

# INPLASY PROTOCOL

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## Conspiracy Theory Beliefs in the Adolescent Population: A Systematic Review Protocol

Byrne, A<sup>1</sup>; Martin, D<sup>2</sup>; Jones, C<sup>3</sup>; Galbraith, N<sup>4</sup>; Mercer, T<sup>5</sup>.

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**Corresponding author:**  
Anthony Byrne

a.j.byrne@wlv.ac.uk

**Author Affiliation:**  
University of Wolverhampton.

**Support:** None.

**Review Stage at time of this submission:** Formal screening of search results against eligibility criteria.

**Conflicts of interest:**  
None declared.

**Review question / Objective:** Given the prevalence of conspiracy theory beliefs in the general population, and the emphasis on studies of adult populations in the literature, the objective of the current systematic review is to identify quantitative research examining belief in conspiracy theories among the adolescent age group (11-19 years of age). The systematic review will therefore explore the extent to which adolescent populations have been studied in relation to belief in conspiracy theories and inform future research directions for studying such beliefs in adolescence.

**Condition being studied:** Adolescent Conspiracy Theory Beliefs.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 24 February 2023 and was last updated on 24 February 2023 (registration number INPLASY202320109).

(11-19 years of age). The systematic review will therefore explore the extent to which adolescent populations have been studied in relation to belief in conspiracy theories and inform future research directions for studying such beliefs in adolescence.

**Rationale:** Whilst belief in conspiracy theories is a relatively young area of study, a significant rise in academic interest has

### INTRODUCTION

**Review question / Objective:** Given the prevalence of conspiracy theory beliefs in the general population, and the emphasis on studies of adult populations in the literature, the objective of the current systematic review is to identify quantitative research examining belief in conspiracy theories among the adolescent age group

been observed in recent years. A wide range of factors have been identified as having significant relationships with such beliefs, including schizotypy, cognitive ability, individual personality traits, and social factors, such as collective narcissism (Hornsey et al., 2022). However, the population samples used for studies of conspiracy theory beliefs are overwhelmingly sourced from the adult age group. Although the knowledge base surrounding conspiracy theory beliefs is increasing rapidly, the seeming lack of studies involving populations from the adolescent age group has left a large gap in the literature. Given that cognitive ability, schizotypy and individual differences are shown to go through significant developmental change during adolescence (Chiesi et al., 2011; Möttus et al., 2017; Wong & Raine, 2018), further study of conspiracy theory beliefs during the adolescent developmental period will contribute to both a greater understanding of belief formation and provide opportunities to influence how adolescents gather and interpret information from the world around them. Therefore, the current systematic review will examine the extent of quantitative studies exploring the underlying mechanisms of conspiracy theory beliefs in adolescent populations to identify possible directions for future studies.

**Condition being studied:** Adolescent Conspiracy Theory Beliefs.

## METHODS

**Search strategy:** To find literature relevant to the review, a search of Web of Science, Scopus, and EBSCOhost (PsycINFO, Psychology and Behavioural Sciences Collection, SocINDEX with Full Text) was carried out in line with the Preferred Reporting Items for Systematic reviews and Meta-Analyses literature search extension (PRISMA-S) format (Rethlefsen et al., 2021). Two independent reviewers conducted the search using the following Boolean operators: (adolescen\* OR teenage\* OR youth) AND (conspirac\*). The search included literature published from

beginning of records to February 23rd 2023. A search of the reference lists in included papers was conducted and PsyArxiv searched to identify pre-prints. An additional search will be carried out at the end of the review process by the two independent reviewers to capture any newly published studies relevant to the review.

**Participant or population:** Adolescents aged 11-19 years.

**Intervention:** Not Applicable.

**Comparator:** Not Applicable.

**Study designs to be included:** All quantitative study designs are eligible for inclusion.

**Eligibility criteria:** Studies were included if they were (a) quantitative studies, (b) directly measure conspiracy theory beliefs, (c) only include adolescents aged 11-19, (d) are of sufficient quality and detail, and (e) published in the English language.

**Information sources:** The search is comprised of Web of Science, Scopus, EBSCOhost (PsycINFO, Psychology and Behavioural Sciences Collection, SocINDEX with Full Text) and PsyArxiv (preprints) databases, and a reference list search of studies that meet the inclusion criteria.

**Main outcome(s):** The main outcome of the systematic review is to identify quantitative studies and report any correlational or causal relationships directly related to belief in conspiracy theories among adolescent populations.

**Additional outcome(s):** None.

**Data management:** Articles from the literature search will be transferred to the Endnote 20 (version 20.4.1 Build 16297) reference management software for duplicate removal and screening by the two independent reviewers. Any discrepancies between the two independent reviewers relating to eligibility during screening will

be resolved by discussion between the two reviewers, and resolved by an independent adjudicator where inclusion decisions cannot be resolved. Microsoft Excel (version 2212 Build 15928.20216) was used to create a data extraction spreadsheet for the purposes of article screening and review. Any conflict between reviewers following assessment with the AXIS tool will be resolved through discussion.

#### Quality assessment / Risk of bias analysis:

Eligible studies will be assessed by the two independent reviewers using the Appraisal Tool for Cross Sectional Studies (AXIS; Downes et al., 2016). AXIS uses 20 items designed to evaluate the study reliability through the review of methodology and reporting quality, including sample size, appropriateness of the population sample, analysis, response bias and data representation.

**Strategy of data synthesis:** Not applicable.

**Subgroup analysis:** Not applicable.

**Sensitivity analysis:** Articles will be subject to discussion between reviewers after quality assessment using the AXIS tool is conducted. Articles will only be excluded based on quality assessment if agreement is reached between the reviewers that the article is not of sufficient quality.

**Language restriction:** Only studies available in English will be included.

**Country(ies) involved:** United Kindom.

**Keywords:** Systematic review; adolescent; adolescence; teenage; conspiracy; conspiracy theory.

**Dissemination plans:** The systematic review will be disseminated through academic conferences and publication in a peer-reviewed academic journal.

#### Contributions of each author:

Author 1 - Byrne Anthony - Author 1 wrote the protocol for the systematic review, conducted the literature search and screening, carried out the data extraction

and quality assessment, wrote the article and carried out revision of the manuscript.

Email: a.j.byrne@wlv.ac.uk

Author 2 - David Martin - Author 2 conducted the literature search, screening, data extraction and quality assessment.

Email: d.martin8@wlv.ac.uk

Author 3 - Claire Jones - Author 3 acted as adjudicator for decisions related to screening and inclusion, reviewed the manuscript, and provided supervision for the project.

Email: claire.jones@wlv.ac.uk

Author 4 - Niall Galbraith - The author provided supervision and reviewed the final manuscript.

Email: n.galbraith@wlv.ac.uk

Author 5 - Tom Mercer - The author provided supervision and reviewed the final manuscript.

Email: t.mercer2@wlv.ac.uk

**References:** Chiesi, F., Primi, C., & Morsanyi, K. (2011). Developmental changes in probabilistic reasoning: The role of cognitive capacity, instructions, thinking styles, and relevant knowledge. *Thinking & Reasoning*, 17(3), 315–350. <https://doi.org/10.1080/13546783.2011.598401>

Downes, M. J., Brennan, M. L., Williams, H. C., & Dean, R. S. (2016). Development of a critical appraisal tool to assess the quality of cross-sectional studies (AXIS). *BMJ open*, 6(12), e011458. <https://doi.org/10.1136/bmjopen-2016-011458>

Hornsey, M. J., Bierwiazzonek, K., Sassenberg, K., & Douglas, K. M. (2023). Individual, intergroup and nation-level influences on belief in conspiracy theories. *Nature reviews psychology*, 2(2), 85–97. <https://doi.org/10.1038/s44159-022-00133-0>

Möttus, R., Soto, C. J., and Slobodskaya, H. R. (2017) Are All Kids Alike? The Magnitude of Individual Differences in Personality Characteristics Tends to Increase from Early Childhood to Early Adolescence. *Eur. J. Pers.*, 31: 313– 328. doi: 10.1002/per.2107

Rethlefsen, M. L., Kirtley, S., Waffenschmidt, S., Ayala, A. P., Moher, D., Page, M. J., Koffel, J. B., & PRISMA-S Group (2021). PRISMA-S: an extension to the PRISMA Statement for Reporting Literature Searches in Systematic Reviews.

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**Systematic reviews, 10(1), 39. <https://doi.org/10.1186/s13643-020-01542-z>**  
**Wong, K.K., & Raine, A. (2018). Developmental Aspects of Schizotypy and Suspiciousness: a Review. *Current Behavioural Neuroscience Reports* 5, 94–101. <https://doi.org/10.1007/s40473-018-0144-y>**