METACOGNITION, READING AND CAUSAL ATTRIBUTIONS: A COMPARISON OF LEARNING DISABLED AND NON LEARNING DISABLED INTERMEDIATE SCHOOL CHILDREN

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ABSTRACT

Metacognitive knowledge, oral reading behaviour, comprehension monitoring, self perceptions of reading ability, and reading-related causal attributions in learning disabled (LD) and non learning disabled (NLD) children were investigated in this study. Sixty-nine Form Two pupils attending five intermediate schools in Palmerston North and Feilding were involved. The LD children were of average or above average intelligence, but underachieving in reading. The LD sample was operationally defined in terms of having a WISC-R IQ of 90 or above, with a PAT Reading Comprehension score equal to or less than the 16th percentile, or with a PAT Reading Comprehension score equal to or less than the 19th percentile and a PAT Reading Vocabulary score equal to or less than the 16th percentile. The LD sample (N=35) comprised 26 boys and 9 girls. The sample of NLD children was selected from pupils who had a WISC-R IQ score of 90 or above, with PAT Reading Comprehension and Reading Vocabulary scores greater than the 50th percentile and a Listening Comprehension score greater than the 30th percentile. As far as possible, the NLD group was matched to the LD group in terms of IQ. The NLD sample (N=34) comprised 19 boys and 15 girls.

Data on metacognitive knowledge of strategies was obtained by administering the Reading Strategies for Meaning Scale and the Reading Strategies for Decoding Scale. Oral reading and comprehension monitoring behaviours were collected on passages which reflected the children's individual "easy" and "difficult" level. Comprehension monitoring was investigated by focusing particular attention on self correction behaviour and by the use of the Monitoring Device (Bleep) which permitted the investigation of on-line monitoring at the word level. At the conclusion of the oral reading self report data on awareness of monitoring and corrective strategy use were collected. This was referred to as the Self Report of Oral Reading Behaviour. In addition, three different instruments were developed in order to examine children's perceptions of their reading achievement and causal beliefs for success and failure in reading. The measures were the Causal Attribution Rating Scales, Reading Perception and Attribution Questionnaire, and Task-linked Perceptions and Causal Attributions.

The study was conducted in two Phases. During Phase A the children's easy and difficult passage for oral reading was established and data on the children's reading-related perceptions and causal attributions were collected. Phase B consisted of administering the individual easy and difficult oral reading passages and the Monitoring Device (Bleep), collecting the Self Report of Oral Reading Behaviour data and administering the reading strategy scales.

The picture of LD readers that has emerged is one not dissimilar to that of NLD readers. LD readers were shown to have similar metacognitive knowledge of positive strategies for gaining meaning from a story and decoding an unknown word compared with NLD readers.

The evidence that LD readers have metacognitive knowledge was further supported by the results of the Self Report of Oral Reading Behaviour. In terms of describing monitoring and corrective strategy use, the reasons for such monitoring and for the selection of specific strategies and judgements about success and lack of success of fix-up activities, the LD readers revealed metacognitive competence. Therefore awareness of self-regulation was manifested by LD readers when specific self-generated reading events at two difficulty levels were examined.

The reading behaviour and comprehension monitoring of the LD readers were also often similar to that of the NLD readers. Where differences did occur they frequently reflected performance on the difficult passage level. However, the reading behaviour of LD children also tended to be very erratic and highly individual in nature. In terms of self correction, as an index of comprehension monitoring, the LD readers were as proficient as their peers, indicating awareness of comprehension failure and an ability to implement corrective strategies. However, when analyses were undertaken combining the variables of self correction and linguistic cue use and meaning cue use, no clear pattern of behaviour appeared. The LD readers were also aware of comprehension breakdown as indicated by use of the Monitoring Device. Errors were signaled as frequently by LD readers as by NLD readers. On the easy passage, LD readers

signaled self corrections as often as the NLD readers, but less often on the difficult passage. Again then, LD readers may be portrayed as competent metacomprehenders. However, when analyses involved signaled monitoring and linguistic cue use and meaning cue use inconsistent patterns emerged across difficulty levels and for correction type.

Attributions for reading success to external factors and for reading failure to internal factors, coupled with low perceptions of in-class reading achievement were made by LD readers. These reflect a lack of self confidence and may lead to decreased persistence in effort, expectations of future failure and avoidance of tasks where difficulty has been previously experienced.

Attributions for other children's reading success and failure and personal reading success and failure collected in an open-ended manner revealed no significant group differences. Similarly, attributions for comprehension and oral reading revealed no group differences. Task difficulty also did not differentiate the attributions made for the Task-linked Perceptions and Causal Attributions by the two groups. Both groups perceived their understanding and oral reading on the easy passage as good or average, and as poor at the difficult level. Poor perceptions at the difficult level led to ascriptions of lack of ability by both groups.

Several educational implications arising from this study were discussed. These relate to both assessment and instruction of LD children. In addition, a number of suggestions for future research were made. Most of these suggestions related to refinement in methodology, however, additional reading-related variables were also considered for future examination.

Finally, while many similarities exist between LD and NLD readers in terms of metacognition, reading and causal attributions, this study has also revealed LD children need assistance with particular aspects of their reading and help in building a more positive self image. Meaningful learning opportunities where these concerns can become the focus of attention can only be achieved through suitable remedial intervention.

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