Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Ability-related political polarization in the COVID-19 pandemic

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ABSTRACT

In two large-scale longitudinal datasets (combined $N = 5761$), we investigated ability-related political polarization in responses to the COVID-19 pandemic. We observed more polarization with greater ability in emotional responses, risk perceptions, and product-purchase intentions across five waves of data collection with a diverse, convenience sample from February 2020 through July 2020 (Study 1, $N = 1267$). Specifically, more liberal participants had more negative emotional responses and greater risk perceptions of COVID-19 than conservative participants. Compared to conservatives, liberal participants also interpreted quantitative information as indicating higher COVID-19 risk and sought COVID-related news more from liberal than conservative news media. Of key importance, we also compared verbal and numeric cognitive abilities for their independent capacity to predict greater polarization. Although measures of numeric ability, such as objective numeracy, are often used to index ability-related polarization, ideological differences were more pronounced among those higher in verbal ability specifically. Similar results emerged in secondary analysis of risk perceptions in a nationally representative longitudinal dataset (Study 2, $N = 4494$; emotions and purchase intentions were not included in this dataset). We further confirmed verbal-ability-related polarization findings on non-COVID policy attitudes (i.e., weapons bans and Medicare-for-all) measured cross-sectionally. The present Study 2 documented ability-related polarization emerging over time for the first time (rather than simply measuring polarization in existing beliefs). Both studies demonstrated verbal ability measures as the most robust predictors of ability-related polarization. Together, these results suggest that polarization may be a function of the amount and/or application of verbal knowledge rather than selective application of quantitative reasoning skills.

1. Introduction

On January 7, 2020, news broke of viral pneumonia cases caused by a novel coronavirus (SARS-CoV-2). By January's end, nearly 200 people had died, and SARS-CoV-2 was found in the US. By late February, political differences began to emerge in the US in responses to coronavirus (e.g., Gadarian, Goodman, & Pepinsky, 2020; Pew, 2020), many of which seemed to follow statements made by then-President Donald Trump. For example, on February 27, Trump tweeted that cases were dropping in China and the US only had a few cases. On February 28, in a rally in South Carolina, Trump called the virus a "new hoax" (e.g., Egan, 2020). In contrast, Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases (Overmohle, 2020), and Nancy Messonnier, director of the National Center for Immunization and Respiratory Diseases (Belluck & Weiland, 2020), issued warnings and called for action. Political differences have persisted and grown since (e.g., Clinton, Cohen, Lapinski, & Trussler, 2020; Pew, 2020). This political polarization is problematic because it creates communication and risk management issues. Mixed messaging reduces the impact of recommendations from public health officials and scientists. The uncertainty created by these messages also can lead to risky decisions (e.g., not wearing masks). And it can split people into disparate beliefs, trusting different sources of information, and behaving quite differently, in this case towards COVID-19.

Indeed, in a study of 3000 Americans, political ideology predicted COVID-19-related attitudes and behaviors more than age, gender, race,

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