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SOCIAL FACTORS IN THE PERCEPTION
OF PHONETIC DIFFERENCES

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Twenty-nine fifth grade (average age: 13) and twenty-eight eighth grade (average age: 15) Brazilian students of lower socio-economic class in the city of São Paulo were tested for auditory discrimination of differences, awareness of the value of socially marked pronunciations, and knowledge of normative classification of various types of deviations from the standard language as taught at school.¹

The overall scores on the tests (Table 1) seem to indicate a close relationship between perception, awareness of social value and knowledge of normative standards according to school grammar, but detailed analysis of performance of the tests — not more comparison of the overall group average scorer — is necessary in order to determine the exact nature of this relationship.

	5th grade (n=29)	8th grade (n=28)
Test 1 (perception)	60.9 %	77.8 %
Test 2 (social value)	51.9 %	77.3 %
Test 3 (correctness)	56.8 %	71.7 %

Table 1. Average scores of fifth and eighth grade students on tests of perception of pronunciation differences awareness of their social value, and classification of deviations from pedagogical norms.

Examination of performance on Test 1 (perception) reveals a significant difference in the sorts of errors made by the two groups. Among the fifth graders the eight most common errors in perception included five cases of alternation between standard pronunciation and highly stigmatized variants², while the most common errors among the eighth grade students included no cases of this nature. Furthermore, on twelve test items consisting of alternation between standard and socially marked pronunciations with various degrees of stigmatization, the eighth graders had scores almost twice as high as those of the fifth graders: 74.4% as opposed to only 38.5%. The eighth graders also had significantly better average scores than the fifth graders on test items involving alternation between socially unmarked pronunciation variants, although the difference between the two groups was not so great in these items as in the ones with stigmatized variants.

The differences in performance on Test 2 (social value) were similar to those previously noted on the perception test. The fifth graders manifested significant sensitivity to the social value of variations in pronunciation, not only in their overall scores (only 51.9% correct answers on Test 2, a binary multiple choice test!), but also in the nature of their performance: on significant correlation between percentages of correct answers and degrees of social marking. In contrast, the eighth graders clearly demonstrated sensitivity to the social meaning of the variants in question, not only in the overall scores (77.3% correct answers on Test 2), but also in the nature of their performance of both tests: higher percentages of correct answers on test items with greater degrees of social marking. The difference in performance with regard to the most highly stigmatized variants (partially shown in Table 2) accounts largely for the difference between the overall scores of the two groups on Test 2.

Front semivowel instead	48.3%	100%
of palatal lateral	55.2%	100%
(2 items)		
/ r / instead of / l /	41.4%	85.7%
as second member of a	55.2%	92.9%
group of consonants		
(2 items)		

Retroflex <u>r</u> instead of lateral or back semivowel (1 item)	58.6%	75%
	_____	_____
average scores	51.7%	90.7%

Table 2. Group scores on items of Test 2 (social value) with the most highly stigmatized variants in pronunciation.

The results of Test 3, knowledge of correctness according to the normative grammar taught at school, serve in part to confirm the different performance patterns noted on the other tests: higher average scores for the eighth grade group (71.7% as opposed to 56.8% for the fifth graders), due largely to better performance with regard to the more stigmatized items of the test. Test 3 also permits comparison of performance in normative classification of different types of deviations from the pedagogical standards (Table 3). Both groups manifested greater knowledge of grammatical and lexical pedagogical standards than of morphophonemic and phonological ones.

	5th grade	8th grade
Lexical	77.2%	94.6%
Grammatical	79.0%	96.4%
Morphophonemic	51.1%	78.6%

Phonological 51.4% 65.5%

Table 3. Average group scores on Test 3 (correction) according to the type of deviation from pedagogical norms.

A comparison of the test scores of both groups divided according to sex (Table 4) reveals that female students generally had scores somewhat higher than the males, the only exception (where the difference is too small to be considered significant) occurring where performance indicated lowest level of development: awareness of social value among the fifth graders.

	5th grade		8th grade	
	male (n=15)	female (n=14)	male (n=13)	female (n=15)
Test 1 (perception)	56.4%	63.4%	74.5%	80.6%
Test 2 (social value)	51.2%	52.5%	74.3%	79.0%
Test 3 (correctness)	52.8%	61.1%	65.7%	76.8%

Table 4. Average test scores of fifth and eighth grade students according to sex.

Because of the partial correlation between age and level of education in the groups surveyed (5th grade, average age: 13; 8th grade, average age: 15), and because it is not possible, in the small sample tested

here, to separate these factors from others (such as sex and linguistic background, in terms of the influence of contact with foreign languages or different dialects of the mother tongue), no conclusions can be drawn from this study with regard to the effects of age and education.³

Although the number of non-repeating students is too small to permit firm conclusions concerning the relationship between academic success, as indicated by whether the student is repeating his grade, and performance of the skills tested, the two are not closely correlated in the groups surveyed: the highest scores on a given test in a given group were obtained in some cases by the more successful (that is, non-repeating) students, in others by the repeating students (Table 5).

	<u>5th grade</u>		<u>8th grade</u>	
	repeaters (n=22)	others (n=7)	repeaters (n=4)	others (n=24)
Test 1 (perception)	61.3%	59.8%	68.9%	79.2%
Test 2 (social value)	50.3%	56.6%	78.6%	76.7%
Test 3 (correctness)	50.3%	67.4%	68.0%	72.8%

Table 5. Test scores among subjects grouped according to academic success (as indicated by whether the student is currently repeating the grade).

In conclusion, this study indicates that, for speakers of the class, age and education group in the community represented, the principal factor in the general perception of phonetic differences between alternant pronunciations is awareness of the value of socially marked variants. The study also reveals greater sensitivity to lexical and grammatical deviations from pedagogical norms than to morphophonemic and phonological ones. Sex is found to be a significant, although rather minor, factor in performance of the skills tested. The study also raises questions as to the effects of age and academic performance (both level of education and current success in school).

NOTAS:

1. *Test 1 (perception) measured ability to recognize occurrences of phonetic differences in alternant pronunciations which involve variants ranging in social marking from neutral to highly stigmatized; Test 2 (social value), identification of the most likely types of speakers and situation in the occurrence of socially marked pronunciations; Test 3 (correctness), normative classification of different types of deviations (lexical, grammatical, morphophonemic and phonological) from the standard language as taught at school.*

2. Investigation among adult speakers in the same community revealed the following relative degrees of social marking in the common variants different from traditional standard pronunciation that are included in the present study: 1) highest degree of stigmatization — front semivowel instead of either palatal lateral or alveolar lateral plus front semivowel, /r/ instead of /l/ as the second member of a consonant cluster, and retroflex r instead of lateral or back semivowel in syllable or word final position; 2) medium to strong stigmatization — ∅ instead of sibilant in word final position, and realization of syllable or word final /R/ as a retroflex; 3) medium stigmatization — [u] instead of [ã^u] in perfect tense ending -ram, [n] instead of [nd] in participle ending -ndo, and [i] instead of [ẽⁱ] in nouns ending in -em; weak stigmatization — ∅ for infinitive ending -r instead of /R/; unmarked (not stigmatized in current colloquial speech, although different from pedagogical and traditional standards) — [lⁱ] instead of [K] and vice versa, insertion or omission of [i] before a sibilant, and epenthetic [i] or [e] in groups such as /tl dv pn/.
3. There is some indication that in the class and age range represented, age is more important than level of education as a factor in the perception or pronunciation differences and awareness of their social

value. For example, among the eighth grade students, the best scores on the perception test (95.5%, 93.9% and 89.4%) were obtained by two eighteen year old subjects and one twenty-one year old. However, no consistent correlation between age and performance of the skills tested is found in the limited data of the present survey, in which the various age levels are represented by too few subjects to permit confident assessment of the significance of this factor.