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NOTES

1. The five initial traits and their favorability scale values (Edwards, 1967b) were: friendly (6.55), interesting (6.14), loyal (6.54), sincere (6.62), and warm-hearted (6.30).
2. The five discrepant traits and their favorability scale values (Edwards, 1967b) were: nonconfident (3.02), tense (3.03), unoriginal (3.03), preoccupied (3.19), and inexperienced (3.60).

Bilinguals as linguistic mediators*

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A variation of the standard word-association technique, together with the cloze procedure, was used to explore whether balanced bilinguals of French Canadian parentage could communicate equally well with monolingual English or French speakers. The bilingual Ss clozed significantly better with the French Ss than with the English. These results suggest that distinctive French Canadian cultural values and traditions may have influenced their ability to communicate with peers. The individual who appears to be equally proficient in two or more languages may really not be an effective linguistic mediator.

The topic of intergroup communication is especially interesting to those of us who live and work in such linguistically diverse areas as Montreal. The anecdotal observations and research conducted by anthropologists and sociologists (e.g., Allen, 1955; Christian, 1970; Nostrand, 1966) suggest that an individual's values and traditions filter or bias, in some way, his transmission or reception of information. That is, their evidence, which they interpret as support for a theory of cultural relativism, implies that failures to communicate may result when two people who share a common vocabulary do not share similar cultural frames of reference. We have recently begun to explore empirically one aspect of the relationship between bilingualism and biculturalism, namely, whether or not apparently "balanced" bilinguals can communicate equally well with native speakers from both of their reference groups.

In our setting, this hypothesis may be tested by seeing whether French-English bilinguals of French parentage communicate equally well with both monolingual French and monolingual

English speakers or whether they communicate better with the French group. We have used a variation of the standard word-association technique together with the cloze procedure to test this hypothesis.

The free-association technique has been extensively used to study verbal behavior. Following the standard procedure, a S is presented with a number of words and asked to respond to each stimulus word, orally or in writing, with the first word that comes to mind. Through force of tradition, most research has been conducted using the familiar Kent-Rosanoff stimulus list. Normative studies have now been conducted in several western countries, and bases for between-group comparisons have been established (e.g., Jenkins & Russell, 1960; Palermo & Jenkins, 1964; Rosenzweig, 1961).

More recently, and of particular relevance to the present study, Lambert & Moore (1966) used this technique to compare the responses given by Canadian bilinguals with Canadian English and French monolinguals. They reported that the bilinguals responded like the English monolinguals on the English form of the test, and like the French monolinguals on the French form. They hypothesized that the associational responses define

"particular connotative meaning networks," and suggested that group differences in associational correspondence may determine the difficulty or ease of communication both within and across linguistic groups.

Gotlieb (1967) collected word-association responses and short compositions from a group of male high school students. He then calculated the number of similar responses (overlap) given by all combinations of students taken two at a time, and selected, for each S, one student with whom he had high overlap and another with whom he had low overlap. He gave each S the two compositions written by the high-overlap and low-overlap students with every fifth word deleted, and asked them to fill in the blanks. This technique, known as the "cloze procedure" (Taylor, 1959), measures the readability of a written passage. In this case, Gotlieb found that male high school students could comprehend better passages written by peers with whom they had high associational correspondence than those written by peers with whom they had low overlap.

The present study was designed to explore directly one aspect of the relationship between associational similarity and intergroup communication, and, indirectly, one aspect of the relationship between bilingualism and biculturalism using Gotlieb's methodology. The previous data suggest two equally plausible outcomes. One could argue that a linguistically balanced bilingual with French-Canadian parents should cloze equally well with either English or French high-overlap peers and that this cloze would be better than that with low-overlap peers, or that such a person who appears from all surface indications to be a balanced bilingual should, in fact, cloze significantly better with French peers, regardless of overlap, than with English peers.

SUBJECTS

The Ss were 10 male and 10 female Grade 9 students from middle-class homes in Montreal. All had French-Canadian parents and appeared to be balanced bilinguals. The criteria for bilinguality were adopted from Lambert & Moore (1966) and Macnamara (1969). In addition, one large group of English-Canadian monolingual students and another of French-Canadian monolinguals, comparable in age, religion, and socioeconomic status, were selected for the preliminary phase of the study from the high streams in their respective schools.

MATERIALS

Fifty of the 100 words from the

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Kent-Rosanoff stimulus list were selected randomly for written presentation. The French translations prepared by Lambert & Moore (1966) were used.

PROCEDURE

All Ss were given the appropriate form of the word-association test as a group test. Bilingual Ss were tested, once in English and once in French, on two occasions 1 week apart. Approximately half of them received the French version first, half, the English.

After completing the word-association task, the monolinguals wrote a one-page composition about "Being a Teenager." This topic, relevant to the students' everyday lives, was chosen as a potentially good reflector of differences in attitudes or behavior across linguistic groups. The Ss also completed a biographical questionnaire.

The associational responses given by each bilingual in English and in French were compared to the associational responses of each of the English or French monolinguals of the same sex. The degree of associational correspondence or overlap was tabulated as follows. A score of 1 was given for every *identical* response by two Ss to a stimulus. For example, if bilingual S1 responded "hair" to the stimulus word "head" and English monolingual S5 also responded "hair," each received a credit of 1. The overlap score for each possible pair was summed over the 50-word list. Theoretically, the overlap scores could range from 0/50 to 50/50. Thus, for each bilingual, an overlap score was tabulated with every same-sexed member of the two monolingual groups.

The compositions written by the monolinguals were then prepared for the cloze procedure. To insure as much comparability across languages as possible, every second adjective or noun was deleted from each composition. The compositions were retyped with blanks of equal length appearing where words had been deleted. All compositions had 12 blanks.

On a subsequent day, each bilingual S

received a folio containing four compositions. Two were written by the English monolinguals with whom each bilingual had the highest and the lowest overlap, and two were written by the French monolingual with whom each had the highest and lowest overlap. These four compositions were stapled together in random order. The Ss were told to read the compositions and to fill in the missing words. The number of correct words (clozures) per composition was used as an index of the bilingual's ability to communicate with the monolingual who wrote the original composition.

METHOD OF ANALYSIS

The data were analyzed using a three-way analysis of variance design with repeated measures. Sex, degree of overlap, and language of composition (i.e., ethnic group of the monolinguals) were the independent variables with the number of clozures serving as the dependent measure.

RESULTS AND DISCUSSION

The language in which the compositions were written was a significant source of variation ($F = 5.36$, $df = 1/18$, $p < .05$). The bilinguals clozed significantly better with the French Ss ($\bar{x} = 5.35$) than they did with the English Ss ($\bar{x} = 4.42$). Neither the Ss' sex nor the degree of overlap between Ss were significant sources of variation. Furthermore, there were no significant interactions.

These exploratory results are interesting because they suggest that, at least for this particular group of bilingual Ss, distinctive French-Canadian cultural values and traditions may have influenced their ability to communicate with peers whose surface linguistic code they appeared to share. The data suggest that bilinguality and biculturalism may not always go together; and that, in fact, the individual who *appears* at first glance to be equally proficient in two or more languages may not be able to act as an effective linguistic mediator between the members of two ethnolinguistic groups.

These results, rather than providing

conclusive evidence to reject or support the hypothesis that a person's cultural background influences his language behavior, may suggest a useful methodology to further explore empirically this question. It would be interesting, for example, to test whether or not bilinguals with one English parent and one French parent can more successfully act as linguistic mediators than the present monocultural Ss.

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