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The Relationship Between Antisemitic Attitudes and Conspiracy Beliefs: A Cross-Sectional Study of UK-Resident Adults

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Abstract

This cross-sectional study follows Open Science principles in estimating relationships between antisemitism, i.e. anti-Jewish bigotry, and conspiracy belief, i.e. endorsement of conspiracy theories, through analysis of data collected from a representative sample of UK adults ($n = 1722$). Antisemitism was measured using the Generalized Antisemitism scale, and conspiracy belief was measured using the Generic Conspiracist Beliefs scale. Positive relationships were found to exist between all forms of antisemitism and all types of conspiracy belief, and an average across all items of the Generic Conspiracist Beliefs scale was found to predict Generalized Antisemitism at least as well as any individual type of conspiracy belief. On a more detailed level, antisemitic attitudes relating to British Jews were found to be most strongly associated with belief in conspiracies relating to personal well-being, while antisemitic attitudes relating to the State of Israel and its supporters were found to be most strongly associated with belief in conspiracies relating to government malfeasance. Generalized Antisemitism itself was found to be most strongly associated with belief in malevolent global conspiracies. Exploratory analysis additionally examined the effect of standard demographic variables that had been introduced into the main analysis as controls. Through this means, it was found that antisemitic attitudes relating both to Jews *qua* Jews and to Israel and its supporters are more prevalent among less highly educated people and members of other-than-white ethnic groups, while antisemitic attitudes relating to Israel and its supporters are more common among younger people. In addition, it was found that female gender is associated with reduced antisemitic attitudes relating to Jews *qua* Jews and also with increased antisemitic attitudes relating to Israel and its supporters. However, the addition of demographic controls did not explain any additional variance in Generalized Antisemitism beyond that which was already explained by conspiracy belief – perhaps suggesting that demographic characteristics are more strongly associated with the inclination towards particular expressions of antisemitism than with antisemitism itself.

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Introduction

Conspiracy theories have been defined as "attempts to explain the ultimate causes of significant social and political events and circumstances with claims of secret plots by two or more powerful actors," with the term "conspiracy belief" being used to denote adherence to or endorsement of any specific conspiracy theory (Douglas et al. 2019, p. 1). A close relationship between antisemitism, i.e. anti-Jewish bigotry, and conspiracy belief has long been argued for through historical scholarship (Byford 2011; Cohn 1967), and has more recently been a finding of several independent studies (Douglas et al. 2019, p. 18). However, these studies have for the most part failed to take into account newer forms of expression of antisemitic attitudes, in particular with regard to the State of Israel. The International Holocaust Remembrance Alliance (IHRA) Working Definition of Antisemitism, whose drafting was prompted by events at the 2021 UN World Conference against Racism (Hirsh and Miller 2022), and which is commonly referred to as the IHRA definition, treats ideas about Jews and ideas about Israel alike as potentially reflecting the specific perception of Jews that is now referred to as "antisemitism" (IHRA 2016; see Harrison and Klaff 2020).

Although there has been some theoretical objection to the identification even of extreme anti-Israel sentiment with antisemitism (Klug 2012), a statistical link between attitudes to Jews and attitudes to Israel has repeatedly been found in multiple international contexts (Allington et al. 2022b; Baum and Nakazawa 2007; Beattie 2017; Cohen et al. 2009; Frindte et al. 2005; Kaplan and Small 2006; League 2023; Staetsky 2017, 2020), in recognition of which it has been argued that there is a single latent trait, i.e. Generalized Antisemitism, which finds expression both in ideas about Jews, i.e. Judeophobic Antisemitism, and in ideas about Israel, i.e. Antizionist Antisemitism (Allington et al. 2022a). However, only a single study has so far attempted to measure the relationship between conspiracism and antisemitism thus defined (Allington et al. 2023). The latter study used a balanced but non-representative UK-based quota sample to test for bivariate correlations between antisemitism and multiple types of conspiracy belief, and then studied the predictive power of the most correlated type of conspiracy belief (together with other ideological and demographic variables) through linear modelling using data drawn from a large, representative sample of the UK population. The testing of only a single type of conspiracy belief as a predictor in relation to the representative sample was a notable limitation of that study, because studies of other aspects of conspiracism have found that "substantive inferences about the causes and consequences of conspiracy beliefs are highly contingent on the [specific] conspiracy theories polled on" (Enders et al. 2021, p. 268).

The current paper therefore presents a study aiming to measure and test for the relationship between antisemitism and multiple forms of conspiracy belief using both bivariate correlation and multiple linear modelling with and without demographic controls in relation to data collected from a large, representative sample of

UK adults. Different forms of antisemitism and different types of conspiracy belief are studied both separately and in aggregate, preserving full transparency. This study forms part of an ongoing project which answers Winiewski and Bilewicz's call for research on antisemitism which employs scales validated through factor analysis and focuses not on the "central tendency" (i.e. the prevalence of antisemitism in the population) but on "complex analysis of relations between psychological, political, demographic (or other) variables" (Winiewski and Bilewicz 2013, p. 97). In keeping with the principles of Open Science, methods and hypotheses were pre-registered – that is, they were decided upon in advance of data collection and uploaded to the Open Science Framework repository before the researchers had sight of the dataset – and both the data themselves and the analytic code necessary to replicate the analyses presented here have been made public (see below). Pre-registration provides confidence that the confirmatory analysis was indeed confirmatory, i.e. that the hypotheses were not formulated post-hoc and that the methods used were not altered to produce a particular result. Publication of data and code will enable other researchers both to check that analyses have been carried out as reported and to carry out secondary analyses of their own using the same dataset.

Hypotheses

The hypothesis of a positive correlation between (on the one hand) each of (a) Generalized Antisemitism (GeAs), (b) Judeophobic Antisemitism (JpAs), and (c) Antizionist Antisemitism (AzAs) and (on the other hand) each of the five factors of the Generic Conspiracist Beliefs scale:

1. Government malfeasance (GM)
2. Malevolent global conspiracies (MG)
3. Extraterrestrial coverup (ET)
4. Personal well-being (PW)
5. Control of information (CI)

This yields a total of 15 hypotheses, for which reason it is important to correct for multiple comparisons (see "Confirmatory Analytic Methodology" below). Given the eventual findings of the study, separate hypotheses for all five factors of the Generic Conspiracist Beliefs scale might be considered to have complicated matters unnecessarily, but this could not have been anticipated at the time when the study was designed.

Methods

Data Collection

Data were collected by YouGov from a sample of British adults drawn randomly from a recruited panel, with quotas to increase representativeness. Data collection

was carried out online as part of YouGov's regular political omnibus polling. Data were collected over the weekend beginning on the evening of Friday, 17 December 2021. Data were not accessible to any human until the morning of Monday, 20 December, and were delivered to the researchers later that day. The registration document was submitted on Sunday, 19 December. The sample size was not subject to change at the researchers' request. The data were transferred to the researchers after collection was complete. A total of 68 observations were removed because the respondents in question were found to have "straightlined" the questionnaire, i.e. responded to each Likert scale by giving the same response to every item.

Materials

Antisemitism was measured using the Generalized Antisemitism scale and its Judeophobic Antisemitism and Antizionist Antisemitism subscales (Allington et al. 2022a, b), and conspiracism was measured using the five factors of the Generic Conspiracist Beliefs scale (Brotherton et al. 2013); see Appendix for details. The Generalized Antisemitism items, the Judeophobic Antisemitism items, the Antizionist Antisemitism items, and the items for each of the factors of the Generic Conspiracist Beliefs scale were numerically coded, and then a mean (M) for each of these scales or subscales was calculated for each respondent.

Confirmatory Analytic Methodology

All hypotheses were tested in the first instance by calculating the product–moment coefficient of correlation, both before and after removal of outliers (see below for definition), and in the second instance through incorporation into a series of linear models. The dependent variable was in each case one of the three measures of antisemitism used, i.e. Generalized Antisemitism, Judeophobic Antisemitism, and Antizionist Antisemitism. For each dependent variable, two models were fitted: one with conspiracy variables as the only predictors, and the other with additional demographic controls for age, gender, ethnicity and educational level. Moreover, each model was fitted twice: once before and once after removal of outliers (see below). For purposes of linear modelling, educational level was operationalized as a dummy variable (degree-level/below-degree level), as were gender (female/other-than-female) and ethnic group membership (white/other-than-white). (As it happened, there were no respondents who identified their gender otherwise than as male or female, and therefore all other-than-female respondents in fact identified as male; however, this transformation had been pre-registered and was therefore retained, even though it turned out to be irrelevant given the data collected.)

Hypotheses were tested through calculation of p-values (two-tailed), with a cut off of $p < 0.010$. In view of the large number of hypotheses, the family-wise error rate was corrected for using the Holm–Bonferroni method. For each of the analytic methods

used (product–moment correlations, linear models without demographic controls and linear models with demographic controls), the 15 hypotheses were considered a family: that is, the various methods were considered to constitute repeated tests of the same 15 hypotheses, and not tests of 60 or more separate hypotheses. This approach is conservative with regard to Type I errors (given that each predictor variable is effectively being tested three times, once against a variable which combines those employed the remaining two times) and therefore raises the risk of Type II error inflation, i.e. failure to reject the null hypothesis of no association with regard to pairs of variables for which a real association exists. This risk is compounded by the use of the Holm–Bonferroni algorithm, which constrains the probability of even a single Type I error to the cut off, and thus may fail to reject the null hypothesis with regard to individual associations for which $p < 0.010$. For the sake of transparency, unadjusted p-values and 95% confidence intervals are therefore reported in all cases, although, to avoid misleading the reader, p-values are only reported for correlation coefficients and linear slopes where there was a pre-registered hypothesis (as well as for the linear models themselves).

Outliers were defined as observations for which the Cook's distance is greater than three times the mean, both when calculating coefficients of correlation and when constructing linear models. As explained above, findings for all hypotheses were reported both before and after removal of outliers.

Exploratory Analytic Methodology

Although no formal hypotheses were pre-registered with regard to demographic variables, the pre-registration document suggested that associations between the three measures of antisemitism used and the four demographic variables controlled for (age, gender, ethnicity and educational level) could be estimated as a form of exploratory analysis. This was done through analysis of demographic-only linear models. (The pre-registration document also suggested the exploratory analysis of associations between antisemitism and certain political variables, but this analysis will be reported in a separate paper, as it was felt to over-complicate matters.) In the absence of formal hypotheses, statistical significance is not discussed, but p-values are nonetheless reported for reasons of transparency. Additionally, 95% confidence intervals are reported as in the confirmatory analytic methodology.

Sample Descriptive Statistics

Table 1 provides basic demographic descriptive statistics for the sample, both with and without demographic weighting. Please note that bivariate correlations (see "Multi-variable Linear Modelling" below) were unweighted, while linear models (again, see "Multi-variable Linear Modelling") were demographically weighted. The nine respondents who gave their religion as Judaism unsurprisingly received low scores for all forms of antisemitism (median GeAs = 1.33, median JpAs = 1.00, median AzAs = 1.50) as compared with the population as a whole

Table 1 Demographic descriptive statistics

	n	Age (years)		Gender (%)		Ethnic group (%)		Degree (%)		Religion (%)			
		M	SD	Female	Other	White	Other	Yes	No	Christian	Judaism	Other	None
Unweighted	1722	50.65	16.55	53	47	95	5	35	65	38	1	5	56
Weighted	1697	49.32	17.01	52	48	94	6	32	68	37	0	6	56

Note: n = Sample numbers; M = mean; SD = standard deviation

(median GeAs = 2.33, median JpAs = 2.00, median AzAs = 2.83), but have not been excluded from the study.

Table 2 provides unweighted and demographically weighted mean scores on the study's preregistered dependent and independent variables (plus overall score on the Generic Conspiracy Beliefs scale) by demographic group; note that Jewish respondents have been excluded from the summary by religion. Respondents of female gender exhibited lower mean scores for most factors of the Generic Conspiracist Beliefs scale than respondents of other-than-female gender, but exhibited roughly equal scores for Generalized Antisemitism, with lower scores for Judeophobic Antisemitism and higher scores for Antizionist Antisemitism. Respondents educated to degree level exhibited lower mean scores for all factors of the Generic Conspiracist Beliefs scale than respondents educated to below-degree level, and also exhibited lower scores for all forms of antisemitism except Antizionist Antisemitism. Moreover, members of other-than-white ethnic groups exhibited higher mean scores than members of white ethnic groups on all these measures. For demographically weighted distributions of the study's preregistered dependent and independent variables (plus overall score on the Generic Conspiracy Beliefs scale), see Fig. 1. It is noted that items loading onto the Control of Information factor of the Generic Conspiracy Beliefs scale were more "popular" than other items of the scale in the sense that they were most widely regarded as likely to be true, and that items of the Antizionist Antisemitism subscale of the Generic Antisemitism scale were more "popular" than those of the Judeophobic Antisemitism subscale in the sense that they tended to receive weaker disagreement, and were more often agreed with.

All of the aforementioned demographic variables were pre-registered as controls for linear modelling. However, religion, which was not pre-registered as a control, may have had a relationship with some of the key variables that were measured. As Table 2 shows, respondents of Christian religion exhibit higher mean Judeophobic Antisemitism scores but lower Antizionist Antisemitism scores as compared with respondents of no religion, while respondents of other-than-Christian religion (excluding Jews) exhibit higher mean scores than both on all three measures. Furthermore, respondents of Christian religion exhibit higher mean scores on most factors of the Generic Conspiracy Beliefs scale as compared with respondents of no religion, while respondents of other-than-Christian religion (again excluding Jews) again exhibit higher scores than both on all five factors. In addition, there appears to have been a relationship between ethnicity and religion, in that people of other-than-Christian religion were more likely to be of other-than-white ethnicity: 4% of respondents of no religion and

3% of respondents of Christian religion, but 40% of respondents of other-than-Christian religion, were members of other-than-white ethnic groups (percentages unweighted). Because the pre-registration document committed the authors to the use of ethnicity rather than religion as a control, it was not possible to rule out the possibility that religion might be operating as a mediator between ethnicity and antisemitism, although open publication of the underlying data enables other researchers to explore this and other possibilities without the need to collect new data in the first instance. However, we note that absolute numbers of respondents of other-than-Christian religion and other-than-white ethnicity were both small, with unweighted n below 100 in each case.

Power Analysis

Given a cutoff of $p < 0.010$ and 1722 observations, an effect size of $r = 0.11$, which existing research suggests might be a minimum expectation (Allington et al. 2023), can be detected with 98% power in a two-tailed test. It should be noted that this is only true with regard to unadjusted p-values relating to individual variables, and that power following application of the Holm–Bonferroni algorithm will be lower. Given a cutoff of $p < 0.010$ and 1722 observations, an effect size of $f^2 = 0.09$ – again, a plausible minimum expectation, given existing research (Allington et al. 2023) – can be detected with virtually 100% power in a two-tailed test featuring all factors of the Generic Conspiracist Beliefs scale as predictors. Unfortunately, there were 438 missing values for ethnicity, which considerably reduced the sample size when full demographic controls were introduced. However, given the same cutoff and a sample of $n = 1257$, an effect of the same size can still be detected with virtually 100% power in a two-tailed test with nine independent variables.

Findings

Hypothesis Tests

Bivariate Correlations

Figure 2 plots all forms of antisemitism against all factors of the Generic Conspiracy Beliefs scale, with demographic weighting and smoothed conditional means calculated through local regression (LOESS regression). Table 3 shows estimated product–moment coefficients of correlation for the associations between all forms of antisemitism and all factors of the Generic Conspiracist Beliefs scale, with 95% confidence intervals (CI), both before and after removal of outliers. Figure 3 visualizes the same coefficients, after removal of outliers only. Correlations for an overall score representing the mean across all items of the Generic Conspiracist Beliefs are provided for comparison, although this was not associated with any formal hypothesis. All correlations are positive, and all are significant to $p < 0.001$ (unadjusted, both with and without outliers). Following application of the Holm–Bonferroni method, all 18 hypotheses are supported to $p < 0.010$ (both with and without outliers). Thus, all forms of conspiracy belief measured by the Generic Conspiracist Beliefs scale

Table 2 Descriptive statistics: mean scores

	n	Conspiracism						Antisemitism		
		(Overall)	GM	MG	ET	PW	CI	GeAs	JpAs	AzAs
Age (years)										
18–25	99	2.56	2.75	2.47	2.26	2.29	3.05	2.28	1.72	2.83
	(164)	(2.62)	(2.81)	(2.50)	(2.35)	(2.37)	(3.09)	(2.36)	(1.90)	(2.81)
25–34	255	2.60	2.72	2.53	2.30	2.37	3.07	2.38	1.95	2.82
	(239)	(2.68)	(2.81)	(2.61)	(2.41)	(2.46)	(3.13)	(2.43)	(2.01)	(2.85)
35–44	303	2.46	2.55	2.48	2.07	2.25	2.97	2.40	2.03	2.77
	(278)	(2.51)	(2.59)	(2.51)	(2.13)	(2.30)	(3.02)	(2.44)	(2.09)	(2.79)
45–54	307	2.58	2.60	2.55	2.22	2.46	3.07	2.37	2.08	2.67
	(300)	(2.62)	(2.65)	(2.56)	(2.29)	(2.50)	(3.10)	(2.42)	(2.16)	(2.68)
55–64	311	2.40	2.36	2.38	2.06	2.31	2.91	2.33	2.06	2.59
	(303)	(2.47)	(2.42)	(2.47)	(2.15)	(2.36)	(2.96)	(2.37)	(2.10)	(2.64)
65+	447	2.35	2.15	2.49	1.98	2.30	2.84	2.30	2.08	2.52
	(413)	(2.40)	(2.20)	(2.54)	(2.04)	(2.35)	(2.88)	(2.30)	(2.08)	(2.53)
Gender										
Female	908	2.51	2.49	2.55	2.18	2.37	2.96	2.35	1.94	2.76
	(881)	(2.56)	(2.52)	(2.60)	(2.26)	(2.42)	(2.98)	(2.38)	(1.98)	(2.78)
Other-than-female	814	2.43	2.43	2.40	2.04	2.29	2.97	2.34	2.12	2.55
	(815)	(2.51)	(2.53)	(2.46)	(2.14)	(2.36)	(3.04)	(2.38)	(2.17)	(2.60)
Ethnic group										
Other-than-white	69	2.75	2.83	2.76	2.49	2.64	3.04	2.58	2.23	2.93
	(74)	(2.82)	(2.94)	(2.78)	(2.52)	(2.72)	(3.14)	(2.63)	(2.30)	(2.95)
White	1215	2.44	2.39	2.46	2.10	2.31	2.96	2.32	2.02	2.63
	(1185)	(2.50)	(2.45)	(2.51)	(2.17)	(2.36)	(2.99)	(2.36)	(2.05)	(2.66)
Education										
Degree	588	2.19	2.26	2.15	1.79	2.01	2.73	2.22	1.79	2.66
	(522)	(2.22)	(2.30)	(2.19)	(1.83)	(2.04)	(2.76)	(2.24)	(1.80)	(2.68)
Non-degree	1092	2.61	2.55	2.65	2.27	2.49	3.08	2.40	2.15	2.66
	(1118)	(2.67)	(2.62)	(2.69)	(2.36)	(2.54)	(3.12)	(2.44)	(2.19)	(2.69)
Religion (excluding Jews)										
Christian	607	2.51	2.37	2.57	2.19	2.46	2.98	2.31	2.09	2.54
	(587)	(2.57)	(2.42)	(2.62)	(2.27)	(2.50)	(3.01)	(2.36)	(2.14)	(2.59)
None	889	2.39	2.45	2.38	2.01	2.20	2.91	2.35	1.97	2.73
	(885)	(2.46)	(2.52)	(2.42)	(2.10)	(2.27)	(2.96)	(2.36)	(2.00)	(2.73)
Other-than-Christian	85	2.87	2.97	2.89	2.58	2.66	3.24	2.62	2.27	2.97
	(94)	(2.95)	(3.05)	(2.97)	(2.67)	(2.77)	(3.31)	(2.68)	(2.37)	(2.98)
Overall										
Whole sample	1722	2.47	2.46	2.48	2.12	2.33	2.96	2.35	2.03	2.66
	(1697)	(2.53)	(2.53)	(2.53)	(2.20)	(2.39)	(3.01)	(2.38)	(2.07)	(2.69)

Note: Weighted figures in parentheses. Abbreviations for Conspiracism and Antisemitic Scales are defined in the text
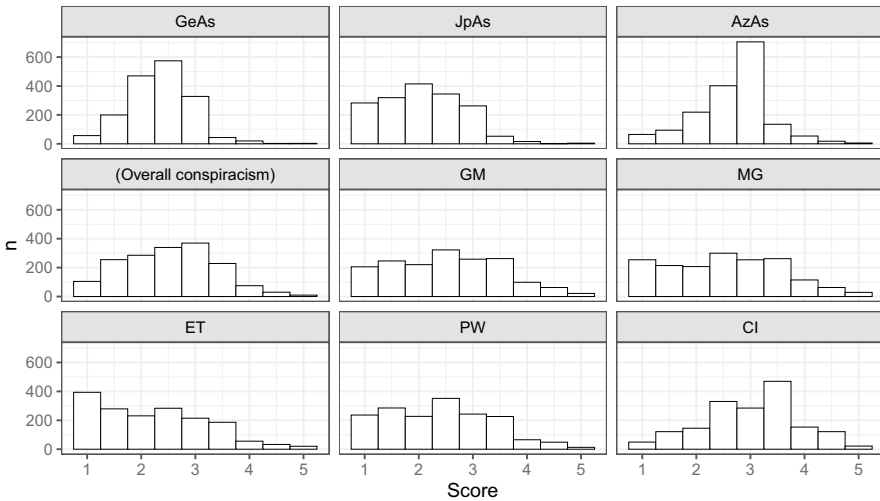
Fig. 1 Antisemitism and conspiracism, demographically weighted

were found to be positively associated with all forms of antisemitism as measured by the Generalized Antisemitism scale.

It can also be noted that all correlations become stronger after removal of outliers. Some of the correlations observed after removal of outliers are particularly strong, especially those for malevolent global conspiracies, which correlated with Generalized Antisemitism ($r(1605) = 0.48$, 95% CI [0.44, 0.52], $p < 0.001$); for government malfeasance, which correlated with Generalized Antisemitism ($r(1614) = 0.46$, 95% CI [0.42, 0.50], $p < 0.001$); and for personal well-being, which correlated with Generalized Antisemitism ($r(1615) = 0.46$, 95% CI [0.42, 0.49], $p < 0.001$; outliers excluded). (The malevolent global conspiracies factor was also found to be the most strongly correlated with Generalized Antisemitism in Allington et al. 2023) Correlations tend to be stronger for the Judeophobic Antisemitism subscale (mean $r = 0.46$, outliers excluded) and weaker for the Antizionist Antisemitism subscale (mean $r = 0.28$, outliers excluded). The strongest correlations for Judeophobic Antisemitism were for conspiracy beliefs relating to personal well-being ($r(1618) = 0.51$, 95% CI [0.47, 0.55], $p < 0.001$), closely followed by those for conspiracy beliefs relating to malevolent global conspiracies ($r(1589) = 0.51$, 95% CI [0.47, 0.55], $p < 0.001$), while the strongest correlations for Antizionist Antisemitism were for conspiracy beliefs relating to government malfeasance ($r(1622) = 0.38$, 95% CI [0.34, 0.42], $p < 0.001$), a little more distantly followed by conspiracy beliefs relating to malevolent global conspiracies ($r(1620) = 0.33$, 95% CI [0.28, 0.37], $p < 0.001$; outliers excluded). Correlations with all forms of antisemitism were weakest for conspiracy beliefs relating to the most "popular" factor of the Generic Conspiracy Beliefs scale, i.e. control of information (see the " Sample Descriptive Statistics" section), although such beliefs still correlated positively and significantly with Generalized Antisemitism ($r(1583) = 0.32$, 95% CI [0.28, 0.36], $p < 0.001$), Judeophobic

Antisemitism ($r(1566) = 0.34$, 95% CI [0.30, 0.39], $p < 0.001$), and Antizionist Antisemitism ($r(1592) = 0.17$, 95% CI [0.12, 0.22], $p < 0.001$; outliers excluded).

Although no hypothesis was pre-registered for the aggregate of all items of the Generic Conspiracist Beliefs scale (for which reason, no p-value is quoted in Table 3), it may be noted that no factor of that scale correlates more strongly with Generalized Antisemitism than the aggregate ($r(1621) = 0.48$, 95% CI [0.44, 0.52]; outliers excluded). This means that, while different factors of the scale appear to have distinct relationships with antisemitism, we may not necessarily have much to gain from considering them separately when predicting how antisemitic a given individual is likely to be – unless we consider Antizionist Antisemitism in isolation, for which the correlation for conspiracy beliefs relating to government malfeasance (see paragraph above) exceeds the correlation with the overall score for conspiracism ($r(1612) = 0.30$, 95% CI [0.26, 0.34]; outliers excluded), with no overlap between the 95% confidence intervals.

Table 3 Bivariate correlations

| Form | Factor | Including outliers | | | | | Excluding outliers | | | | |
| | | | r | | | | | r | | | |
		DF	Estimated	Low	High	p	DF	Estimated	Low	High	p
GeAs	(Overall)	1720	0.39	0.34	0.43		1621	0.48	0.44	0.52	
GeAs	GM	1720	0.36	0.31	0.40	< 0.001	1614	0.46	0.42	0.50	< 0.001
GeAs	MG	1720	0.36	0.32	0.40	< 0.001	1605	0.48	0.44	0.52	< 0.001
GeAs	ET	1720	0.31	0.26	0.35	< 0.001	1616	0.39	0.35	0.43	< 0.001
GeAs	PW	1720	0.35	0.31	0.39	< 0.001	1615	0.46	0.42	0.49	< 0.001
GeAs	CI	1720	0.28	0.24	0.33	< 0.001	1583	0.32	0.28	0.36	< 0.001
JpAs	(Overall)	1720	0.41	0.37	0.45		1611	0.50	0.46	0.53	
JpAs	GM	1720	0.31	0.27	0.35	< 0.001	1609	0.43	0.39	0.47	< 0.001
JpAs	MG	1720	0.39	0.35	0.43	< 0.001	1589	0.51	0.47	0.55	< 0.001
JpAs	ET	1720	0.35	0.30	0.39	< 0.001	1588	0.44	0.40	0.48	< 0.001
JpAs	PW	1720	0.42	0.38	0.46	< 0.001	1618	0.51	0.47	0.55	< 0.001
JpAs	CI	1720	0.31	0.27	0.35	< 0.001	1566	0.34	0.30	0.39	< 0.001
AzAs	(Overall)	1720	0.22	0.18	0.27		1612	0.30	0.26	0.34	
AzAs	GM	1720	0.28	0.24	0.33	< 0.001	1622	0.38	0.34	0.42	< 0.001
AzAs	MG	1720	0.21	0.16	0.25	< 0.001	1620	0.33	0.28	0.37	< 0.001
AzAs	ET	1720	0.16	0.11	0.20	< 0.001	1622	0.26	0.22	0.31	< 0.001
AzAs	PW	1720	0.16	0.11	0.20	< 0.001	1608	0.24	0.19	0.28	< 0.001
AzAs	CI	1720	0.16	0.11	0.20	< 0.001	1592	0.17	0.12	0.22	< 0.001

Note: DF = Degrees of freedom; 95% confidence intervals (CI) used; p-values (unadjusted) reported only for pre-registered hypotheses

Multi-variable Linear Modelling

Hypotheses were re-tested using a series of multi-variable linear models. Models where the dependent variable is Generalized Antisemitism are represented in Table 4, models where the dependent variable is Judeophobic Antisemitism are represented in Table 5, and models where the dependent variable is Antizionist Antisemitism are represented in Table 6. As detailed in the "Methods" section, four models were created for each dependent variable to serve as hypothesis tests: one model with conspiracy belief predictors only, with outliers included; one model with conspiracy belief and demographic predictors, again with outliers included; one model with conspiracy belief predictors only, with outliers excluded; and one model with conspiracy belief and demographic predictors, again with outliers excluded. For the sake of transparency, an additional pair of models was added for each dependent variable, this time with demographic predictors only (again, both with and without outliers), although these are discussed in the "Exploratory Analysis" section, as there were no corresponding pre-registered hypotheses. Please note that scale variables and age were standardized prior to model construction: thus, a coefficient of (say) 0.10 indicates that a rise of one standard deviation in the independent variable is estimated to correspond to a mean rise of 10% of a standard deviation in the dependent variable, with these trends being cumulative.

All linear models, with and without outliers, and including the demographic-only models which were not used in testing of formal pre-registered hypotheses (see "Exploratory Analysis", below), were significant to $p < .001$. The most complete models (i.e. those featuring factors of the Generic Conspiracist Beliefs scale as well as demographic variables) were able to explain a substantial proportion of variance in levels of antisemitism, i.e. 25% of variance in Generalized Antisemitism ($r^2 =0.25$, adj. $r^2 =0.24$, $F(9, 1169) = 42.50$, $p < 0.001$), 33% of variance in Judeophobic Antisemitism ($r^2 =0.33$, adj. $r^2 =0.32$, $F(9, 1168) = 63.65$, $p < 0.001$) and 16% of variance in Antizionist Antisemitism ($r^2 =0.16$, adj. $r^2 = 0.16$, $F(9, 1163) = 25.41$, $p < 0.001$), following removal of outliers: by Cohen's criteria, a moderate effect for the latter and a large effect for each of the former two (J. Cohen, 1988, pp. 413–414). Models without demographic controls explained a slightly lower proportion of variance, with a fall of 0 percentage points for variance in Generalized Antisemitism ($r^2 =0.25$, adj. $r^2 =0.25$, $F(5, 1608) = 106.05$, $p < 0.001$), 6 percentage points for variance in Judeophobic Antisemitism ($r^2 = 0.27$, adj. $r^2 =0.27$, $F(5, 1612) = 118.36$, $p < 0.001$), and a proportionally more notable 5 percentage points for variance in Antizionist Antisemitism ($r^2 =0.11$, adj. $r^2 =0.11$, $F(5, 1599) = 40.45$, $p < 0.001$; outliers excluded). In view of the finding that adding demographic controls to the model for Generalized Antisemitism explained no variance that was not already explained by conspiracism, it is worth noting that similar proportions of variance are explained by some of the bivariate relationships represented in Table 3 and discussed in the "Bivariate Correlations" section: as noted before, the association between overall mean score across all factors of the Generic Conspiracist Beliefs scale and Generalized Antisemitism is summarized by an estimated correlation coefficient of $r =0.48$, which indicates that 23% of the variance measured in either variable within the

sample can be explained by variance in the other. Thus, the shift from a bivariate model ignoring the factor structure of the Generic Conspiracist Beliefs scale to a multi-variable linear model treating all types of conspiracy belief separately and (in addition) applying demographic controls increases the explained proportion of variance in Generalized Antisemitism within the sample by only 2 percentage points. Although a test of significance cannot be applied here because of the absence of a pre-registered hypothesis, it would be difficult to regard such an increase as particularly great or important (especially when one bears in mind that an increase in the number of independent variables will usually lead to a rise in r^2 due to overfitting, hence the calculation of adjusted r^2).

For complete models with estimated coefficients, 95% confidence intervals and non-adjusted p-values, see Tables 4, 5, 6 and Fig. 4. As discussed in the "Confirmatory Analytic Methodology" section, model coefficients were treated as parallel tests of the same 15 hypotheses, using the Holm–Bonferroni method to correct for the family-wise error rate with a cut-off of $p < 0.010$. If we begin with the models without demographic controls but with outliers included, with regard to Generalized Antisemitism, the significant predictors were government malfeasance, malevolent global conspiracies and personal well-being; with regard to Judeophobic Antisemitism, the significant predictors were malevolent global conspiracies and personal well-being; and with regard to antizionist antisemitism, the only significant predictor was government malfeasance. If we move on to the models with demographic controls whilst continuing to include outliers, with regard to Generalized Antisemitism, the only significant predictor was malevolent global conspiracies; with regard to Judeophobic Antisemitism, the significant predictors were malevolent global conspiracies and personal well-being; and with regard to Antizionist Antisemitism, the only significant predictor was government malfeasance. Excluding outliers changes the picture only slightly. Again beginning without demographic controls, with regard to Generalized Antisemitism, the significant predictors were government malfeasance, malevolent global conspiracies and personal well-being; with regard to Judeophobic Antisemitism, the significant predictors were malevolent global conspiracies and personal well-being; and with regard to Antizionist Antisemitism, the only significant predictor was government malfeasance. If we move on to the models with demographic controls following exclusion of outliers, with regard to Generalized Antisemitism, the significant predictors were government malfeasance and malevolent global conspiracies; with regard to Judeophobic Antisemitism, the only significant predictor was personal well-being; and with regard to Antizionist Antisemitism, the only significant predictor was government malfeasance. Among these predictors, control of information is anomalous in that its coefficient is negative.

To reiterate a point made in the "Confirmatory Analytic Methodology" section, these are not the only predictor variables found to have an association with antisemitism in the data, but the only ones for which it is possible to reject the null hypothesis after controls whilst constraining the probability of even a single Type I error to be less than 1 in 100. For estimated effect sizes and unadjusted p-values with regard to individual predictor variables, the reader is referred again to Tables 4, 5, and 6. It is noted that all associations between forms of antisemitism and factors of the Generic Conspiracist Beliefs scale individually significant to $p < 0.010$ (unadjusted)

Table 4 Linear models for Generalized Antisemitism

	Including outliers					Excluding outliers				
		β					β			
	Estimated	Low	High	t	p	Estimated	Low	High	t	p
Including outliers: $r^2 = 0.17$, adj. $r^2 = 0.16$ ($f^2 = 0.20$), $F(5, 1716) = 68.72, p < 0.001$ — Excluding outliers: $r^2 = 0.25$, adj. $r^2 = 0.25$ ($f^2 = 0.33$), $F(5, 1608) = 106.05, p < 0.001$										
(Intercept)	0.03	−0.01	0.08	1.47		0.03	0.00	0.07	1.78	
GM	0.18	0.11	0.25	5.10	< 0.001	0.15	0.09	0.22	4.86	< 0.001
MG	0.15	0.07	0.22	3.88	< 0.001	0.21	0.14	0.28	5.87	< 0.001
ET	0.05	−0.01	0.11	1.49	0.135	0.09	0.03	0.15	3.10	0.002
PW	0.15	0.07	0.23	3.69	< 0.001	0.13	0.06	0.20	3.55	< 0.001
CI	−0.08	−0.15	−0.01	−2.35	0.019	−0.08	−0.15	−0.02	−2.72	0.007
Including outliers: $r^2 = 0.04$, adj. $r^2 = 0.03$ ($f^2 = 0.04$), $F(4, 1252) = 12.15, p < 0.001$ — Excluding outliers: $r^2 = 0.05$, adj. $r^2 = 0.05$ ($f^2 = 0.05$), $F(4, 1172) = 16.32, p < 0.001$										
(Intercept)	0.17	0.08	0.26	3.70		0.17	0.09	0.25	4.29	
Age	−0.05	−0.11	0.00	−1.91		−0.06	−0.11	−0.01	−2.42	
Female	−0.04	−0.15	0.06	−0.79		−0.03	−0.12	0.07	−0.52	
Other-than-white	0.42	0.18	0.66	3.45		0.43	0.17	0.69	3.24	
Degree	−0.36	−0.48	−0.24	−5.95		−0.40	−0.51	−0.29	−7.40	
Including outliers: $r^2 = 0.18$, adj. $r^2 = 0.18$ ($f^2 = 0.21$), $F(9, 1247) = 30.96, p < 0.001$ — Excluding outliers: $r^2 = 0.25$, adj. $r^2 = 0.24$ ($f^2 = 0.32$), $F(9, 1169) = 42.50, p < 0.001$										
(Intercept)	0.11	0.03	0.19	2.58		0.12	0.05	0.19	3.32	
GM	0.13	0.04	0.21	3.00	0.003	0.14	0.06	0.21	3.60	< 0.001
MG	0.17	0.08	0.26	3.71	< 0.001	0.18	0.09	0.26	4.20	< 0.001
ET	0.02	−0.05	0.10	0.58	0.564	0.06	−0.01	0.12	1.68	0.092
PW	0.16	0.06	0.25	3.20	0.001	0.14	0.05	0.22	3.15	0.002
CI	−0.04	−0.12	0.04	−1.06	0.289	−0.06	−0.13	0.01	−1.67	0.096
Age	−0.03	−0.08	0.03	−0.95		−0.02	−0.06	0.03	−0.64	
Female	−0.08	−0.18	0.03	−1.47		−0.05	−0.14	0.04	−1.18	
Other-than-white	0.25	0.03	0.48	2.22		0.24	0.02	0.45	2.17	
Degree	−0.17	−0.29	−0.06	−2.94		−0.21	−0.31	−0.12	−4.25	

Note: 95% confidence intervals (CI) used; p-values (unadjusted) reported only for pre-registered hypotheses

were positive, with the exception of control of information, which had a negative association with all forms of antisemitism in all models (although this was not always statistically significant). Following demographic controls, the coefficient for control of information was in all cases negative but non-significant, being $\beta = -0.06$, 95% CI [−0.13, 0.01], $p = 0.117$ with regard to Generalized Antisemitism, $\beta = -0.03$, 95% CI [−0.10, 0.04], $p = 0.477$ with regard to Antizionist Antisemitism, and $\beta = -0.06$, 95% CI [−0.13, 0.01], $p = 0.117$ with regard to Judeophobic Antisemitism (outliers excluded).

The detailed picture emerging from the various linear models is thus (perhaps unsurprisingly) considerably more complicated than that emerging from the bivariate analyses reported in the "Bivariate Correlations" section. Placing the various factors of the Generic Conspiracist Beliefs scale in direct competition with one another within single models reveals that some are differently associated with Judeophobic Antisemitism and with Antizionist Antisemitism, while one, i.e. control of information, may perhaps have a different relationship to antisemitism than the remaining factors in that its positive bivariate association (see the "Bivariate Correlations" section) becomes negative following controls for other types of conspiracy belief. The most notable finding is that the strongest predictor of Judeophobic Antisemitism (following demographic controls) was belief in conspiracies relating to personal well-being ($\beta = 0.32$, 95% CI [0.24, 0.41], $p < 0.001$) – a variable which had no significant predictive power in the equivalent model for Antizionist Antisemitism ($\beta = -0.06$, 95% CI [−0.14, 0.02], $p = 0.164$) – while the strongest predictor of Antizionist Antisemitism (again following demographic controls) was belief in conspiracies relating to government malfeasance ($\beta = 0.22$, 95% CI [0.14, 0.29], $p < 0.001$) – a variable which, conversely, had no predictive power at all in the equivalent model for Judeophobic Antisemitism ($\beta = 0.00$, 95% CI [−0.07, 0.08], $p = 0.935$; outliers excluded). With regard to Generalized Antisemitism, the strongest predictor following controls was belief in conspiracies relating to personal well-being ($\beta = 0.14$, 95% CI [0.05, 0.22], $p = 0.002$), followed by belief in conspiracies relating to government malfeasance ($\beta = 0.14$, 95% CI [0.06, 0.21], $p < 0.001$; outliers excluded). On the other hand, the question must arise as to whether one really needs this extra complexity, given that an overall average across all factors of the Generic Conspiracy Beliefs scale predicts Generalized Antisemitism about as well as the most detailed model.

Exploratory Analysis

The demographic-only models were, by comparison with the conspiracy belief models, able to predict relatively little variation in levels of antisemitism, i.e. 5% of variation in Generalized Antisemitism ($r^2 = 0.05$, adj. $r^2 = 0.05$, $F(4, 1172) = 16.32$, $p < 0.001$), 11% of variation in Judeophobic Antisemitism ($r^2 = 0.11$, adj. $r^2 = 0.11$, $F(4, 1168) = 37.44$, $p < 0.001$), and a proportionally more notable 7% of variation in Antizionist Antisemitism ($r^2 = 0.07$, adj. $r^2 = 0.07$, $F(4, 1185) = 23.64$, $p < 0.001$; outliers excluded). Age was found to have a negative association with Antizionist Antisemitism ($\beta = -0.17$, 95% CI [−0.22, −0.12]), as in another recent UK study
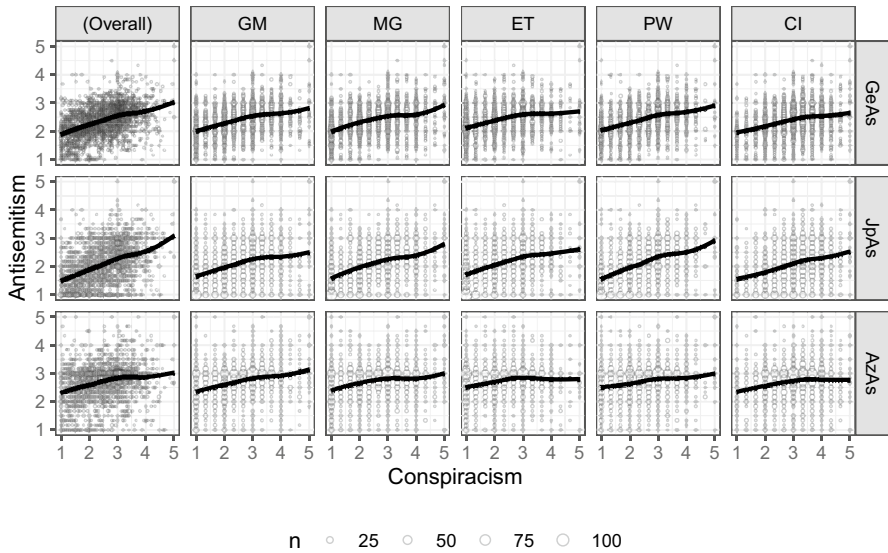
Fig. 2 Antisemitism versus conspiracism, demographically weighted with smoothed conditional means
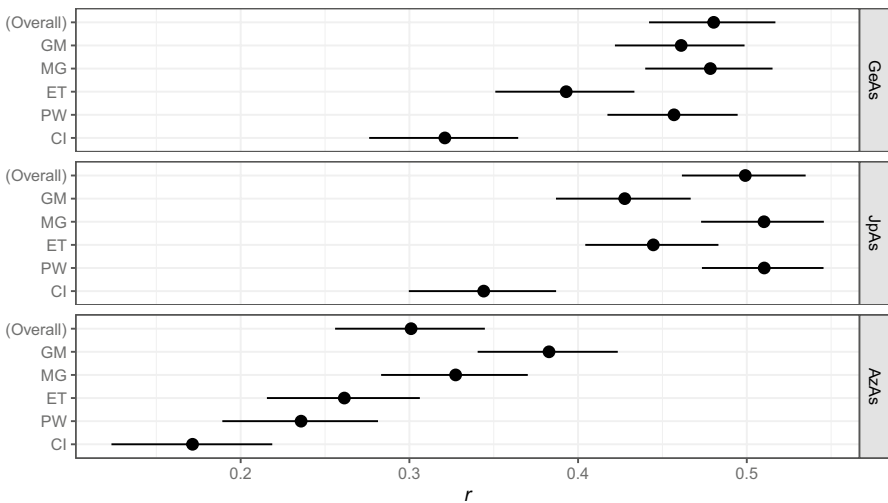

Fig. 3 Bivariate correlations with 95% CI; unweighted, outliers excluded

(Allington et al., 2023), but, in contrast to the analysis carried out in that study (which also found a weak but significant negative association between age and Judeophobic Antisemitism), the analysis carried out here suggests a weak positive association between age and Judeophobic Antisemitism ($\beta = 0.08$, 95% CI [0.03, 0.13]), with the overall result of a weak negative association with Generalized Antisemitism ($\beta = -0.06$, 95% CI [−0.11, −0.01]). Given the cross-sectional nature of the data, it

Table 5 Linear models for Judeophobic Antisemitism

Including outliers: $r^2 = 0.20$, adj. $r^2 = 0.20$ ($f^2 = 0.24$), $F(5, 1716) = 84.45$, $p < 0.001$ Excluding outliers: $r^2 = 0.27$, adj. $r^2 = 0.27$ ($f^2 = 0.36$), $F(5, 1612) = 118.36$, $p < 0.001$

	Including outliers					Excluding outliers				
	Estimated	β Low	β High	t	p	Estimated	β Low	β High	t	p
(Intercept)	0.03	−0.01	0.07	1.43		0.00	−0.04	0.04	0.08	
GM	−0.01	−0.08	0.05	−0.40	0.688	−0.01	−0.08	0.05	−0.38	0.707
MG	0.15	0.08	0.23	4.01	< 0.001	0.17	0.10	0.24	4.76	< 0.001
ET	0.08	0.02	0.14	2.53	0.012	0.08	0.02	0.14	2.73	0.006
PW	0.31	0.23	0.39	7.55	< 0.001	0.32	0.25	0.40	8.41	< 0.001
CI	−0.05	−0.12	0.02	−1.50	0.134	−0.05	−0.11	0.02	−1.47	0.143

Including outliers: $r^2 = 0.08$, adj. $r^2 = 0.08$ ($f^2 = 0.09$), $F(4, 1252) = 28.18$, $p < 0.001$ Excluding outliers: $r^2 = 0.11$, adj. $r^2 = 0.11$ ($f^2 = 0.12$), $F(4, 1168) = 37.44$, $p < 0.001$

	Including outliers					Excluding outliers				
	Estimated	β Low	β High	t	p	Estimated	β Low	β High	t	p
(Intercept)	0.33	0.24	0.42	7.46		0.28	0.20	0.36	6.87	
Age	0.06	0.01	0.12	2.29		0.08	0.03	0.13	3.03	
Female	−0.28	−0.39	−0.17	−5.13		−0.28	−0.38	−0.18	−5.67	
Other-than-white	0.39	0.16	0.63	3.26		0.38	0.10	0.67	2.62	
Degree	−0.48	−0.60	−0.37	−8.06		−0.51	−0.62	−0.40	−9.28	

Including outliers: $r^2 = 0.25$, adj. $r^2 = 0.24$ ($f^2 = 0.32$), $F(9, 1247) = 45.80$, $p < 0.001$ Exc. outliers: $r^2 = 0.33$, adj. $r^2 = 0.32$ ($f^2 = 0.48$), $F(9, 1168) = 63.65$, $p < 0.001$

	Including outliers					Excluding outliers				
	Estimated	β Low	β High	t	p	Estimated	β Low	β High	t	p
(Intercept)	0.27	0.19	0.35	6.69		0.26	0.19	0.33	7.08	
GM	−0.03	−0.11	0.05	−0.76	0.447	0.00	−0.07	0.08	0.08	0.935
MG	0.15	0.07	0.24	3.49	0.001	0.11	0.03	0.19	2.63	0.009
ET	0.05	−0.02	0.13	1.50	0.135	0.09	0.03	0.16	2.76	0.006
PW	0.31	0.22	0.40	6.53	< 0.001	0.32	0.24	0.41	7.51	< 0.001
CI	−0.04	−0.12	0.03	−1.11	0.269	−0.06	−0.13	0.01	−1.57	0.117
Age	0.06	0.01	0.12	2.36		0.08	0.03	0.13	3.41	

Table 5 (continued)

| | Including outliers | | | | | Excluding outliers | | | | |
| | β | | | | | β | | | | |
	Estimated	Low	High	t	p	Estimated	Low	High	t	p
Female	−0.33	−0.43	−0.23	−6.60		−0.36	−0.45	−0.28	−8.20	
Other-than-white	0.21	−0.01	0.43	1.92		0.24	0.02	0.46	2.12	
Degree	−0.26	−0.37	−0.15	−4.62		−0.25	−0.35	−0.15	−4.98	

Note: 95% confidence intervals (CI) used; *p*-values (unadjusted) reported only for pre-registered hypotheses

Table 6 Linear models for Antizionist Antisemitism

	Including outliers					Excluding outliers				
	β					β				
	Estimated	Low	High	t	p	Estimated	Low	High	t	p
Including outliers: $r^2 =0.09$, adj. $r^2 =0.09$ ($f^2 =0.09$), $F(5, 1716) = 32.99$, $p < 0.001$ Exc. outliers: $r^2 =0.11$, adj. $r^2 =0.11$ ($f^2 =0.12$), $F(5, 1599) = 40.45$, $p < 0.001$										
(Intercept)	0.02	−0.02	0.07	0.99		0.06	0.02	0.10	3.03	
GM	0.32	0.25	0.39	8.97	< 0.001	0.27	0.21	0.34	8.27	< 0.001
MG	0.09	0.02	0.17	2.37	0.018	0.11	0.04	0.18	3.14	0.002
ET	0.00	−0.07	0.06	−0.10	0.917	0.05	−0.01	0.11	1.63	0.103
PW	−0.07	−0.15	0.01	−1.61	0.108	−0.09	−0.16	−0.01	−2.33	0.020
CI	−0.08	−0.15	−0.02	−2.39	0.017	−0.06	−0.13	0.00	−2.02	0.043
Including outliers: $r^2 =0.05$, adj. $r^2 =0.05$ ($f^2 =0.05$), $F(4, 1252) = 16.37$, $p < 0.001$ Excluding outliers: $r^2 =0.07$, adj. $r^2 =0.07$ ($f^2 =0.08$), $F(4, 1185) = 23.64$, $p < 0.001$										
(Intercept)	−0.07	−0.15	0.02	−1.54		−0.03	−0.11	0.04	−0.88	
Age	−0.16	−0.22	−0.11	−5.87		−0.17	−0.22	−0.12	−7.11	
Female	0.22	0.12	0.33	4.15		0.24	0.15	0.33	5.18	
Other-than-white	0.31	0.07	0.54	2.58		0.23	−0.01	0.47	1.87	
Degree	−0.11	−0.22	0.01	−1.81		−0.16	−0.27	−0.06	−3.21	
Including outliers: $r^2 =0.12$, adj. $r^2 =0.12$ ($f^2 =0.13$), $F(9, 1247) = 19.69$, $p < 0.001$ Excluding outliers: $r^2 =0.16$, adj. $r^2 =0.16$ ($f^2 =0.19$), $F(9, 1163) = 25.41$, $p < 0.001$										
(Intercept)	−0.10	−0.19	−0.02	−2.45		−0.05	−0.12	0.02	−1.42	
GM	0.26	0.17	0.34	5.88	< 0.001	0.22	0.14	0.29	5.68	< 0.001
MG	0.12	0.04	0.21	2.73	0.006	0.12	0.04	0.19	2.91	0.004
ET	−0.02	−0.10	0.05	−0.55	0.584	0.00	−0.06	0.07	0.10	0.917
PW	−0.06	−0.16	0.04	−1.25	0.213	−0.06	−0.14	0.02	−1.39	0.164
CI	−0.03	−0.11	0.05	−0.67	0.502	−0.03	−0.10	0.04	−0.71	0.477
Age	−0.11	−0.17	−0.06	−4.02		−0.14	−0.18	−0.09	−5.67	

Table 6 (continued)

| | Including outliers | | | | | Excluding outliers | | | | |
| | | β | | | | | β | | | |
	Estimated	Low	High	t	p	Estimated	Low	High	t	p
Female	0.22	0.12	0.33	4.25		0.24	0.15	0.32	5.37	
Other-than-white	0.21	−0.02	0.44	1.82		0.14	−0.08	0.37	1.28	
Degree	−0.02	−0.13	0.10	−0.28		−0.10	−0.20	0.00	−2.03	

Note: 95% confidence intervals (CI) used; *p*-values (unadjusted) reported only for pre-registered hypotheses

is impossible to determine whether this is a true age-related association (in which case, the younger members of the sample would be expected to exhibit progressively lower levels of Antizionist Antisemitism and Generalized Antisemitism as they grow older) or a generational association (in which case, those younger participants might be expected to carry their attitudes with them as they grow older, and perhaps to impart them to newer generations also). On the other hand, female gender was found to have a negative association with Judeophobic Antisemitism ($\beta = -0.28$, 95% CI [-0.38, -0.18]), and a positive association with Antizionist Antisemitism ($\beta = 0.24$, 95% CI [0.15, 0.33]), with the overall result of an extremely weak negative association with Generalized Antisemitism, the 95% confidence interval crossing zero, $\beta = -0.03$, 95% CI [-0.12, 0.07] (outliers excluded). By contrast, membership of an other-than-white ethnic group was (as in Allington et al., 2023) found to have strong, positive associations with Judeophobic Antisemitism ($\beta = 0.38$, 95% CI [0.10, 0.67]) and Generalized Antisemitism ($\beta = 0.43$, 95% CI [0.17, 0.69]) and a weaker positive association with Antizionist Antisemitism ($\beta = 0.23$, 95% CI [-0.01, 0.47]; outliers excluded). Degree-level education was (again, as in Allington et al., 2023) found to have a negative association with Antizionist Antisemitism
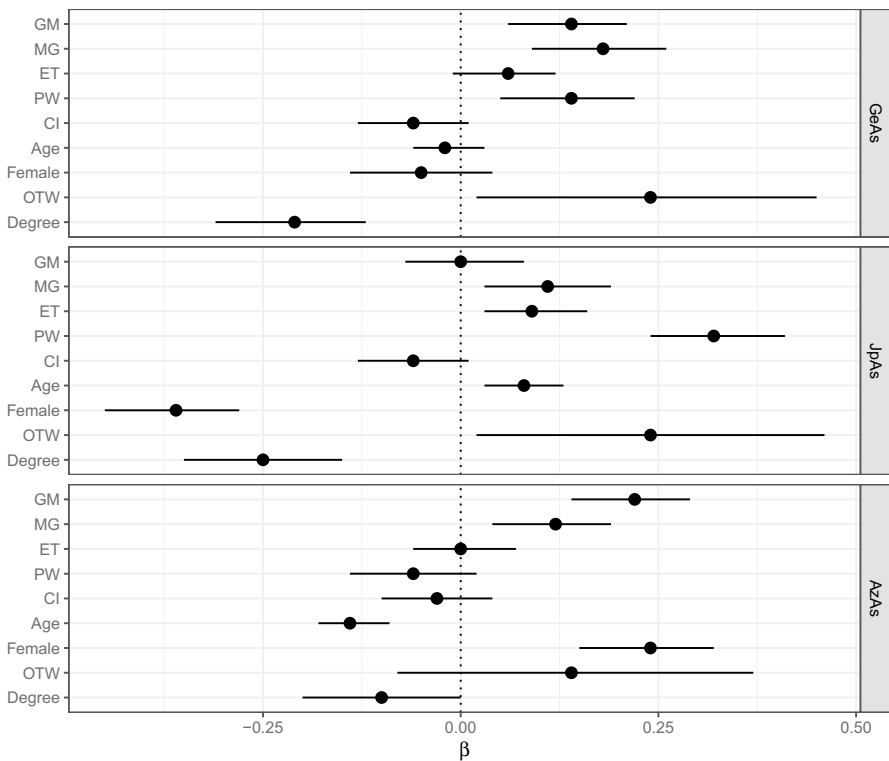
Fig. 4 Linear model coefficients with 95% CI; demographically weighted, outliers excluded. OTW, other-than-white ethnicity

($\beta = -0.16$, 95% CI [−0.27, −0.06]), with Generalized Antisemitism ($\beta = -0.40$, 95% CI [−0.51, −0.29]), and especially with Judeophobic Antisemitism ($\beta = -0.51$, 95% CI [−0.62, −0.40]; outliers excluded). Although the coefficients change, these observations broadly hold true after controls for the various factors of the Generic Conspiracist Beliefs scale (see "Bivariate Correlations"), with the caveat that the lower bound of the 95% confidence interval for the association between Antizionist Antisemitism and membership of an other-than-white ethnic group falls below zero, while its coefficient ($\beta = 0.14$, 95% CI [−0.08, 0.37]) continues to exceed that of a one standard deviation rise in any factor of the Generic Conspiracist Beliefs scale save for government malfeasance ($\beta = 0.22$, 95% CI [0.14, 0.29]). This suggests that associations between demographic variables and antisemitism are unlikely to be fully explicable in terms of associations between demographic variables and forms of conspiracy belief. However, a full mediation analysis would be necessary to probe the basis for this interpretation – in addition to which, it must be remembered that the explained proportion of variance in Generalized Antisemitism is unchanged by the introduction of demographic controls, which suggests that such an approach is only likely to tell us much about scores on one or other of that measure's subscales.

Discussion

This article provides evidence that conspiracy belief in any of the assessed conceptual domains individually predicts all forms of antisemitism in the absence of controls. Thus, any form of conspiracy belief would appear to come with an increased likelihood of openness to antisemitic attitudes: a finding which appears to support arguments which have been made on the basis of a critical reading of the writings of professional conspiracy theorists (Byford 2011, p. 107). On a more detailed level, multi-variable linear modelling indicates that some types of conspiracy belief may have a different relationship to specific forms of antisemitism following the introduction of controls (including controls for other types of conspiracy belief). Among the factors of the Generic Conspiracist Beliefs scale, the best predictor of Antizionist Antisemitism appears to be belief in conspiracies relating to Government Malfeasance, but, following controls, this variable was found to have no predictive power regarding Judeophobic Antisemitism. Conversely, the best predictor of Judeophobic Antisemitism following controls appears to be belief in conspiracies relating to personal well-being – but, in the equivalent linear model, this variable was found to have no significant relationship with Antizionist Antisemitism. This finding could potentially be taken to suggest that Antizionist Antisemitism is a more political form of antisemitism, while Judeophobic Antisemitism is more personal – or to put it another way, that antisemitism might perhaps find a Judeophobic expression to the extent that people have a conspiracist understanding of their personal problems, but find an Antizionist expression to the extent that people have a conspiracist understanding of political problems. However, the current study's most important finding is likely to be that, when we consider Generalized Antisemitism, such complex modelling appears unnecessary: an individual's average level of conspiracy belief across all conceptual domains predicts their overall level of

antisemitism, and differentiating between types of conspiracy belief and applying demographic controls yields only a small increase in explained variance. That is, it appears that a bivariate model of the relationship between conspiracy beliefs and antisemitic attitudes is likely to prove adequate for many purposes. Conspiracism predicts antisemitism.

The finding that conspiracy beliefs relating to control of information predict lower levels of antisemitism following controls for other factors of the Generic Conspiracist Beliefs scale was completely unexpected. To be clear, any form of conspiracy belief predicts all forms of antisemitism to a high level of statistical significance when taken in isolation. The finding is not, then, that the relationship between this type of conspiracy belief and antisemitism is negative per se. Rather, analysis of the data suggests that, given two people with otherwise identical levels of conspiracy belief, the one with higher levels of belief in conspiracies specifically relating to the control of information might be expected to hold certain kinds of antisemitic attitudes less strongly, or to reject them more strongly, than the other. Why this might be is not a question which can be answered on the basis of the study conducted here.

The finding of an apparent relationship between antisemitism and ethnicity was made only through exploratory analysis, and thus holds a different status to the above, but it replicates findings from earlier studies which have found heightened levels of antisemitism among ethnic or religious minority communities in the UK and elsewhere (Allington et al. 2023; Anti-Defamation League 2011; Baum and Nakazawa 2007; Ehsan 2020; Hersh and Royden 2021; Jikeli 2015; Staetsky 2017, 2020). It should be noted that the association does not appear wholly explicable by reference to heightened levels of conspiracy belief among members of minority groups (which have previously been found by Goertzel 1994; Uscinski and Parent 2014, pp. 83–84; and Freeman and Bentall 2017), because it was generally found to survive controls for various types of conspiracy belief. However, given the apparent (but untested) relationships between ethnicity and religion and between religion and antisemitism, the possibility that the relationship between ethnicity and antisemitism may be at least partially mediated by religion is raised, although – given the non-pre-registration of religion as a control – it has not been possible to explore it within the parameters the current study. (In this connection, it may be relevant to note that Staetsky 2020 finds heightened anti-Jewish and anti-Israeli attitudes among British Muslims.) The finding of higher Judeophobic Antisemitism but lower Antizionist Antisemitism among women likewise lacks the weight of a pre-registered and tested hypothesis, but appears to replicate the findings of one previous study (Alet23), and thus should also be taken seriously; it suggests that, while overall levels of antisemitism may be flat across gender, men and women may express antisemitism in different ways. The finding that higher education predicts lower antisemitism appears to contradict the findings of one recent US-based study which took a very different approach to the measurement of antisemitism (Greene et al. 2021).

It is worth devoting some thought to the question of why the introduction of demographic controls appears to contribute little or nothing to an explanation of variance in Generalized Antisemitism, while contributing much more notably to

explanations of variance in Judeophobic Antisemitism and Antizionist Antisemitism. A possible interpretation, consistent with arguments regarding the factor structure of the Generalized Antisemitism scale (Allington et al. 2022b), is that demographic variables only serve to incline individuals at a given level of antisemitism towards one or other of these surface expressions of that theoretically latent trait.

Conclusion

The study reported here presents evidence of a positive association between conspiracism and antisemitism, taking into account both the variety of conceptual domains with regard to which conspiracy beliefs may be held and the diverse nature of antisemitism in the contemporary world. It does so in relation to data collected from a large, representative sample of UK-resident adults, using extensively validated questionnaire instruments, i.e. the Generic Conspiracist Beliefs scale and the Generalized Antisemitism scale, thus providing scope for comparison with the findings of existing and future research, including potential replication studies. It reports both descriptive statistics and statistical models in depth, enabling other researchers to interrogate its findings fully, and it provides confidence intervals for all coefficients, enabling effect sizes to be reasoned about in a fully informed manner, and also to become available for employment in power analyses for future studies. Coefficients and statistical tests are reported both before and after removal of outliers, and before and after the application of demographic controls, providing a high degree of assurance that findings are not artefactual; through use of the Holm–Bonferroni correction in conjunction with a stringent cut-off for p, this article furthermore provides particularly strong evidence that the positive findings it reports are unlikely to be the chance result of multiple comparisons. Moreover, this article and the study it reports have followed principles of Open Science, including pre-registration, open data and open code, thus maintaining a high standard for transparency, whilst at the same time providing further confidence in the findings by eliminating potential areas for statistical malpractice. All of these points should be borne in mind when assessing the robustness of the overall support which this article finds for the substantial body of theoretical and historical scholarship which suggests that antisemitism is indeed positively related to conspiracy belief, as well as the robustness of this article's detailed findings with regard to associations between specific forms of antisemitism and specific types of conspiracy belief: associations which have not hitherto been the subject of extensive theorizing.

This study's principal finding is that conspiracy beliefs in any of the domains covered by the Generic Conspiracist Beliefs scale predict antisemitism when considered individually, and that an average across all of those domains predicts antisemitism very nearly as well as a multi-variable linear model which treats all domains of conspiracy belief separately and which also controls for the standard demographic variables of gender, age, ethnicity and level of education. Moreover, while demographic variables increase the explained proportion of variance in each of the Generalized Antisemitism scale's two subscales beyond that which is explained by conspiracy

beliefs alone, adding demographic controls to a model predicting Generalized Anti-semitism itself yields no such increase – perhaps suggesting that demographic characteristics largely serve to incline individual respondents towards one or other manifest expression of the underlying latent variable (see Allington et al. 2022b), having only a weak relationship to the latent variable itself.

However, the demographic associations which this paper finds for antisemitism replicate the findings of earlier studies, and can therefore be treated as relatively robust, although they remain unexplained. The finding that membership of an other-than-white ethnic group is associated with heightened antisemitism may perhaps require discussion on a policy level, as it could potentially be taken to suggest the possible need for community-focused interventions. By contrast, the finding that degree-level education predicts lower antisemitism, even after controls for conspiracy beliefs, can perhaps be treated as encouraging, as it suggests that rising levels of education might tend to be accompanied by falling levels of antisemitism over time – although the relatively small proportion of variance explained by demographic-only models suggests that any such reduction would be likely to be slight.

Limitations and Scope for Further Work

This study is cross-sectional and as such cannot provide a basis for speculation on causal relationships or temporal trends. The limitation with regard to temporality could be overcome through longitudinal study. The limitation with regard to causation may be inevitable, as to induce conspiracy beliefs in those who do not hold them would be problematic both on an ethical and on a practical level. A further limitation is inherent to the (admittedly standard) use of Likert items to measure antisemitism: it has been argued that measures of antisemitism which elicit agreement or disagreement with specific beliefs may be in part measures of ability to guess the researcher's intention, which might in turn bias studies relying on such a data collection methodology towards underestimation of levels of socially sanctioned attitudes among more highly educated respondents (Greene et al. 2021, p. 2). Alternative data collection methods such as presentation of participants with manipulated scenarios could be used to overcome this limitation by measuring antisemitism in a way which provides participants with fewer clues as to the purpose of the research (as in Greene et al. 2021). Lastly, descriptive statistics indicate that there may be a relationship between religion and several variables included in the analysis, in particular, ethnicity, conspiracy beliefs and antisemitism, but non-pre-registration of religion as a control would have rendered it problematic to explore the possibility that it is operating as a mediator, given that the approach taken here was only to look for effects associated with variables mentioned in the pre-registration document.

Although the effects which this study has found to be associated with demographic variables are slight in comparison to the effects which it has found to be associated with conspiracy belief, such effects may nonetheless be considered likely to prove important on a population level, and as such deserve further investigation. If conspiracy belief does not explain the relationships between (on the one hand) age, gender and ethnicity, and (on the other hand) antisemitism, what might? Religion

has been suggested as a potential mediator between ethnicity and antisemitism, and the open release of the data employed in this study will enable other researchers to re-model the data using religion as a potential mediator between ethnicity and antisemitism. However, a new dataset created using either (a) a much larger sample or (b) intentional oversampling of religious and/or ethnic minorities will be likely to prove necessary to disentangle any associations that are found to exist, because absolute numbers of members of minority communities in any demographically representative sample of standard size will inevitably be low. Moreover, plausible mediators for effects associated with age and gender remain to be investigated, and will of necessity require the collection of new data.

Technical Note

All statistical analyses for this article were carried out using `R`, v. 4.2.0 (R Core Team, 2022), employing the `pwr` library, v. 1.3-0 (Champely 2020) for power analysis and the `dplyr`, v. 1.0.9 (Wickham et al. 2022) and `BBmisc`, v. 1.0.9 (Bischl et al. 2022) libraries for data manipulation. The `knitr`, v. 1.39 (Xie 2014) and `KableExtra`, v. 1.3.4 (Zhu 2021) libraries were used for preparation of tables and drafts.

Pre-registration of Methods and Hypotheses

All methods and hypotheses were registered on the Open Science Framework repository prior to receipt of the data by the researchers (https://doi.org/10.17605/OSF.IO/67UR2).

Declarations

Conflict of interest The authors declare no conflict of interest.

Ethical Statement All methods were carried out in accordance with guidelines at King's College London and YouGov. The study was carried out with theapproval of the King's College London Research Ethics Committee (ref. MRM-20/21-20918).

Informed Consent All participants provided informed consent to take part in the study.

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