Research Note

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Grammatical Ability and its Relationship With Grammatically Appropriate Oral Reading Errors

Oral reading error analysis has been extensively researched and used by clinicians for a century. Oral reading errors have been classified and systematized by reading experts to investigate the nature of the reading process and to remediate reading difficulties. The relationship between various types of grammatical ability and reading comprehension has been examined for several decades. A relationship has been established by many researchers between grammatical ability and reading comprehension. Furthermore, Goodman (1967) and other investigators have found that reading comprehension is impeded by the occurrence of a disproportionate number of grammatically inappropriate oral reading errors.

Les cliniciens utilisent et étudient, depuis cent ans, l'analyse des erreurs en lecture orale. Les experts en lecture ont classé et systématisé les erreurs en lecture orale pour mieux comprendre le processus de lecture et pour corriger les difficultés en lecture. Depuis plusieurs décennies, on étudie le rapport entre différentes sortes d'habiletés grammaticales et la compréhension de la lecture. Plusieurs chercheurs ont établi un lien entre l'habileté grammaticale et la compréhension de la lecture. De plus, Goodman (1967), entre autres, a trouvé qu'un nombre démesuré d'erreurs de grammaire en lecture orale entrave la compréhension de la lecture.

Introduction

The relationship between various types of grammatical ability and reading comprehension has been examined for several decades. Among these grammatical abilities are the following: morphology (Brittain 1970; Trachtenberg, 2002; Vogel, 1974, 1975, 1977; Wiig & Semel, 1972; Wiig, Semel, & Crouse, 1973), semantics (Rubin & Johnson, 2002), syntax (Catts, 1993; Fry, Johnson, & Mühl, 1970; Hammill & McNutt, 1980; Pisecco, Baker, Silva, & Brooks, 2001; Shire, 1945; Vogel, 1975), vocabulary (Cirino, Israelian, Morris, & Morris, 2005; Fry et al., 1970; Gonzalez & Valle, 2000; Miller, Brecht, & Richey, 1978; Yedinack, 1949), and especially in recent years phonology (Cardoso-Martins, 1995; Cirino et al., 2005; Gonzalez & Valle, 2000; Levi & Musatti, 1978; Morais, Cary, Alegria, & Bertelson, 1979; Savage et al., 2005; Trachtenberg; van Ijzendoorn & Bus, 1994). The above-mentioned research projects and most other uncited and well done research projects indicate a relationship between grammatical ability and

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reading comprehension. Additional evidence about this relationship is derived from studies that examined the efficacy of language-based education intervention strategies (Ayres, 1995; Perez, 1981; Torgesen et al., 2001).

The above research and remediation projects lend support to Goodman's (1967) theory of reading. Goodman views the process of reading as a psycholinguistic prediction activity. He and other investigators have found that oral reading comprehension is impeded by the occurrence of a disproportionately large number of grammatically inappropriate oral reading errors. The purpose of this research project is to determine whether there is a relationship between underlying grammatical ability and the proportion of oral reading errors deemed grammatically appropriate.

Method

Participants

Sixty students ranging in age from 8 years 0 months to 10 years 4 months were selected randomly from nine schools (6 or 7 per school) in the Lakehead District School Board system located in Thunder Bay, Ontario. Thirty were drawn from grade 3 and 30 from grade 4.

The following criteria were met during the selection process. All participants' sensory acuity and overall health were normal, their IQ was equal to or greater than 80, and they had had at least two years of instruction in English before the year of data collection.

Materials

Receptive grammatical ability was measured by administering the Processing Word and Sentence Structure subtest of the Clinical Evaluation of Language Functions test (Semel & Wiig, 1980). This assesses the participant's ability to process and interpret certain word and sentence structures and transformations. It consists of 26 items, each of which consists of a card containing four pictures and an associated stimulus sentence. One picture portrays the meaning of the sentence whereas the other three represent minimal grammatical contrasts. The examiner presents the stimulus sentence orally, and the participant responds by pointing to a picture.

A sample of approximately 30 oral reading errors was obtained by administering the Oral Reading subtest of the Durrell Analysis of Reading Difficulty test (Durrell, 1955). In the event of an insufficient number of oral reading errors, the Supplementary subtest was also administered. After transcription, each error was deemed grammatically appropriate or inappropriate.

Procedure

Each participant was selected randomly, and the two subtests were administered individually to each participant. The order of administration of each subtest was randomized to control for the effects of fatigue and test sophistication.

Immediately before administration of the Oral Reading subtest of the Durrell Analysis of Reading Difficulty test, each participant was instructed to read carefully. The oral reading session was tape-recorded, and the errors were subsequently transcribed and analyzed.

Results

The Pearson product-moment correlation coefficient was –0.0196, which indicates no relationship between the two variables.

Discussion

This research finding is similar to that obtained by Sturdivant-Odwarka (1977). In fact, Goodman (1967) believed that oral reading error analysis could not be used to detect the presence or absence of underlying psychoeducational abilities or disabilities. However, this research and clinical tool can reveal important insights regarding the reading process.

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