Title: Improving Diagnostic Accuracy: Text Comprehension and Detection of Gambling Disorder

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Abstract:

Self-report questionnaires are widely used in the identification of gambling problems. If respondents complete these questionnaires without accurately comprehending each item, the likelihood of mis-identification of problematic gambling behavior increases.

This presentation first reviews the most commonly used self-report questionnaires of gambling disorder. Using advanced text comprehension tools, we identified characteristics of questionnaire items that may interfere with accurate comprehension. These problems included items which likely overload the working memory capacity of respondents, are too syntactically complex, or use language that may be too technical or unfamiliar to the reader.

We then present data from a project designed to test whether these text comprehension tools may be useful in the process of developing a questionnaire of gambling disorder that is easier to understand and potentially more diagnostically accurate than currently used diagnostic tools such as the National Opinion Research Center DSM-IV screen for gambling problems (NODS). Using a two-group experimental design, we found that individuals accurately reported on symptoms of gambling disorder at a significantly higher rate when responding to this newly developed questionnaire than when completing the NODS. Individuals with college degrees compared to those who did not complete high school also more accurately reported symptoms of gambling disorder.

Implications:

Presently used self-report questionnaires of gambling disorder are likely misunderstood by a significant number of individuals that are screened for gambling disorder. This poses a threat to accurate detection of gambling disorder. Text comprehension tools can be used to evaluate and improve the comprehension and diagnostic accuracy of these questionnaires.

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