Towards open and reproducible terrorism studies: Current trends and next steps

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Theory

Open science refers to a broad range of activities that increase transparency of the research process such that data as well as information about its collection and analysis are freely available, discoverable, and intelligible for evaluation and reuse by different stakeholders. Advantages of open science include a larger impact, increased likelihood of collaboration, and efficient resource use. Importantly, open science also allows for a more rigorous assessment of research, making it easier to become aware of questionable research practices and increase the reproducibility of findings. The advancement of open science practices, such as open access publishing, data sharing, and pre-registration of analyses, has been noticeable across several disciplines, in particular the psychological sciences. Terrorism scholars, however, have not yet engaged in a public reflection about open science.

Method

This study sought to examine attitudes towards and the application of different open science practices amongst terrorism scholars; we further aimed to identify barriers for 'doing' open science. To assess these research questions, we conducted an online survey study that was distributed at a conference for terrorism studies, through social media, and by contacting scholars directly. Respondents, N = 75, reported what open science activities they engaged in, what they'd hoped to do in the future, and where they saw challenges.

Findings

Results showed that the majority of terrorism scholars who participated in the survey had positive attitudes towards open science. Almost one quarter stated that they shared data for most research; and around 20% published open access and used open software for most research. The majority of respondents intended to apply more open science practices in the future. However, the reported challenges suggest that a shift towards more open terrorism studies is only possible if concerns regarding financial costs, a lack of concrete incentives and discipline-specific best practices as well as lack of knowledge are addressed. In addition, respondents highlighted that sensitive data - commonly used by terrorism scholars - can't be easily shared, malicious practices may be facilitated through open science, open access publishing is not facilitating career advancement, and open science seems to favour quantitative research, thus excludes terrorism scholars who apply qualitative methods. The paper provides practical solutions to overcome these challenges.