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The Effect of Personality Traits and Political Affiliation on the Misinformation Effect in Fake News Headlines

CONFERENCE ABSTRACT

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Abstract

The misinformation effect is a cognitive bias where, after being exposed to misleading information, individuals recall an event inaccurately (Ayers & Reder, 1998). Despite the rise of *fake news*, it remains unclear what makes an individual more susceptible to misinformation. This study examined how personality traits and political affiliation influenced susceptibility to the misinformation effect in fake news. Using a between-subjects quasi-experimental design, participants were a) asked about their political affiliations; b) completed the Big 5 Personality Assessment (Lang et al., 2011); and c) chose whether they believed 20 news article headlines were real or fake. Accuracy scores were calculated as the percentage of correct responses (i.e., higher scores indicated better ability to distinguish between real/fake headlines). Contrary to hypotheses, political affiliation was unrelated to susceptibility to misinformation, but personality traits were significant predictors of accuracy. Overall, accuracy was significantly positively correlated with conscientiousness [$r(57) = 0.109$, $p < 0.0001$], openness [$r(57) = 0.314$, $p < 0.0001$], and agreeableness [$r(57) = 0.171$, $p < 0.0001$], suggesting that participants

with higher levels of these traits were more accurate/less susceptible. However, accuracy was significantly negatively correlated with both neuroticism [$r(57) = -0.295$, $p < 0.0001$] and extraversion [$r(57) = -0.103$, $p < 0.0001$], suggesting that participants with higher levels of these traits were less accurate/more susceptible. Although the negative correlation between accuracy and neuroticism was significant for all political affiliations, the relationship was strongest for Republicans, [$r(20) = -0.401$, $p < 0.0001$].

Keywords: misinformation effect, susceptibility, conscientiousness

References

- Ayers, Michael S.; & Reder, Lynne M. (1998). A theoretical review of the misinformation effect: Predictions from an activation-based memory model. *Psychonomic Bulletin & Review*, 5(1), 1–21
- Lang, Frieder R.; John, Dennis; Ludtke, Oliver; Schupp, Jürgen; & Wagner, Gert. (2011). Short assessment of the Big Five: robust across survey methods except telephone interviewing. *Behavior Research Methods*, 43, 548–567.