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The development of comprehension of chance language: evaluation and interpretation.

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Summary: Comprehension of chance language, such as is found in newspapers, is a fundamental aspect of statistical literacy. In this study, students' understandings of chance language were explored through responses to two items in surveys administered to 2,726 students from grades 5 to 11. One item involved evaluating the chance expressed in phrases from newspaper headlines using a number line, and responses were described in four levels of chance language evaluation. The other item involved interpreting, in context, an expression of percent chance, and responses were described in four levels of chance language interpretation. Students in higher grades were more likely to demonstrate higher levels of both evaluation and interpretation. The association between levels of evaluation and interpretation was further explored generally and in relation to one of the headlines involving percent. Implications for mathematics educators in relation to chance language in the curriculum across the years of schooling are discussed. (ERIC)

Classification: E40 D30

Keywords: general education; literacy; feedback; elementary secondary education; age differences; evaluation; academic achievement; newspapers; language

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