

# Beliefs about the COVID-19 pandemic, trust in government, and vaccine intention in older adults with cognitive impairment in the United States and Italy

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## Abstract

**Background:** The degree and spread of misinformation regarding the COVID-19 pandemic has been prolific, influencing individuals of all ages. We examined belief in misinformation in older individuals with and without cognitive impairment in Boston, MA (United States) and Chieti (Italy). The purpose of this investigation was to compare the two cohorts on specific misconceptions, trust in media and government, perceived risk regarding COVID-19, and their relation to COVID-19 vaccine hesitancy and intention.

**Method:** Forty-seven subjects from the U.S. (mean age = 75.4, *SD* = 9.4) and 134 subjects from Italy (mean age = 72.2, *SD* = 7.7) were administered a telephone neuropsychological battery and MoCA. One hundred twenty-two individuals (67.4%) met the cutoff for cognitive impairment. Individuals answered a COVID-19 Misinformation Questionnaire and Perceived Risk Scale. A Vaccine Hesitancy Scale was administered 4-6 months after the initial assessment. Comparisons were made between the two cohorts using binary logistic regression, controlling for age, education, and cognitive status (i.e., MoCA).

**Results:** Individuals in the Italian cohort demonstrated greater perceived risk of contracting COVID-19 and also greater trust in the government as a source of information. A large proportion of the sample (*N*=160; 88.4%) rated the media as not at all trustworthy. Greater cognitive impairment was predictive of misconception endorsement. Further, individuals in the U.S. cohort were approximately four times as likely as individuals in the Italian cohort to believe that that COVID-19 was a bioweapon developed by a government or terrorist organization. Trust indices were not related to misconception belief. Examination of vaccine hesitancy, and confirmation of the preliminary analyses, will be undertaken following completed recruitment and testing.

**Conclusion:** When individuals hold knowledge that is incorrect, the consequences can be manifold. From our preliminary analyses, we found that trust in government was not

related to misconception endorsement; however, differences emerged between the U.S. and Italian cohorts. This examination provides a broad, cultural context to complex health beliefs, with specific implications for health behaviors such as vaccine intention, for individuals with and without cognitive impairment.