the underlying problem is one of translatability -- the primary requisite to achieving intelligibility between speakers of different dialects.



Table 1
Summary of Analysis of Variance for
Function Word Omission Scores

SOURCE	DF	SUM OF	MEAN	PARTIAL	F
		SQUARES	SQUARE	SS	VALUE
REGRESSION Grade (G) Sex (S) Race (R) GxS GxR SxR GxSxR ERROR	11 2 1 1 2 1 1 2 78	771.04 1732.07 2503.11	70.09 22.20	257.39 21.29 432.88 166.13 57.35 7.83 35.57	3.15 5.79* .95 19.49* 3.74* 1.29 .35 .80

^{*}p<.05

Table 2
Summary of Analysis of Variance for
Function Word Correct Scores

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	PARTIAL SS	F VALUE
REGRESSION	11	1952,28	177.48		6,23
Grade	2			714.29	12.53*
Sex	1			27.27	.95
Race	1			1123.68	39.44*
GxS	2	بالر.		161.65	2.83
GxR	2			77.11	1,35
SxR	1			4.85	.17
GxSxR	2	1		44.49	.78
ERROR	78	2221.76	28.48	•	
TOTAL	. 89	4174.04			



Table 3.

Summary of Partial Correlations

Between Dialect Usage and the

Four Criterion Tasks

• •	Articulation	Grammatical Closure	Auditory Discrimination	Sentence Comprehension
Dialect	09	18	27*	29*
Usage		er e	•	* * * * * * * * * * * * * * * * * * *

*p<.05, df=86

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