
Processing irony: new insights into the role of working memory and fluid intelligence

Marianna Kyriacou¹ and Franziska Köder^{*†1}

¹University of Oslo – Norway

Abstract

Verbal irony is one of the most challenging pragmatic phenomena to process. We hypothesised that greater working memory (WM) and fluid intelligence (Gf) would facilitate irony comprehension due to increased processing capacity and superior problem-solving skills respectively. In an eye-tracking study, participants read stories containing literal or ironic phrases, and completed two cognitive tasks. WM did not modulate processing. However, high Gf improved response accuracy in the irony condition, while regression patterns in low-Gf readers indicated problematic integration of irony. Our study provides novel insights into the role of general cognitive skills in the interpretation of non-literal meanings.

Keywords: irony, executive function, working memory, fluid intelligence, eyetracking, reading

*Speaker

†Corresponding author: franziska.koder@iln.uio.no