Bilingualism and Metaphor Comprehension

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A better understanding of the general processes involved in bilingual children's metaphorical reasoning was determined by conducting comparative research with children from bilingual and unilingual backgrounds. Two tests of metaphor as well as the Ravens Coloured Progressive Matrices Test (RCPMT) were administered to 30 bilingual Canadian-Greek children and to 30 unilingual Canadian children aged 8 and 11 years. The Proverbs Test (a verbal metaphorical test) and the Metaphoric Triads Task (MTT—a nonverbal pictorial test) were administered to both linguistic groups. There were no significant differences between the two linguistic groups on the RCPMT and the MTT. The only significant difference between the Canadian-Greek and the Canadian children was that the former correctly preferred the moral of the proverbs in the Proverbs Test to a greater extent than did the Canadian children. The results are discussed with respect to bilingualism and cross-cultural comparisons of cognitive constructs. The implications of the study for bilingual education are also discussed.

Many recent research studies suggest that bilingualism can enhance intellectual and educational abilities when these abilities are developed in both languages (Cummins, 1981). These studies have reported positive effects of bilingualism in: (1) the ability to analyse and become aware of language; (2) overall academic skills; (3) general conceptual development; (4) creative thinking, and (5) sensitivity to communicate the needs of the listener. Specifically, Kessler and Quinn (1980) found that Hispanic bilingual students who had been in a bilingual programme performed significantly better than monolinguals on a science problem-solving task, while Cummins and Mulcahy (1978) found that Ukrainian-English bilingual students were better able to detect ambiguities in English sentence structure than were monolingual English-speaking students. An explanation put forth by the latter researchers for the linguistic superiority of bilingual children is that in gaining control over two language systems, the bilingual child has had to decipher much more language input than the unilingual child, who has been exposed to only one language system. Following this view then, abstract metaphorical

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language such as proverbs may also be more proficiently analysed by bilingual children.

Metaphor comprehension (verbal as well as non-verbal) is the ability to coordinate systems of thought to create a new concept. It involves transporting one object or word from its usual context to a second context, that is unusual but appropriate. A number of developmental studies indicate that metaphor comprehension improves from childhood through adolescence and into adulthood (Billow, 1975; Boswell, 1979). Understanding of metaphor then is a useful index of advanced cognitive skills (Honeck, Voegtle, Dorfmüller & Hoffman, 1980). Verbal metaphors such as proverbs are especially interesting research tools because they can be understood on both a literal and an abstract or figurative level. Therefore both concrete as well as abstract linguistic abilities can be assessed.

In order to gain a better understanding of the effects of bilingualism on children’s metaphorical competence, two groups of children who were from two different cultural and linguistic backgrounds, but who had common schooling experiences were compared on two tests of metaphor, the Metaphoric Triads Task (MTT), a pictorial test developed by Kogan, Connor, Gross and Fava (1980), and the Proverbs Test, a verbal test developed by Djap (1983). The Ravens Coloured Progressive Matrices Test was also administered to ensure comparable ability with respect to performance on a standardized nonverbal intelligence test.

The aim of the present study was to assess the extent to which bilingual Canadian-Greek children as compared to unilingual Canadian children are capable of understanding verbal (proverbs) and nonverbal (pictorial) metaphors. It was hypothesized that the bilingual children would be more proficient in comprehending proverbs for two possible reasons. First, their bilingualism has allowed them to better analyse verbal meanings. This may generalize to analyzing verbal metaphor. A second but related reason is cultural, in that proverbs are used extensively in the Greek culture. The proverbs presented in this study however were in English. A certain amount of linguistic transfer would still need to occur for understanding of the metaphor. It was also hypothesized that the two groups would perform comparably on the MTT, the pictorial metaphor test, in that these metaphors were nonverbal in nature and would not necessarily be directly influenced by bilingualism.

Method

Subjects

The subjects consisted of 30 bilingual (Greek and English) and 30 unilingual (English) children in Toronto, Canada. The bilingual group was comprised of 15 eight and 15 eleven year-old children, who were born in Canada, whose first language was Greek and whose parents were born in Greece and have emigrated to Canada. While the children attended public schools in Toronto, they also attended private 3 hour/ evening Greek classes three times a week, Mondays, Wednesdays and Fridays, 5 to 8 p.m., at a private Greek school in Toronto. These classes included language arts, history and culture as well as geography. They also spoke Greek at home with their parents.

The unilingual group was comprised of 15 eight and 15 eleven year-old children who were born in Canada, whose first language was English and who attended public schools in Toronto, Canada. The parents of these children were