SP - (16153) - DOES SCIENTIFIC KNOWLEDGE HELP IDENTIFY COVID-19 RELATED MISINFORMATION?

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Short Abstract

Scientific literacy is claimed to help publics to engage with science-related issues, participate in scientific discourse, and make informed decisions. One of its expressions is the ability to identify misinformation regarding scientific issues, such as COVID-19. Our research examines what are the skills people use to identify misinformation about COVID-19, and connections between scientific knowledge and using these skills. Data was collected two similar online surveys (March 2020). Study 1 targeted the general public in Israel, where science education is mandatory up to the age of 15 *(n=453) and Study 2 targeted the ultra-Orthodox Jewish community that have an independent education system, where science education is emphasized less for females and not required at all for males (n=514). Findings indicate a significant connection between science knowledge, measured by on four questions from a widely used research tool to assess public understanding of science, and the level of skills people use to identify misinformation in both studies (χ^2 =12.5; p <0.01, χ^2 =10.3; p <0.01). In addition, in Study 1 we found that people used more skills than in study 2, and the frequency of use of the different skills also differs. Scientific knowledge is one of the components of scientific literacy. However, there is no consensus about the role and the types of scientific knowledge crucial for a scientific literate person. In this study we examine whether there is a connection, as well as what is the connection between scientific knowledge and expression of science literacy in daily life.*