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Antisemitism is predicted by anti-hierarchical aggression, totalitarianism, and belief in malevolent global conspiracies

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Two cross-sectional studies were carried out in order to identify predictors of antisemitism, measured using the Generalised Antisemitism or GeAs scale. In the first, which used a self-selecting sample of UK-resident adults ($n = 809$), age, gender, ethnicity, and educational level as well as a wide range of ideological predictors were analysed as bivariate predictors of antisemitism. In the second, which used a representative sample of UK-resident adults ($n = 1853$), the same demographic predictors plus the non-demographic predictors found to have the strongest bivariate relationships with Generalised Antisemitism in the previous study were used to construct a linear model with multiple predictors. Ethnicity, support for totalitarian government, belief in malevolent global conspiracies, and anti-hierarchical aggression were identified as the strongest predictors of Generalised Antisemitism. However, support for totalitarian government was only found to predict 'old' antisemitic attitudes (measured using the Judeophobic Antisemitism or JpAs subscale) and not 'new' antisemitic attitudes (measured using the Antizionist Antisemitism or AzAs subscale), whereas ethnicity, anti-hierarchical aggression, and belief in malevolent global conspiracies were found to predict both 'old' and 'new' antisemitic attitudes. This finding adds nuance to ongoing debates about whether antisemitism is more prevalent on the political right or left, by suggesting that (at least in the UK) it is instead associated with a conspiracist view of the world, a desire to overturn the social order, and a preference for authoritarian forms of government—all of which may exist on the right, the left, and elsewhere. Data from both samples are open, as is the code used in order to carry out the analyses presented here.

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Introduction

It has long been recognised that anti-Jewish attitudes can be expressed through discourse on Israel and its supporters (Billig, 1984a, b; Cohen, 1984). In the early 21st century, this phenomenon came to be labelled the ‘new antisemitism’ or ‘new Judeophobia’ (Laqueur, 2006; Taguieff, 2004; Wistrich, 2004a, b), with resurgent antizionism being understood as ‘a new form of appearance of underlying antisemitism’ (Hirsh, 2007, p. 5). While this ‘new’ antisemitism has come to prominence in the 21st century, many of its essential characteristics were observed much earlier (e.g. Améry, 1969a, b; Patterns of Prejudice, 1970), and can indeed be traced back to the middle of the 20th century, and even to the Holocaust (Judaken, 2008, p. 533). Although theoretical objections have been raised in relation to the idea—central to the ‘new antisemitism’ concept—that antisemitism may be expressed not only in relation to Jews *qua* Jews, but also in relation to the State of Israel (see especially Klug, 2012), numerous studies have found a statistically significant association between scores on questionnaire instruments designed to measure anti-Jewish and anti-Israeli attitudes (ADL, 2023, Allington et al., 2022a, b; Baum and Nakazawa, 2007; Beattie, 2017; Cohen et al., 2009; Frindte et al., 2005; Kaplan and Small, 2006; Staetsky, 2017, 2020), and it seems appropriate that the deep connection between the two should be reflected in the IHRA Working Definition of Antisemitism (IHRA, 2016; see Harrison and Klaff, 2021 for discussion), which makes no distinction between ‘old’ and ‘new’ antisemitism, and had been adopted by at least 36 countries by the time of writing (Liphshiz, 2021).

Research focus on replicating the finding that anti-Israeli attitudes predict anti-Jewish attitudes, though important, may have distracted attention from the question of which factors might predict both. This is particularly important given the changing status of antisemitism both on the political right and on the political left. In the 1980s, it was observed that the antisemitism of British far-right leaders brought them no political advantage, having little appeal to members of the communities within which they sought to recruit followers (Billig, 1988), and it has since been argued that a reorientation around anti-Muslim (as opposed to anti-Jewish) agitation has been key to recent electoral gains by radical right-wing parties in Europe (Berntzen, 2020). Moreover, since the 1980s, the influence of antisemitic ideas on the far left has emerged as a concern for many scholarly observers (Billig, 1984a, b; Bolton, 2020; Fine and Spencer, 2017; Hirsh, 2007; Johnson, 2019; Julius, 2010; Rich, 2018 [2017]), and an argument has been made that conspiracy narratives used by both right- and left-wing populists possess an inherent potential for linkage with antisemitism (Bolton and Pitts, 2018, pp. 214–219): as one observer puts it, contemporary antisemitism transcends the ideological differences associated with ‘opposite ends of the political continuum ... by travelling ... through the connective tissues of enduring tropes’ (Elman, 2022, p. 112).

In this context, it appears likely that neither self-identification with the political right nor self-identification with the political left will be particularly powerful predictors of antisemitic attitudes: an assumption which receives support from Staetsky’s finding of pockets both of antisemitism and of opposition to antisemitism not only among UK residents who identify as very right-wing but also among UK residents who identify as very left-wing (2020). To identify variables predictive of antisemitism whether on the right or on the left, or even causal factors potentially driving some members of the right or the left to view Jews unfavourably while others do not, would thus constitute an important contribution to knowledge. For example, Hersh and Royden plausibly argue (like certain scholars cited above) that members of the far left and the far right might be more likely to subscribe to a populist view of society as unjustly dominated by elite groups with which Jews

might have a perceived association—but then carry out studies in which the explanatory variable is not adherence to any particular understanding of society, but (again) self-placement on an abstract political spectrum (2022, p. 8, 13). We would thus advocate for a data collection strategy that enables analysts to take account of ideological distinctions potentially distinguishing more antisemitic individuals from less antisemitic individuals whether they are found on the left, the right, or the centre of the conventional Western political spectrum, or somewhere else entirely: for example, by measuring subscription or otherwise to the populist view of society which Hersh and Royden argue might be observed both on the far left and on the far right. Fortunately, the research literature provides us with a number of useful instruments with which to categorise individuals’ ideological beliefs more precisely than has been attempted in earlier studies of antisemitism, as well as with theoretical explanations providing plausible reasons for expecting at least some of these categorisations to have a possible association with antisemitism.

One of the clearest candidates for a predictor is suggested by Social Dominance Theory: an understanding of the society in which ‘all of the familiar forms of group-based oppression ... [are conceptualised] as special cases of a more general tendency for humans to form and maintain group-based hierarchy’ (Sidanius et al., 2004, p. 846). Just as psychometric scales have been developed to measure antisemitism, other scales have been developed as a measure of the strength of this ‘general tendency’ as it manifests on an individual level, where it is referred to as Social Dominance Orientation. If antisemitism, as a form of group-based oppression, derives from a general tendency towards group-based hierarchy, we would expect valid measures of it to correlate with valid measures of Social Dominance Orientation. A related theoretical construct is that of Right Wing Authoritarianism, which is one of the most intensively studied traits in political psychology. There are numerous scales for measuring this purported trait, the first of which was developed by Altemeyer (1981), in part as an improvement on the now largely discredited F-scale, which was originally intended as a measure of the potential for endorsement of fascism (Adorno et al., 1950). Right Wing Authoritarianism is a measure of the extent to which individuals position themselves in support of or opposition to the hierarchies existing in their social environment, and thus might be supposed to have a relationship with antisemitism for much the same reasons as Social Dominance Orientation. In this connection, it is noted that Frindte et al. (2005) found antisemitism in Germany to be predicted by Right Wing Authoritarianism, but not by Social Dominance Orientation, while Swami (2012) found belief in antisemitic conspiracy theories among participants from Malaysia to be predicted both by Right Wing Authoritarianism and by Social Dominance Orientation. Right Wing Authoritarianism and Social Dominance Orientation have been found to predict prejudice among Swedish students (Ekehammar et al., 2004), although antisemitism was not a focus of that particular study.

The converse of Right-Wing Authoritarianism is Left Wing Authoritarianism, which Altemeyer defined not by association with any particular ideology, but by an enthusiasm for overthrowing whichever social order happens to be in force (Altemeyer, 1996, p. 218); thus, in contexts where ‘[l]eft-wing economic ideology is ... both the traditional status quo and a “sacred belief”’, those who hold ‘left wing’ beliefs may exhibit high levels of not of Left but of Right-Wing Authoritarianism in Altemeyer’s sense (Conway III et al., 2021, p. 425), while revolutionary right-wing extremist groups such as the US-based Posse Comitatus exhibit an authoritarianism that can be called ‘left wing’ in the specific sense that it seeks to overturn rather than to

support existing social hierarchies (1996, p. 218). Given the argument (above) that anti-establishment social movements may under certain circumstances be conducive to antisemitism (not to mention the undeniable antisemitism of some revolutionary groups, of course including the *Posse Comitatus*), it would seem reasonable to hypothesise a relationship between Left Wing Authoritarianism and antisemitism. Although no published study has yet tested such a relationship, sympathy for (implicitly insurrectional) violent extremism has been found to be associated with antisemitism in the UK (Staetsky, 2017, 2020), as has a desire to ‘overthrow capitalism’ (Staetsky, 2020).

As it has been argued that ‘antisemitism differs from other forms of racism because it uses conspiracy theories to claim that Jews are a powerful, controlling influence in society’ (Rich, 2018 [2017], p. 201), another psychological construct of clear potential relevance is that of conspiracy belief. Although at least one study has not found generic conspiracy belief to predict antisemitism (Swami, 2012), the historic association between conspiracism and antisemitism (see Allington et al., 2021; Allington and Joshi, 2020; Byford, 2011; Cohn, 1967) provides a theoretical warrant for re-testing for a relationship. Given the well-documented antisemitism of Nazi Austro-Germany, Fascist Italy, and the Soviet Union, especially under Stalin (e.g. Adler, 2005; Herf, 2008 [2006]; Szaynok, 2002; Tabarovsky, 2019), it also seems reasonable to hypothesise a connection between antisemitism and support for totalitarianism: that is, the political system which maintains itself through ‘a combination of force, indoctrination, and propaganda’ and within which it is axiomatic ‘that opponents ... can be eliminated, that terror is necessary to fulfill historical destiny, and that an individual who tried, either actively or passively, to exclude himself [sic] from the activities of the community had to be destroyed’ (Curtis, 1979, p. 4, 6). However, such support has yet to be tested as a predictor. Ethnic nationalism is another plausible predictor of antisemitism, extreme forms of which have emerged in the course of attempts to construct an ethnic or ‘racial’ in-group that excludes Jews (Bergen, 1994; Kofman, 2006); again, this has not been tested, although one UK-based study finds that opposition to immigration more than doubles the odds of holding antisemitic attitudes (Staetsky, 2020). Lastly, cynicism and trust have been found to have an association both with populism and with conspiracy beliefs (Meuer and Imhoff, 2021; Papaioannou et al., 2022), each of which has been argued to have a possible relationship with antisemitism (see above), although a relationship between cynicism or trust and antisemitism only appears to have been tested for in a single previous study, the results of which are unclear (Simon, 2003).

In terms of demographic predictors, a number of studies in the US and Germany have found a negative association between antisemitism and education and a positive association between antisemitism and age (ADL, 2011; Weil, 1980, 1985), and one has found a negative relationship between antisemitism and exclusive education in the US (Greene and Kingsbury, 2017), while another has found a positive association between antisemitism and education (Greene et al., 2021). Moreover, heightened levels of antisemitism among members of ethnically- or religiously-defined minority groups have been found in a number of studies carried out in western countries (ADL, 2011; Baum and Nakazawa, 2007; Ehsan, 2020; Hersh and Royden, 2022; Jikeli, 2015; Simon, 2003; Staetsky, 2017, 2020). Lower antisemitism among women as compared to men has also occasionally been reported (Baum and Nakazawa, 2007; Simon, 2003; Staetsky, 2020).

This article thus makes a start on the important search for predictors of antisemitism by employing a two-step approach using relatively large samples collected in the UK and taking full account both of ‘old’ and of ‘new’ forms of antisemitism. Study 1

measures bivariate associations between antisemitism, basic demographic variables, and a wide range of relevant ideological scales. Study 2 retests the strongest three non-demographic correlates from Study 1, plus the same demographic variables, as predictors of antisemitism, through linear modelling, using a large representative sample with demographic weighting.

Research materials are included in a supplemental file, referred to throughout the body of this article as the Appendix. Tables of descriptive statistics and bivariate associations between demographic variables and antisemitism are also included in the appendix; they are distinguished from tables placed in the body of this article by being referred to as Supplemental Tables. The code and data necessary to replicate the analyses and visualisations presented here were made available to peer reviewers at the time of manuscript submission and were released ahead of publication via the Open Science Framework repository (<https://osf.io/9p2f8/>).

Samples

Data for Study 1 were collected through the Qualtrics platform from a self-selecting, quota-limited sample recruited via Prolific ($n = 809$, collected 30–31 October 2020), with equal-sized quotas for respondents under and over the age of 25 as well as for male and female respondents, and with recruitment limited to respondents resident in the UK. Balance between 18–25-year-olds and 26+-year-olds was considered desirable because of the argument that established societal roles and a stable self-identity are attained from the age of 26 and over (Arnett, 2000). Data for Study 2 were collected by opinion research company, YouGov ($n = 1853$, 16–17 December 2020) from randomly-sampled members of a pre-recruited panel of UK residents, using YouGov’s online data collection platform (note that an earlier analysis of the same dataset was presented in CAA, 2021). Sampling was done within demographic quotas based on the 2011 UK census. Due to non-response bias, male respondents and members of other-than-white ethnic groups were under-represented in the sample relative to that particular census (see Wells, 2020 on under-representation of other-than-white ethnic groups as a longstanding issue in the British polling industry), but demographic weights (calculated by YouGov) were used to produce greater representativeness in the linear models constructed as part of Study 2 (in both studies, univariate and bivariate analyses were unweighted).

See Supplemental Table 1 (Appendix) for a mean and standard deviation for age and percentages for other demographic variables. Gender was measured as a three-level variable with a neutral option but was for analytic purposes operationalised as a dichotomous variable and dummy-coded: female = 1, other-than-female = 0. Ethnicity was measured as a multi-level variable with options derived from the UK national census but was for analytic purposes operationalised as a dichotomous variable and dummy-coded: other than white = 1, white = 0. Educational level was operationalised in terms of the highest educational qualification achieved by each respondent, with the resulting multi-level variable being dichotomised and dummy-coded: degree holders = 1, non-degree holders = 0 (where a degree may be an undergraduate, postgraduate, or doctoral degree). Please note that missing data were excluded from each column, but percentages are not guaranteed to sum to 100 because they have been rounded to the nearest whole number. It can be seen that the mean age in the sample collected for Study 1 was much lower than that for Study 2 (32.42 vs. 51.85 years) and that it contained a lower proportion of female participants (50% vs. 59%) and participants from white ethnic groups (83% vs. 95%).

A seven-point scale from ‘very left-wing’ to ‘very right-wing’ was used to measure self-assessed political position. For the

purposes of Supplemental Table 2 (Appendix), this seven-point political scale was collapsed into a three-level variable, with all left-wing positions and all right-wing positions conflated. Self-assessed political position is reported here in order to facilitate comparison between the two samples and in order to assist in comparisons with studies that have used a similar measure as their sole ideological variable. There is no way of knowing what the population percentages are for self-identification with the left, centre, and right of the political spectrum. However, we note that the sample for Study 1 included a much higher proportion of participants identifying with the left of the political spectrum than the sample for Study 2 (55% vs. 31%).

Research materials

The Generalised Antisemitism or GeAs scale was designed to measure ‘old’ and ‘new’ antisemitic attitudes equally, and is comprised of two subscales (Allington et al., 2022a; see Allington and Joshi, 2021 for survey research employing an earlier version). ‘Old’ antisemitic attitudes, measured using the Judeophobic Antisemitism or JpAs subscale (developed from that used in multiple surveys of antisemitic attitudes in the UK by CAA, 2015; CAA, 2017; CAA, 2019; see also Allington, 2019, 2020), comprise prejudicial attitudes towards Jews of the kind which were established before the Holocaust and the founding of the State of Israel, measured through agreement with statements such as ‘Compared to other groups, Jewish people have too much power in the media’ and disagreement with contrary statements, while ‘new’ antisemitic attitudes, measured using the Antizionist Antisemitism or AzAs subscale (developed from that proposed by Allington and Hirsh, 2019; which was employed in the ADL, 2023 survey of antisemitic attitudes in the US), comprise a combination of irrationally extreme anti-Israel positions and ‘old’ antisemitic attitudes expressed in relation to Israel and its supporters rather than to Jews *qua* Jews, measured through agreement with statements such as ‘Israel can get away with anything because its supporters control the media’ and disagreement with contrary statements. Earlier analysis of responses to GeAs scale items shows that the two subscales are positively correlated (including among male and female respondents and among younger and older respondents) and that all items of the scale are invariant across age and gender in relation to the same factor model with regard to the same large representative sample of UK-resident adults (Allington et al., 2022b).

A number of other scales were used to measure traits that might be expected to relate to antisemitism for plausible theoretical reasons (see the section “Introduction”). The Generic Conspiracy Beliefs scale (Brotherton et al., 2013) was designed to measure endorsement of conspiracy beliefs across a range of domains: malevolent global conspiracies (e.g. ‘The power held by heads of state is second to that of small unknown groups who really control world politics’), conspiracies affecting personal wellbeing (e.g. ‘Experiments involving new drugs or technologies are routinely carried out on the public without their knowledge or consent’), government malfeasance (e.g. ‘The government is involved in the murder of innocent citizens and/or well-known public figures, and keeps this a secret’), the cover-up of extraterrestrial activity (e.g. ‘Secret organizations communicate with extraterrestrials, but keep this fact from the public’), and control of information (e.g. ‘Groups of scientists manipulate, fabricate, or suppress evidence in order to deceive the public’). McClosky and Chong’s (1985) Totalitarianism scale was designed in order to measure sympathy for a totalitarian style of government among activists of the extreme left and right, with regard to such matters as the treatment of political opponents; it does not ask respondents for their view of actual totalitarian regimes, but instead

elicits respondents’ agreement or disagreement with statements which reflect the kinds of arguments used to justify totalitarian political systems without reference to any specific ideology, such as ‘To bring about great changes for the benefit of mankind often requires cruelty and even ruthlessness’. Ethnic nationalism was measured using a group of items adapted from block Q4 of the Comparative Study of Electoral Systems module of the 2017 British Election Study, which invited respondents to assess the importance ‘for being truly British’ of certain characteristics, such as having ‘British ancestry’ (Fieldhouse et al., 2018). This block of items was modified through the addition of a religious characteristic (‘To be Christian’) and an overtly racialised characteristic (‘To be white’). Political cynicism was assessed using a scale measure that had earlier been found to predict racial prejudice, eliciting agreement or disagreement with statements such as ‘Politicians are only interested in getting and maintaining power’; related measures of Social Cynicism, measured using statements such as ‘People will tell lies to get ahead’, and Political Trust, measured using statements such as ‘Politicians usually have good intentions’, were also employed (Pattyn et al., 2012). The instrument employed to measure Social Dominance Orientation in the current study includes two factors, i.e. (orientation towards) Dominance, measured through agreement with statements such as ‘Some groups of people are simply inferior to other groups’, and (orientation towards) Egalitarianism, measured through agreement with statements such as ‘It is unjust to try to make groups equal’ (Ho et al., 2015). Endorsement of political violence was measured here using a shortened version of the Sympathies for Radicalisation or SyFoR scale, which asks respondents about the extent to which they ‘sympathise with or condemn’ acts such as ‘Using bombs to fight injustice’ (Bhui et al., 2014). Following an earlier study, this scale was modified to replace a mention of suicide bombing (a tactic specifically associated with Islamist radicalism) with a reference to ‘street violence’ (see Allington et al., 2019).

The instrument here used to measure Right-Wing Authoritarianism is that developed by Duckitt et al. (2010). It comprises three dimensions: Submission, measured through a level of agreement with statements such as ‘Obedience and respect for authority are the most important virtues children should learn’, Aggression, measured through a level of agreement with statements such as ‘The way things are going in this country, it’s going to take a lot of “strong medicine” to straighten out the troublemakers, criminals, and perverts’, and Conventionalism, measured through agreement with statements such as ‘Traditions are the foundation of a healthy society and should be respected’. The instrument employed here to measure Left-Wing Authoritarianism was developed by Costello et al. (2021). It comprises three factors: Anti-hierarchical Aggression, which corresponds to the desire for potentially violent revolution, and is measured through agreement with statements such as ‘When the tables are turned on the oppressors at the top of society, I will enjoy watching them suffer the violence that they have inflicted on so many others’, Anti-conventionalism, which corresponds to rejection of established social norms, and is measured through agreement with statements such as ‘The “old-fashioned ways” and “old-fashioned values” need to be abolished’, and Top-down Censorship, which corresponds to support for restrictions on free expression in line with a stereotypically ‘liberal’ position in the so-called ‘culture wars’ famously associated with university campuses in the US (see e.g. Shepard and Culver, 2018), and is measured through agreement with statements such as ‘I should have the right not to be exposed to views I find offensive’.

Across the two studies, the Generalised Antisemitism scale was treated as a single measure: effectively the overlap between ‘old’ and ‘new’ antisemitism. However, findings were also reported for

each of the measure's two subscales, in order to establish whether different predictors are necessary for each. For example, a scale that correlates with Generalised Antisemitism might do so because of its correlation with Judeophobic Antisemitism, Antizionist Antisemitism, or both. Conversely, a scale that does not correlate with Generalised Antisemitism might do so because it does not correlate with Judeophobic Antisemitism or with Antizionist Antisemitism, or it might do so because it correlates positively with one and negatively with the other. The position taken in this article is that it is not possible to understand 21st-century antisemitism without taking into account both its Judeophobic and its antizionist manifestations: a position informed not only by the repeated finding of a correlation between measures of the two but by the recent finding that the factor model which best explains variation in responses to the twelve statements comprising the Generalised Antisemitism scale is one that assumes a single latent trait which underlies all of them, in addition to a pair of traits inclining individual respondents more towards one or more towards the other form of antisemitism (Allington et al., 2022b).

In all other cases, measures that are conceived to comprise multiple dimensions, domains, or factors were treated as collections of subscales. This was done both in order to preserve maximum informativeness and in order to reduce the length of the questionnaire employed in Study 2, in which the measurement instruments used comprised the complete Generalised Antisemitism scale and the three dimensions, domains, or factors of other scales which were found to be most predictive of aggregate Generalised Antisemitism score, plus standard demographic questions.

Please note that all scale variables were normalised to the range 0.00–1.00 prior to analysis.

Scale descriptive statistics

Rank-order correlation with subjective left–right orientation, skewness, and kurtosis for scales used in Studies 1 and 2 are presented in Supplemental Table 3 (Appendix). Because left–right orientation was coded with higher ranks corresponding to right-wing positions, positive correlations indicate an association with subjective alignment with the political right and negative correlations indicate an association with subjective alignment with the political left. For each of the scales used in Study 1, there were 808 complete observations, and for each of the scales in Study 2, there were 1853 complete observations. However, for the subjective left–right position, there were only 744 complete observations in Study 1 and only 1396 in Study 2, because there were substantial numbers of individuals who chose not to place themselves on the scale. (Beyond the theoretical objections raised in Section 1, this problem in itself raises a practical argument against using subjective identification with abstract degrees of 'left' and 'right', or 'liberal' and 'conservative', as predictors, namely that not all potential participants are keen to categorise themselves in such terms, perhaps because these continua do not reflect the ways in which they understand their own political commitments or affinities.)

While the Totalitarianism scale was designed in order to measure support for repressive government equally across the right and left of the political spectrum, scores were generally higher among respondents aligned with the right, although this relationship was weaker in Study 1 than in Study 2 ($r_s = 0.23$ vs. $r_s = 0.28$). Conversely, scores on the Sympathies for Radicalisation scale, which was designed in order to measure support for violent insurrection regardless of orientation towards the traditional western political spectrum, were higher among respondents aligned with the left (in Study 1, $r_s = -0.22$; the measure was

unused in Study 2). In Study 1, all factors of the Right Wing Authoritarianism scale were strongly predictive of self-identification as 'right wing' ($r_s \in [0.54, 0.55]$), while factors of the Left Wing Authoritarianism scale varied widely in their opposite correlation with subjective political position ($r_s \in [-0.65, -0.30]$). However, it is perhaps notable that the negative correlation between subjective political position and Anti-conventionalism ($r_s = -0.65$) was so much stronger than the negative correlations for Anti-hierarchical Aggression ($r_s = -0.42$) and Topdown Censorship ($r_s = -0.30$), perhaps indicating that a 'left wing' *social identity* is more closely tied to the rejection of social conservatism which that factor of the scale implies than it is to the revolutionary and pro-censorship positions implied by the other two factors—at least among the participants in this particular study (for participants in Study 2, the correlation with Anti-hierarchical Aggression was very similar, $r_s = -0.32$). Ethnic Nationalism had a notably positive correlation with subjective political identity in Study 1 ($r_s = 0.48$), as might perhaps be expected: Mudde, for example, identifies the 'aspir[ation] for the congruence of state (the political unit) and nation (the cultural unit)' as one of two components of the 'core ideology' of the contemporary far right, the other being xenophobia (2000, p. 177).

Study 1

Hypotheses. The approach taken was to test for relationships between Generalised Antisemitism and all of (a) the scale measures discussed in the section "Research materials" and (b) the demographic measures discussed in the section "Samples" (with the exception of self-assessed political position). Correlations with the Judeophobic Antisemitism and Antizionist Antisemitism subscales are also reported for purposes of transparency and informativeness, although these played no role in variable selection for Study 2.

Methodology. Bivariate relationships between antisemitism and binary demographic variables were assessed through Welch unequal variance *t*-tests using *d*, i.e. mean difference divided by sample standard deviation, as a measure of effect size, while bivariate relationships between antisemitism and age were assessed through calculation of the product-moment coefficient of correlation. Bivariate relationships between antisemitism and the various political and personality scales were assessed through calculation of the product-moment coefficient of correlation.

Power analysis. When testing a hypothesis in relation to data collected from a sample, it is important to consider statistical power. In relation to sample surveys, statistical power is defined as the probability (assuming no sources of error other than sampling error) of rejecting the null hypothesis, i.e. that there is no association between variables, at a given threshold of statistical significance, in the event that an association of a given strength really exists in the population from which the sample is drawn (or, to put it less positively, in the event that such an association would be found to exist were measurements to be taken from the population as a whole). In layperson's terms, statistical power is a measure of confidence that a hypothesised relationship will not fail to be detected simply because the sample from which measurements have been taken is too small for such a relationship to have a reasonable chance of being found to be statistically significant.

The use of gender-based quotas makes it possible to compare levels of antisemitism among male- and female-identified respondents using Welch *t*-tests with a high level of power. Given a significance threshold of $p < 0.010$, a true mean difference

Table 1 Scale measures: product-moment coefficients of correlation with measures of antisemitism (Study 1), DF = 806.

Measure	GeAs				JpAs				AzAs			
	<i>r</i>				<i>r</i>				<i>r</i>			
	Est.	Low	High	<i>p</i>	Est.	Low	High	<i>p</i>	Est.	Low	High	<i>p</i>
GeAs	1.00	1.00	1.00	<0.001	0.83	0.80	0.85	<0.001	0.81	0.79	0.83	<0.001
JpAs	0.83	0.80	0.85	<0.001	1.00	1.00	1.00	<0.001	0.34	0.28	0.40	<0.001
AzAs	0.81	0.79	0.83	<0.001	0.34	0.28	0.40	<0.001	1.00	1.00	1.00	<0.001
Totalit.	0.34	0.28	0.40	<0.001	0.43	0.37	0.48	<0.001	0.13	0.06	0.19	<0.001
GCB glob.	0.34	0.28	0.40	<0.001	0.34	0.27	0.40	<0.001	0.21	0.15	0.28	<0.001
LWA antih. aggr.	0.32	0.25	0.38	<0.001	0.15	0.08	0.22	<0.001	0.37	0.31	0.43	<0.001
GCB pers.	0.30	0.23	0.36	<0.001	0.32	0.26	0.38	<0.001	0.16	0.09	0.23	<0.001
GCB govt	0.30	0.23	0.36	<0.001	0.20	0.13	0.26	<0.001	0.29	0.22	0.35	<0.001
GCB info.	0.22	0.15	0.29	<0.001	0.20	0.14	0.27	<0.001	0.16	0.09	0.22	<0.001
SyFoR	0.22	0.15	0.28	<0.001	0.14	0.07	0.20	<0.001	0.22	0.15	0.28	<0.001
Ethn. Nation.	0.18	0.11	0.25	<0.001	0.37	0.31	0.43	<0.001	-0.08	-0.15	-0.01	0.022
GCB extr.	0.18	0.11	0.25	<0.001	0.19	0.12	0.25	<0.001	0.11	0.04	0.18	0.002
Pol. cynic.	0.14	0.07	0.21	<0.001	0.07	0.00	0.14	0.043	0.16	0.09	0.22	<0.001
Soc. cynic.	0.11	0.04	0.18	0.002	0.10	0.03	0.16	0.006	0.08	0.01	0.15	0.018
LWA topd. cens.	0.11	0.04	0.18	0.002	-0.05	-0.12	0.02	0.160	0.23	0.17	0.30	<0.001
RWA aggr.	0.10	0.04	0.17	0.003	0.29	0.22	0.35	<0.001	-0.12	-0.19	-0.05	<0.001
RWA conv.	0.10	0.04	0.17	0.003	0.29	0.22	0.35	<0.001	-0.12	-0.19	-0.05	<0.001
RWA subm.	0.08	0.01	0.15	0.021	0.26	0.19	0.32	<0.001	-0.13	0.20	-0.06	<0.001
SDO egal.	-0.08	-0.14	-0.01	0.030	-0.03	-0.10	0.04	0.403	-0.10	-0.16	-0.03	0.006
Pol. trust	-0.07	-0.14	0.00	0.056	0.04	-0.03	0.11	0.225	-0.16	-0.22	-0.09	<0.001
LWA anticonv.	0.06	-0.01	0.13	0.099	-0.19	-0.26	-0.12	<0.001	0.30	0.23	0.36	<0.001
SDO dom.	0.04	-0.03	0.11	0.294	0.11	0.04	0.18	0.002	-0.05	-0.12	0.02	0.141

of 0.24 SD between males and females would be detectable with 80% power. Because of the relatively small number of participants from other-than-white ethnic groups, power is reduced when attempting to detect between-group differences by ethnicity. Indeed, given the same threshold for significance, the same true mean difference between members of white ethnic groups and members of other-than-white ethnic groups would be detectable with only 28% power, and a true mean difference of 0.41 SD would be required for a power of 80%. For comparison, 0.20 SD is conventionally regarded as the cut-off for a ‘small’ effect, while 0.50 SD is conventionally regarded as the cut-off for a ‘medium’ effect (Cohen, 1988, pp. 25–26). Before conducting the study, there was no basis on which to estimate the magnitude of likely between-group differences in Generalised Antisemitism, Judeophobic Antisemitism, or Antizionist Antisemitism scores, so it was necessary to proceed on the assumption that power would be adequate, even though this would only be true for ethnicity given a true effect approaching what is conventionally regarded as a medium size.

Given a threshold of $p < 0.010$, a true effect size of $r = 0.12$ is sufficient to provide 80% power in a two-tailed test of bivariate correlation. This indicates a possibility that smaller but still real effects might fall short of statistical significance at that level. However, $r \geq 0.10$ is often considered the cut-off even for a small effect in analyses of bivariate correlation (Cohen, 1988, p. 79). Before conducting the study, there was no basis on which to estimate likely correlation coefficients, so, again, it was necessary to proceed on the assumption that power would be adequate, which seems reasonable as power only falls below 80% for effect sizes very close to the lower bracket of reportability.

Findings

Demographic predictors. Supplemental Table 4 (Appendix) presents bivariate associations between measures of antisemitism and binary demographic variables. In terms of Judeophobic

Antisemitism, there is a notable negative effect associated with female gender, $d = -0.43$, 95% CI [-0.56, -0.29], $t(750.83) = -6.19$, $p < 0.001$, but because of the (marginally non-significant) opposite association of the same variable with Antizionist Antisemitism, $d = 0.14$, 95% CI [0.00, 0.28], $t(798.33) = 1.96$, $p = 0.051$, the mean difference in Generalised Antisemitism is very small, $d = -0.18$, 95% CI [-0.32, -0.05], $t(754.69) = -2.61$, $p = 0.009$. In terms both of Generalised Antisemitism and of Antizionist Antisemitism, the effects associated with other-than-white ethnicity are much more substantial than those associated with gender, i.e. $d = 0.65$, 95% CI [0.45, 0.84], $t(182.58) = 6.52$, $p < 0.001$ and $d = 0.60$, 95% CI [0.40, 0.80], $t(182.59) = 5.98$, $p < 0.001$ (respectively), and (unlike with gender) the association with Judeophobic Antisemitism is in the same direction as that in Antizionist Antisemitism, $d = 0.46$, 95% CI [0.27, 0.65], $t(189.44) = 4.81$, $p < 0.001$. A weak negative association between Generalised Antisemitism and education to degree level was also found, $d = -0.21$, 95% CI [-0.35, -0.08], $t(749.81) = -3.03$, $p = 0.003$, which appeared to be largely accounted for by the stronger negative association for Judeophobic Antisemitism, $d = -0.31$, 95% CI [-0.45, -0.17], $t(761.65) = -4.43$, $p < 0.001$.

As we see from Supplemental Table 5 (Appendix), the very weak negative correlation between Generalised Antisemitism and age, $r(804) = -0.11$, 95% CI [-0.18, -0.04], $p = 0.001$, is largely accounted for by the stronger negative correlation between Antizionist Antisemitism and age, $r(804) = -0.18$, 95% CI [-0.24, -0.11], $p < 0.001$. Judeophobic Antisemitism appeared to have no relationship to age, $r(804) = -0.01$, 95% CI [-0.08, 0.06], $p = 0.788$.

Non-demographic predictors. All scale correlations are presented in Table 1, in decreasing order of strength of correlation with Generalised Antisemitism. Generalised Antisemitism itself and its two subscales are included here for informational purposes; it may be seen that the two subscales correlate more strongly with

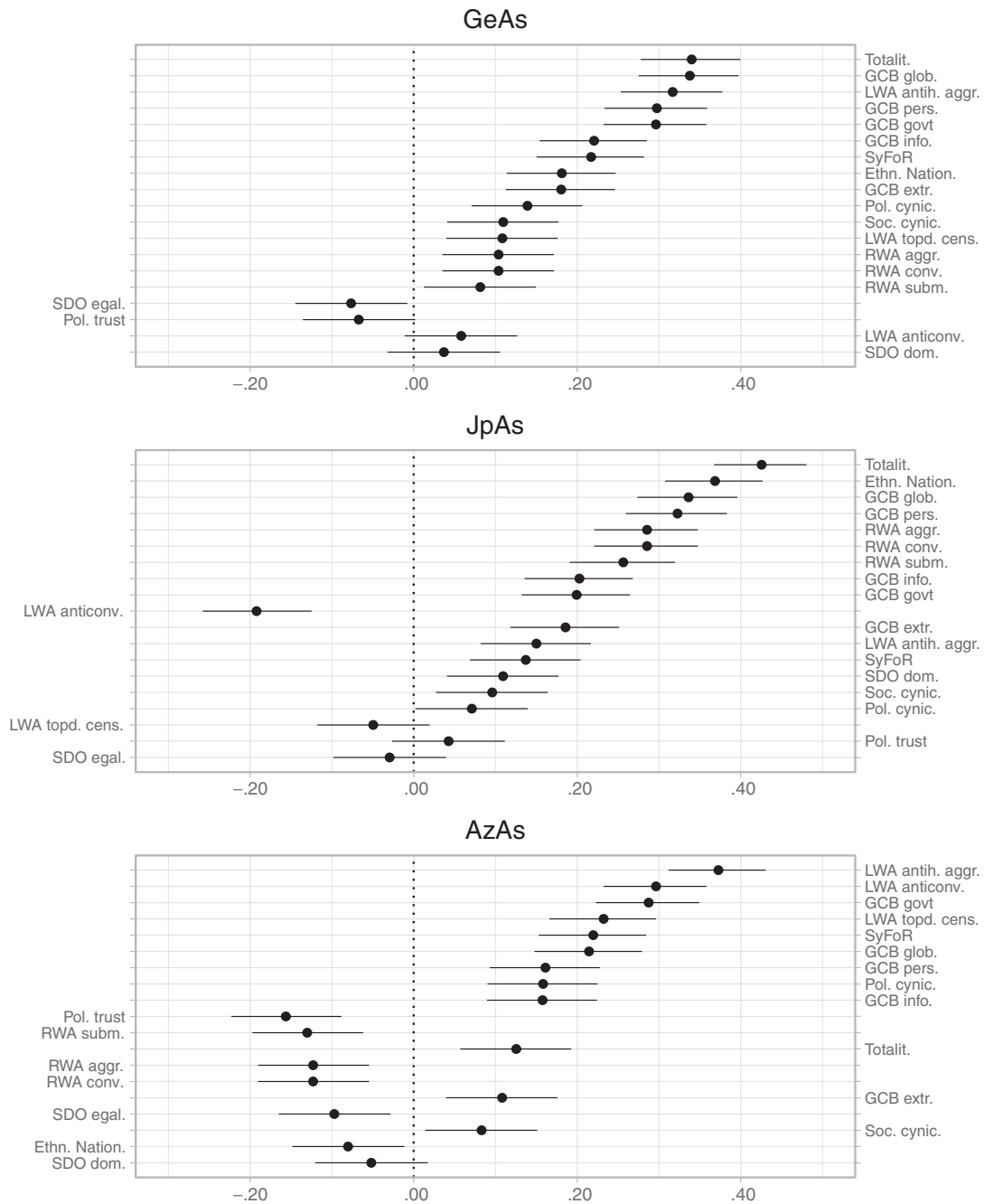


Fig. 1 Ideological predictors of antisemitism in Study 1. Product-moment coefficients of correlation with Generalised Antisemitism, Judeophobic Antisemitism, and Antizionist Antisemitism (with 95% confidence intervals).

one another than with any of the candidate predictors. The same correlations (minus the self-correlations) are visualised in Fig. 1. The strongest correlates of Generalised Antisemitism, for all of which, $r \geq 0.30$, were Totalitarianism, Anti-hierarchical Aggression, and three subscales of the Generic Conspiracy Beliefs scale, i.e. those relating to Malevolent Global conspiracies, Personal Wellbeing, and Government Malfeasance. Totalitarianism and belief in both Personal Wellbeing and Malevolent Global conspiracies were better predictors of Judeophobic Antisemitism than of Antizionist Antisemitism, while Anti-hierarchical Aggression and belief in conspiracies centred around Government Malfeasance were better predictors of Antizionist Antisemitism than of Judeophobic Antisemitism. Sympathies for

Radicalisation were moderately correlated with Generalised Antisemitism and Antizionist Antisemitism, but only weakly correlated with Judeophobic Antisemitism.

Social Dominance Orientation was found to be a poor predictor of antisemitism, whether the latter is considered in its generalised, Judeophobic, or antizionist forms, with both factors of Social Dominance Orientation being among the weakest correlates of all three. Ethnic Nationalism was found to be the second-strongest correlate of Judeophobic Antisemitism but to be effectively uncorrelated with Antizionist Antisemitism, with the result that it predicted Generalised Antisemitism very poorly. Political Trust and Political Cynicism were weak correlates of Antizionist Antisemitism and effectively uncorrelated with

Judeophobic Antisemitism, while Political Cynicism and Social Cynicism were very weak predictors of Generalised Antisemitism, and Political Trust was uncorrelated with the latter.

Discussion. To begin with demographic associations, younger and older people exhibit approximately equal levels of Judeophobic Antisemitism, but younger people exhibit higher levels of Antizionist Antisemitism. If this is a generational rather than an age-related effect, and if it remains stable as the generation represented by the younger participants ages, one might thus expect Judeophobic Antisemitism to remain at the same level in the population while Antizionist Antisemitism increases, resulting in a net gain in Generalised Antisemitism. However, attitudes may not remain stable, as we see from the finding that the highest educational qualification is weakly associated with lower Generalised Antisemitism—a relationship probably accounted for by the stronger negative association of educational level with Judeophobic Antisemitism. It is thus plausible that rising levels of education might protect against a population-level increase in Generalised Antisemitism over time—although the lack of a significant negative association with Antizionist Antisemitism may mitigate this. (Distinguishing between different fields of educational attainment might help to unpick any underlying relationships: for example, it is conceivable that higher levels of education in certain subjects might predict lower Antizionist Antisemitism while education in others might predict the reverse, with the two tendencies more-or-less cancelling out in the degree-educated population as a whole.)

Heightened levels of antisemitism among members of certain minority ethnic groups have been reported by a number of earlier studies, as noted above, and this finding is replicated. Frindte et al.'s (2005) finding that antisemitism is not predicted by Social Dominance Orientation is replicated in Study 1, while their finding that antisemitism is predicted by Right Wing Authoritarianism is complicated by the new finding that all factors of the latter were found to be positively associated with Judeophobic Antisemitism but negatively associated with Antizionist Antisemitism. Overall, the strongest non-demographic bivariate predictors of Generalised Antisemitism were belief in malevolent global conspiracies, plus Totalitarianism, i.e. desire for an extremely authoritarian political system, and Anti-hierarchical Aggression, i.e. desire to overthrow the current social order. All of these were positively correlated with Generalised Antisemitism, and indeed with both of its subscales, although each of them was more strongly associated with one subscale or the other, with Totalitarianism and belief in malevolent global conspiracies being more strongly associated with Judeophobic Antisemitism and Anti-hierarchical Aggression being more strongly associated with Antizionist Antisemitism.

All factors of the Right-Wing Authoritarianism scale were found to be positively associated with Judeophobic Antisemitism but negatively associated with Antizionist Antisemitism, while the remaining two factors of the Left Wing Authoritarianism scale besides Anti-hierarchical Aggression were found to be positively associated with Antizionist Antisemitism but negatively associated with Judeophobic Antisemitism. Factors of the Right Wing and Left Wing Authoritarianism scales had a complicated relationship with Generalised Antisemitism, with the exception of Anti-hierarchical Aggression, which—as noted above—correlated positively with both Judeophobic Antisemitism and Antizionist Antisemitism and therefore emerged as one of the strongest predictors of Generalised Antisemitism overall. All factors of the Right Wing Authoritarianism scale were found to have moderate positive correlations with Judeophobic Antisemitism and weak negative correlations with Antizionist

Antisemitism, while Anti-conventionalism and Top-down Censorship were both found to have moderate positive correlations with Antizionist Antisemitism and negative correlations (statistically insignificant in the case of Top-down Censorship) with Judeophobic Antisemitism. In this connection, it is worth noting that Left-Wing Authoritarian traits, along with belief in government conspiracies, were the strongest predictors of Antizionist Antisemitism, but Right-Wing Authoritarian traits were not the strongest predictors of Judeophobic Antisemitism, being eclipsed by Totalitarianism, Ethnic Nationalism, and global and personal conspiracy beliefs.

The same demographic predictors and the top three scale predictors were retained for use in Study 2, with the hypothesis of a relationship with each form of antisemitism being tested for each in a series of linear models.

Study 2

Hypotheses. The purpose of Study 2 was to retest all of the demographic predictors employed in Study 1, as well as the three scales found to be most strongly predictive in the same study, using a representative sample. Resources prevented the testing of further predictors.

The demographic predictors were gender, ethnicity, age, and highest educational qualification. The scale predictors were Totalitarianism (McClosky and Chong, 1985), belief in Malevolent Global conspiracies (Brotherton et al., 2013), and Anti-hierarchical Aggression (Costello et al., 2021). In order to keep the questionnaire to an affordable length given available funds, the Anti-hierarchical Aggression instrument was abbreviated to include only the six items that were found to be most correlated with the Anti-hierarchical Aggression factor of the Left Wing Authoritarianism scale in relation to the data collected for Study 1.

Methodology. Bivariate relationships between antisemitism and binary demographic variables were assessed through Welch unequal variance *t*-tests, while bivariate relationships between antisemitism and age were assessed through the calculation of the product-moment coefficient of correlation. Bivariate relationships between antisemitism and the various political and personality scales were assessed through the calculation of the product-moment coefficient of correlation. Nested linear models, with Generalised Antisemitism as the dependent variable, were created in order to determine whether bivariate relationships would survive controls; the same models were recreated with Judeophobic Antisemitism and Antizionist Antisemitism as dependent variables in order to probe these findings. The most elaborate model, featuring all predictor variables mentioned above, was considered the definitive test of hypotheses.

Please note that, where linear modelling was employed, all numeric variables (i.e. scale variables and age) were transformed through subtraction of the mean and division by the standard deviation.

Power analysis. Given 7 independent variables, 1845 error degrees of freedom, and a significance threshold of $p < 0.010$, a model associated with a true effect size as low as $f^2 = 0.02$ (i.e. the cut-off for a 'small effect size' according to Cohen 1988, p. 413) can be detected with 99% power. This means that it is possible to have a very high degree of confidence that real effects will be detected, even if small.

Findings

Demographic predictors: bivariate association. Bivariate associations for binary demographic predictors are found in

Table 2 Scale measures: product-moment coefficients of correlation with measures of antisemitism (Study 2), DF = 1851.

Measure	GeAs				JpAs				AzAs			
	r				r				r			
	Est.	Low	High	p	Est.	Low	High	p	Est.	Low	High	p
GeAs	1.00	1.00	1.00	<0.001	0.87	0.85	0.88	<0.001	0.82	0.80	0.83	<0.001
JpAs	0.87	0.85	0.88	<0.001	1.00	1.00	1.00	<0.001	0.42	0.38	0.46	<0.001
AzAs	0.82	0.80	0.83	<0.001	0.42	0.38	0.46	<0.001	1.00	1.00	1.00	<0.001
LWA antih. aggr.	0.39	0.35	0.43	<0.001	0.32	0.28	0.36	<0.001	0.34	0.30	0.38	<0.001
GCB glob.	0.36	0.32	0.40	<0.001	0.38	0.34	0.42	<0.001	0.22	0.18	0.26	<0.001
Totalit.	0.31	0.27	0.35	<0.001	0.40	0.37	0.44	<0.001	0.09	0.05	0.14	<0.001

Table 3 Partial Model I: demographic predictors only, DF = 1791.

	β				t	p
	Est.	Low	High	SE		
<i>Dependent variable: GeAs, r² = 0.09, adj.r² = 0.08 (f² = 0.09)</i>						
(Intercept)	0.24	0.17	0.31	0.04	6.48	<0.001
Age	-0.12	-0.17	-0.07	0.02	-5.03	<0.001
Female	-0.09	-0.18	0.00	0.05	-2.01	0.045
Degree	-0.53	-0.63	-0.43	0.05	-10.36	<0.001
Ethn. other than white	0.52	0.32	0.71	0.10	5.22	<0.001
<i>Dependent variable: JpAs, r² = 0.11, adj.r² = 0.11 (f² = 0.12)</i>						
(Intercept)	0.40	0.33	0.47	0.04	10.81	<0.001
Age	-0.07	-0.11	-0.02	0.02	-2.79	0.005
Female	-0.30	-0.39	-0.21	0.05	-6.58	<0.001
Degree	-0.61	-0.71	-0.51	0.05	-11.98	<0.001
Ethn. other than white	0.51	0.32	0.71	0.10	5.15	<0.001
<i>Dependent variable: AzAs, r² = 0.05, adj.r² = 0.05 (f² = 0.05)</i>						
(Intercept)	-0.02	-0.10	0.05	0.04	-0.67	0.504
Age	-0.14	-0.19	-0.09	0.02	-5.97	<0.001
Female	0.18	0.09	0.27	0.05	3.95	<0.001
Degree	-0.25	-0.35	-0.16	0.05	-5.06	<0.001
Ethn. other than white	0.35	0.16	0.54	0.10	3.57	<0.001

Supplemental Table 6 (Appendix). The effects associated with other-than-white ethnicity in relation to Generalised Antisemitism, $d = 0.75$, 95% CI [0.51, 0.99], $t(98.16) = 6.18$, $p < 0.001$, Judeophobic Antisemitism, $d = 0.65$, 95% CI [0.40, 0.89], $t(98.10) = 5.29$, $p < 0.001$, and Antizionist Antisemitism, $d = 0.61$, 95% CI [0.36, 0.87], $t(97.35) = 4.79$, $p < 0.001$, are much larger than the effects associated with female gender in relation to Judeophobic Antisemitism, $d = -0.23$, 95% CI [-0.32, -0.13], $t(1481.48) = -4.71$, $p < 0.001$, and Antizionist Antisemitism, $d = 0.27$, 95% CI [0.18, 0.37], $t(1327.16) = 5.52$, $p < 0.001$, which (being of opposite valence) had the effect of cancelling out with regard to Generalised Antisemitism, $d = 0.01$, 95% CI [-0.09, 0.10], $t(1369.26) = 0.13$, $p = 0.893$. Education to degree level was found to be negatively associated with Judeophobic Antisemitism, $d = -0.57$, 95% CI [-0.67, -0.48], $t(1094.21) = -11.86$, $p < 0.001$, resulting in a much more notable overall negative correlation with Generalised Antisemitism, $d = -0.45$, 95% CI [-0.55, -0.35], $t(1044.68) = -9.02$, $p < 0.001$, than was found in Study 1. The negative association between degree-level education and Antizionist Antisemitism found in Study 2 was not quite as weak as that found in Study 1, and this time attained statistical significance, $d = -0.16$, 95% CI [-0.26, -0.05], $t(965.04) = -2.96$, $p = 0.003$.

With regard to correlations between antisemitism and age, for which see Supplemental Table 7 (Appendix), very similar observations to those made in Study 1 can be repeated here. Age was again found to be negatively correlated with Antizionist Antisemitism, $r(1851) = -0.15$, 95% CI [-0.20, -0.11], $p < 0.001$, resulting in an overall negative correlation with Generalised Antisemitism, $r(1851) = -0.08$, 95% CI [-0.12, -0.03], $p = 0.001$, which (while highly statistically significant) was so weak as to fall below the lower bound of reportability. As in Study 1, age was uncorrelated with Judeophobic Antisemitism, $r(1851) = 0.01$, 95% CI [-0.04, 0.05], $p = 0.784$.

Non-demographic predictors: bivariate associations. Bivariate correlations for ideological scales are presented in Table 2. As in Study 1, Generalised Antisemitism itself and its two subscales are included here for informational purposes; it is noted that the two subscales correlate more strongly. All three variables were moderately predictive both of Generalised Antisemitism and of Judeophobic Antisemitism, while Anti-hierarchical Aggression and belief in malevolent global conspiracies were also moderately predictive of Antizionist Antisemitism. The bivariate correlation between Totalitarianism and Antizionist Antisemitism was found to be extremely weak, although still very highly statistically significant.

Linear models. Partial linear models are presented in Tables 3–6, with the full linear model in Table 7. As explained in the section “Methodology”, each model is fitted to the data three times: first, for the canonical fit, with Generalised Antisemitism as the dependent variable, and then, for the sake of transparency, with each of Judeophobic Antisemitism and Antizionist Antisemitism as dependent variables. Effect sizes are expressed in terms of r^2 , adjusted r^2 , and Cohen’s f^2 (calculated from adjusted r^2). Qualitative interpretations of effect sizes below are based on the thresholds suggested by Cohen, (1988, pp. 413–414).

Partial Model I (Table 3) shows that after controls for other demographic variables, age and degree-level education are negatively associated not only with Generalised Antisemitism but also with both of its subscales. All three models are associated with small effect sizes. Female gender is found to be associated negatively with Judeophobic Antisemitism and positively (although less strongly) with Antizionist Antisemitism, resulting in a negative association with Generalised Antisemitism that is so weak as to be of only marginal significance despite the large sample size. Membership of an other-than-white ethnic group is positively associated with both subscales and has an overall association with Generalised Antisemitism that is approximately equal to that of degree-level education, although in the opposite direction. (We note that the confidence interval for the effect associated with ethnicity is much wider than that for the effect associated with education because the sample contained relatively few participants from other-than-white ethnic groups.)

Table 4 Partial Model II: demographic predictors plus Totalitarianism, DF = 1790.

	β			SE	t	p
	Est.	Low	High			
<i>Dependent variable: GeAs, r² = 0.16, adj.r² = 0.16 (f² = 0.18)</i>						
(Intercept)	0.15	0.08	0.22	0.04	4.05	<0.001
Age	-0.09	-0.13	-0.04	0.02	-3.74	<0.001
Female	-0.02	-0.11	0.07	0.04	-0.41	0.679
Degree	-0.38	-0.48	-0.29	0.05	-7.65	<0.001
Ethn. other than white	0.49	0.31	0.68	0.10	5.16	<0.001
Totalit.	0.28	0.24	0.33	0.02	12.40	<0.001
<i>Dependent variable: JpAs, r² = 0.23, adj.r² = 0.23 (f² = 0.29)</i>						
(Intercept)	0.28	0.21	0.35	0.04	7.94	<0.001
Age	-0.02	-0.07	0.02	0.02	-1.02	0.308
Female	-0.21	-0.29	-0.12	-0.04	4.79	<0.001
Degree	-0.42	-0.52	-0.33	0.05	-8.71	<0.001
Ethn. other than white	0.48	0.30	0.66	0.09	5.17	<0.001
Totalit.	0.36	0.32	0.41	0.02	16.54	<0.001
<i>Dependent variable: AzAs, r² = 0.06, adj.r² = 0.06 (f² = 0.06)</i>						
(Intercept)	-0.05	-0.13	0.02	0.04	-1.47	0.142
Age	-0.13	-0.18	-0.08	0.02	-5.49	<0.001
Female	0.20	0.11	0.29	0.05	4.46	<0.001
Degree	-0.21	-0.31	-0.11	0.05	-4.04	<0.001
Ethn. other than white	0.34	0.15	0.53	0.10	3.50	<0.001
Totalit.	0.09	0.05	0.14	0.02	3.93	<0.001

Table 5 Partial Model III: demographic predictors plus belief in malevolent global conspiracies, DF = 1790.

	β			SE	t	p
	Est.	Low	High			
<i>Dependent variable: GeAs, r² = 0.18, adj.r² = 0.18 (f² = 0.21)</i>						
(Intercept)	0.21	0.14	0.28	0.04	6.08	<0.001
Age	-0.11	-0.16	-0.07	0.02	-5.03	<0.001
Female	-0.13	-0.22	-0.04	0.04	-2.97	0.003
Degree	-0.37	-0.46	-0.27	0.05	-7.37	<0.001
Ethn. other than white	0.42	0.23	0.60	0.09	4.43	<0.001
GCB glob.	0.32	0.28	0.36	0.02	14.16	<0.001
<i>Dependent variable: JpAs, r² = 0.21, adj.r² = 0.21 (f² = 0.26)</i>						
(Intercept)	0.37	0.30	0.44	0.04	10.66	<0.001
Age	-0.06	-0.10	-0.02	0.02	-2.67	0.008
Female	-0.34	-0.43	-0.26	0.04	-7.85	<0.001
Degree	-0.44	-0.54	-0.34	0.05	-8.95	<0.001
Ethn. other than white	0.41	0.22	0.59	0.09	4.34	<0.001
GCB glob.	0.33	0.29	0.38	0.02	14.80	<0.001
<i>Dependent variable: AzAs, r² = 0.09, adj.r² = 0.09 (f² = 0.09)</i>						
(Intercept)	-0.04	-0.11	0.03	0.04	-1.13	0.258
Age	-0.14	-0.18	-0.09	0.02	-5.93	<0.001
Female	0.16	0.07	0.25	0.04	3.51	<0.001
Degree	-0.16	-0.25	-0.06	0.05	-3.06	0.002
Ethn. other than white	0.29	0.10	0.48	0.10	3.00	0.003
GCB glob.	0.20	0.15	0.24	0.02	8.54	<0.001

Partial Model II (Table 4) shows that, after demographic controls, Totalitarianism has a very highly statistically significant positive relationship with Generalised Antisemitism and with both subscales, although the effect with regard to Antizionist

Table 6 Partial Model IV: demographic predictors plus Anti-hierarchical Aggression, DF = 1790.

	β			SE	t	p
	Est.	Low	High			
<i>Dependent variable: GeAs, r² = 0.22, adj.r² = 0.22 (f² = 0.29)</i>						
(Intercept)	0.19	0.12	0.26	0.03	5.60	<0.001
Age	-0.04	-0.08	0.01	0.02	-1.64	0.100
Female	-0.08	-0.16	0.01	0.04	-1.83	0.067
Degree	-0.40	-0.49	-0.31	0.05	-8.48	<0.001
Ethn. other than white	0.50	0.32	0.68	0.09	5.46	<0.001
LWA antih. aggr.	0.39	0.35	0.43	0.02	17.89	<0.001
<i>Dependent variable: JpAs, r² = 0.21, adj.r² = 0.21 (f² = 0.26)</i>						
(Intercept)	0.36	0.29	0.43	0.04	10.24	<0.001
Age	0.00	-0.04	0.05	0.02	0.18	0.855
Female	-0.29	-0.38	-0.21	0.04	-6.69	<0.001
Degree	-0.50	-0.60	-0.41	0.05	-10.36	<0.001
Ethn. other than white	0.49	0.31	0.68	0.09	5.29	<0.001
LWA antih. aggr.	0.33	0.29	0.37	0.02	14.86	<0.001
<i>Dependent variable: AzAs, r² = 0.15, adj.r² = 0.15 (f² = 0.18)</i>						
(Intercept)	-0.07	-0.13	0.00	0.03	-1.87	0.061
Age	-0.07	-0.12	-0.03	0.02	-3.14	0.002
Female	0.19	0.11	0.28	0.04	4.47	<0.001
Degree	-0.15	-0.24	-0.06	0.05	-3.12	0.002
Ethn. other than white	0.34	0.15	0.52	0.09	3.61	<0.001
LWA antih. aggr.	0.32	0.28	0.37	0.02	14.71	<0.001

Antisemitism is very weak. Comparison of Model II with Model I suggests that the predictive power of the highest educational qualification diminishes after controls for Totalitarianism, but that of ethnicity does not. Gender, on the other hand, completely disappears as a predictor of Judeophobic Antisemitism once Totalitarianism is controlled for. The models for Generalised Antisemitism and Judeophobic Antisemitism are associated with medium effect sizes, while the model for Antizionist Antisemitism is associated with a small effect size.

Partial Model III (Table 5) shows that, after demographic controls, belief in malevolent global conspiracies remains a positive predictor of Generalised Antisemitism and both its subscales, although a stronger predictor of Antizionist Antisemitism. Comparison of Model III with Model I suggests that the predictive power of ethnicity and highest educational qualification is diminished after controls for belief in malevolent global conspiracies, but that of gender is not. Again, the models for Generalised Antisemitism and Judeophobic Antisemitism are associated with medium effect sizes, while the model for Antizionist Antisemitism is associated with a small effect size (although that effect size is well above the minimum threshold for reportability).

Partial Model IV (Table 6) shows that Anti-hierarchical Aggression is an equally strong predictor of Judeophobic Antisemitism and Antizionist Antisemitism after demographic controls. In that model, age and gender are weakened as predictors of Generalised Antisemitism, to the point where both become statistically insignificant. Comparison of Model IV with Model I suggests that much of the effect associated with age and highest educational qualification disappears after controlling for Anti-hierarchical Aggression, while this has little impact on the effects associated with gender or ethnicity. Interestingly, the coefficient for Anti-hierarchical Aggression is effectively identical for both Judeophobic Antisemitism and Antizionist Antisemitism. Models for all three dependent variables are associated with medium effect sizes.

Table 7 Full Model: demographic predictors plus Totalitarianism, belief in malevolent global conspiracies, and Anti-hierarchical Aggression, DF = 1788.

	β			SE	t	p
	Est.	Low	High			
<i>Dependent variable: GeAs, $r^2 = 0.29$, $adj.r^2 = 0.29$ ($f^2 = 0.40$)</i>						
(Intercept)	0.13	0.07	0.20	0.03	3.98	<0.001
Age	-0.03	-0.08	0.01	0.02	-1.57	0.116
Female	-0.06	-0.14	0.02	0.04	-1.48	0.140
Degree	-0.25	-0.34	-0.16	0.05	-5.34	<0.001
Ethn. other than white	0.43	0.26	0.60	0.09	4.87	<0.001
Totalit.	0.17	0.12	0.21	0.02	7.56	<0.001
GCB glob.	0.19	0.15	0.24	0.02	8.70	<0.001
LWA antih. aggr.	0.29	0.25	0.34	0.02	13.17	<0.001
<i>Dependent variable: JpAs, $r^2 = 0.32$, $adj.r^2 = 0.32$ ($f^2 = 0.46$)</i>						
(Intercept)	0.27	0.20	0.33	0.03	8.13	<0.001
Age	0.01	-0.03	0.06	0.02	0.62	0.535
Female	-0.25	-0.33	-0.17	0.04	-6.12	<0.001
Degree	-0.30	-0.39	-0.21	0.05	-6.49	<0.001
Ethn. other than white	0.41	0.24	0.58	0.09	4.73	<0.001
Totalit.	0.27	0.22	0.31	0.02	12.26	<0.001
GCB glob.	0.21	0.17	0.25	0.02	9.45	<0.001
LWA antih. aggr.	0.21	0.16	0.25	0.02	9.33	<0.001
<i>Dependent variable: AzAs, $r^2 = 0.17$, $adj.r^2 = 0.16$ ($f^2 = 0.19$)</i>						
(Intercept)	-0.07	-0.14	0.00	0.04	-1.94	0.052
Age	-0.08	-0.12	-0.03	0.02	-3.38	0.001
Female	0.18	0.09	0.26	0.04	4.07	<0.001
Degree	-0.11	-0.20	-0.01	0.05	-2.16	0.031
Ethn. other than white	0.30	0.12	0.48	0.09	3.27	0.001
Totalit.	-0.01	-0.05	0.04	0.02	-0.25	0.800
GCB glob.	0.11	0.07	0.16	0.02	4.75	<0.001
LWA antih. aggr.	0.29	0.25	0.34	0.02	12.56	<0.001

In the Full Model (Table 7), Anti-hierarchical Aggression and membership of an other-than-white ethnic group emerge as by far the strongest predictors of Generalised Antisemitism (although note that the confidence interval for the effect associated with ethnicity is much wider than that associated with Anti-hierarchical Aggression). As a predictor of Judeophobic Antisemitism, Totalitarianism is stronger than Anti-hierarchical Aggression and belief in malevolent global conspiracies, which are about equally strong, but, as a predictor of Antizionist Antisemitism, Anti-hierarchical Aggression is by far the strongest of the three, with Totalitarianism disappearing entirely. Female gender predicts higher Antizionist Antisemitism and lower Judeophobic Antisemitism, but has no significant relationship with Generalised Antisemitism, and age predicts lower Antizionist Antisemitism but does not predict Judeophobic Antisemitism, and, like female gender, has no significant relationship with Generalised Antisemitism overall. Education to degree level and membership of an other-than-white ethnic group retain their relationships (negative and positive, respectively) with Generalised Antisemitism, Judeophobic Antisemitism, and Antizionist Antisemitism. Models for Generalised Antisemitism and Judeophobic Antisemitism are associated with large effect sizes, while the model for Antizionist Antisemitism is associated with a medium effect size.

Coefficients for the full model are visualised in Fig. 2, and observed values by scale with predicted values from the same model are simultaneously visualised in Fig. 3.

Discussion. To begin, again, with bivariate associations for demographic predictors, the young and the old tend to exhibit

equivalent levels of Judeophobic Antisemitism, but the young tend to exhibit higher levels of Antizionist Antisemitism than the old: an association that may (if genuinely age-related) or may not (if generational) diminish as they grow older. However, education again appears to be associated with lower Generalised Antisemitism—again, mostly because it is associated with lower Judeophobic Antisemitism. (As above, we note that lack of distinction between different fields of educational attainment may have masked a more complicated relationship.) The effects on Judeophobic Antisemitism and Antizionist Antisemitism that are associated with gender appear to completely cancel out, while those that are associated with ethnicity accumulate, resulting in a very notable bivariate association.

In terms of bivariate relationships among scales, Anti-hierarchical Aggression is the strongest predictor both of Generalised Antisemitism and of Antizionist Antisemitism, followed by belief in Malevolent Global conspiracies, while Totalitarianism is the strongest predictor of Judeophobic Antisemitism, again followed by belief in Malevolent Global conspiracies. With regard to the question of whether antisemitism—new or old—is more strongly associated with the political right or with the political left, this is a notable finding, because the Anti-hierarchical Aggression measure was moderately associated with subjective left-wing identity, while Totalitarianism was moderately associated with subjective right-wing identity, and belief in malevolent global conspiracies was only very weakly correlated with subjective left-right identity.

When one constructs linear models with multiple predictors, Anti-hierarchical Aggression emerges as the strongest predictor of Generalised Antisemitism and predicts both Judeophobic Antisemitism and Antizionist Antisemitism well: indeed, in the model for which it was the only scale predictor, it was found to exhibit an equivalent relationship with both Judeophobic Antisemitism and Antizionist Antisemitism. Totalitarianism, by contrast, predicts Generalised Antisemitism more weakly and predicts Judeophobic Antisemitism strongly but Antizionist Antisemitism not at all. The form of conspiracy belief tested here predicts Judeophobic Antisemitism about as well as Anti-hierarchical Aggression after controls both for the latter and for Totalitarianism, but was found to be weaker as a predictor of Generalised Antisemitism and Antizionist Antisemitism. A plausible interpretation of this finding is that Anti-hierarchical Aggression and belief in a Malevolent Global conspiracy are associated with the underlying latent factor, i.e. generalised antisemitism itself, while Totalitarianism is associated only with that latent factor as it manifests in relation to Jews *qua* Jews. All models explain less variation in Antizionist Antisemitism than in Judeophobic Antisemitism, but it must be recalled that the strongest predictors of Antizionist Antisemitism from Study 1 after Anti-hierarchical Aggression, i.e. Anti-conventionalism and belief in Government Malfeasance-related conspiracies, were left out of the study by design. Membership of an other-than-white ethnic group was again found to be positively associated with Generalised Antisemitism and of both of its subscales, with coefficients that transpired to be little affected by controls for scales other than conspiracy belief—although, as noted above, the confidence interval for the effect associated with ethnicity was relatively wide.

Conclusion

By beginning with a wide-ranging test of multiple candidate predictors of antisemitism, and then narrowing this down to a test of the strongest predictors identified in the first round using a large representative sample, the two studies presented in this article have made a decisive contribution to the scholarship of

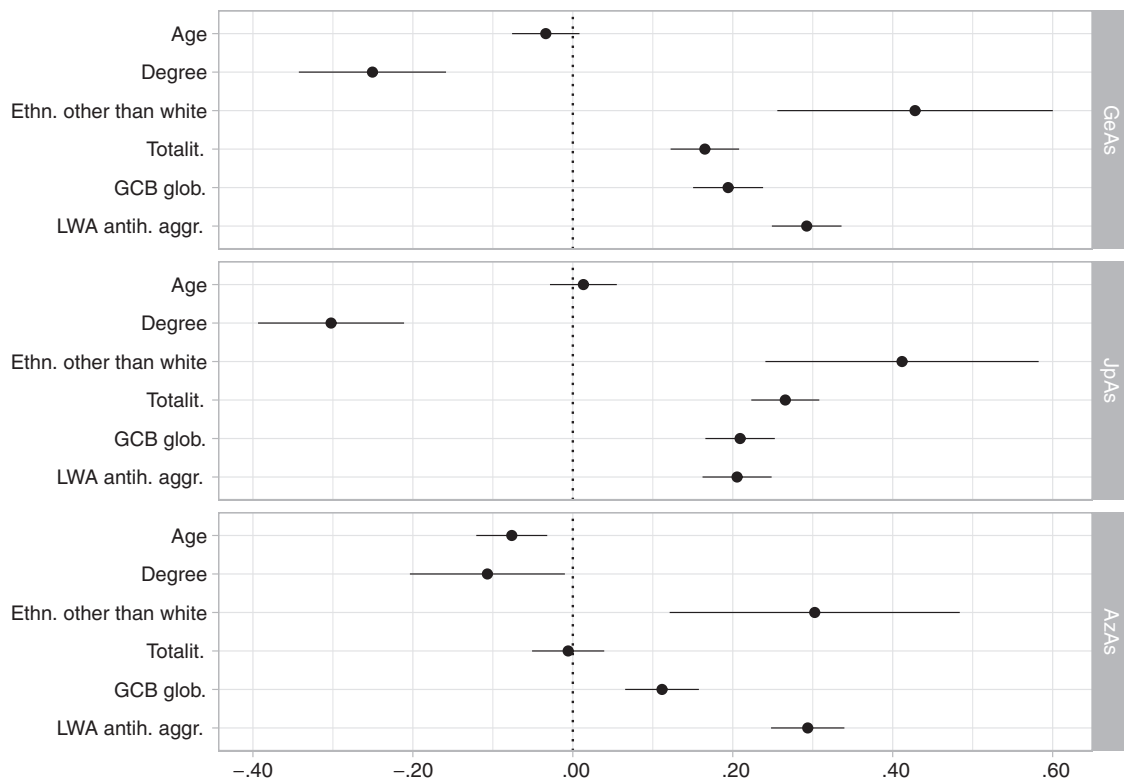


Fig. 2 Ideological predictors of antisemitism in Study 2. Product-moment coefficients of correlation with Generalised Antisemitism, Judeophobic Antisemitism, and Antizionist Antisemitism (with 95% confidence intervals).

antisemitism, not only through their immediate findings but through the avenues which they open up for future research. Drawing on the estimates and confidence intervals from Study 1, for example, it will be possible for future studies of antisemitism to begin with power analyses informed by assumptions based on an empirical study of a wide range of predictor variables. Moreover, the finding in Study 1 and Study 2 that scores for Generalised Antisemitism and for both of its subscales tended to be higher among members of other-than-white ethnic groups replicates earlier research findings, while the finding, also made both in Study 1 and in Study 2, that female gender was positively associated with Antizionist Antisemitism but negatively associated with Antizionist Antisemitism, appears to be novel and deserves further investigation. However, the major finding of both studies is that antisemitism is predicted by a conspiratorial understanding of the world as it is, by openness to totalitarian rule, and, above all, by a desire to overthrow the social order.

We would argue that this finding may contribute to an explanation of why both antisemitism and opposition to antisemitism have previously been found to exist both among those self-identifying as very left-wing and among those self-identifying as very right-wing: although one may find at both ends of the left-right ideological spectrum a belief in conspiracy theories, a preference for a more authoritarian political system, and an inclination towards possibly violent revolution, by no means all individuals who identify as 'very right-wing' or 'very left-wing' can be assumed to share these traits. In associating themselves with one or other of those labels, individuals may, for example, simply be expressing very strong belief in values commonly associated with the political right or left, such as market freedom or universal healthcare. In this connection, it is for example worth emphasising the much stronger correlation of Anti-conventionalism than Anti-hierarchical aggression with subjective self-assessed political position, when Anti-hierarchical

Aggression was found to be the better predictor of antisemitism. In a similar vein: Totalitarianism correlated much less strongly with subjective political position than did the three factors of the Right Wing Authoritarianism scale, but Totalitarianism was a much better predictor of antisemitism than they were. This suggests that (at least in the UK) it may perhaps not be (people understanding themselves to be) right wingers or left wingers per se, but rather, political revolutionaries and would-be totalitarians who are most likely to be antisemitic. Together with the finding of an association with conspiracy belief, this may perhaps be regarded as support for those scholars who have argued that antisemitism in the contemporary western world might be related to a crude anti-elitism sometimes regarded as 'populist' and argued to be prevalent (but by no means universal) both among the very left-wing and among the very right-wing.

The Study 1 finding that Judeophobic Antisemitism was predicted less well by any factor of the Right-Wing Authoritarianism scale than by Totalitarianism, Ethnic Nationalism, and certain forms of conspiracy belief likewise emphasises the need to consider carefully what is meant by 'right-wing' or 'left-wing': the ideology measured by the Right-Wing Authoritarianism scale might best be described as *social conservatism*, even very strong endorsement of which cannot really be identified with the nascent fascism that its ancestor, the much-criticised F-scale, was intended to measure. There is no particular reason why a social conservative in the UK should be assumed to have negative feelings about Jews if he or she accepts Jews as part of the social order (which may, after all, be seen as 'Judeo-Christian'); however, if he or she sees membership of the national community as open only to Christians or to people of very longstanding 'British' ancestry, that point may cease to apply. In a similar vein, we must draw attention to the same study's finding that the factor of the Left-Wing Authoritarianism scale which was most closely aligned with subjective self-perception as 'left-wing'—i.e. Anti-conventionalism,

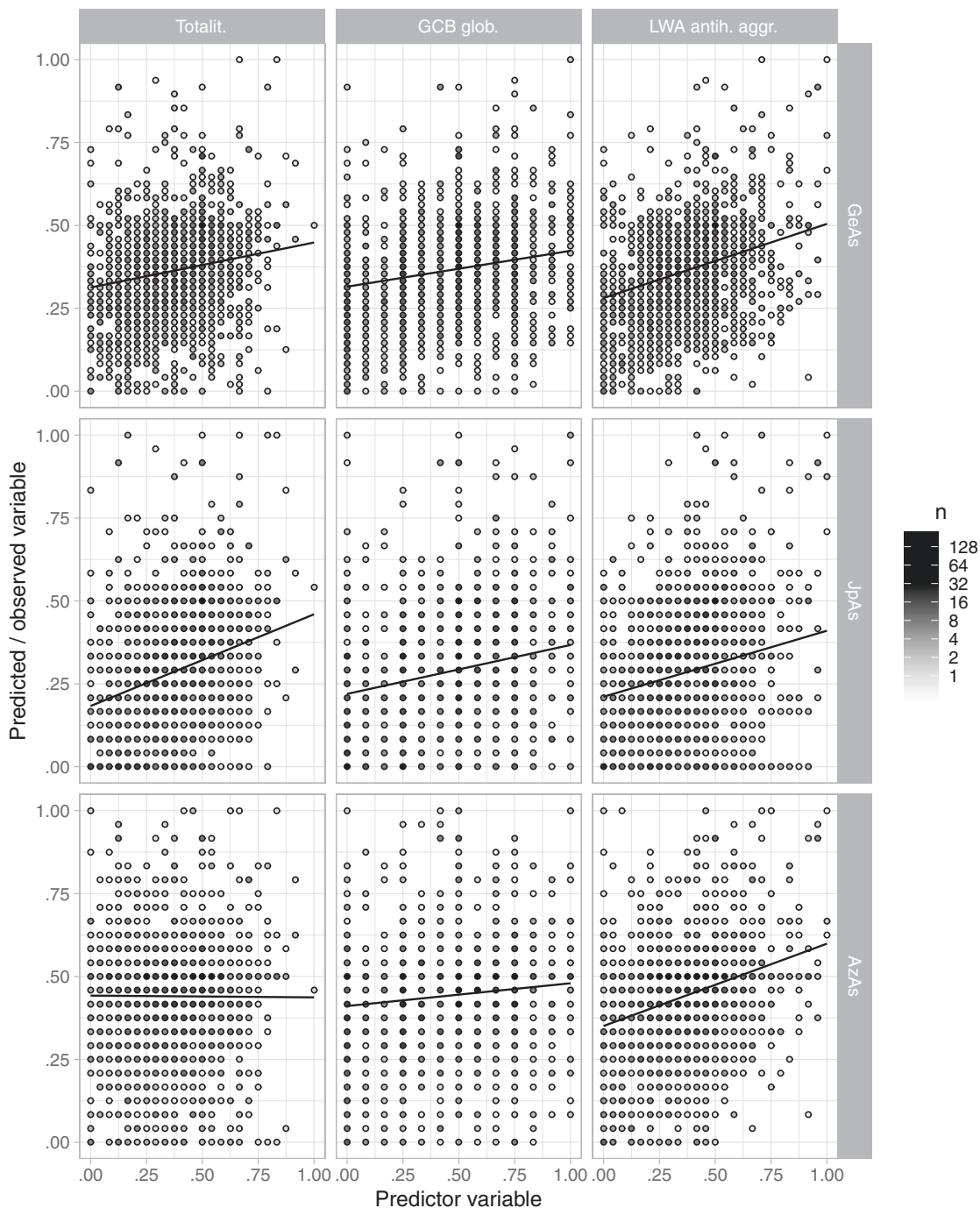


Fig. 3 Observed and predicted levels of antisemitism in Study 2 (full model). Generalised Antisemitism, Judeophobic Antisemitism, and Antizionist Antisemitism by ideological predictor variable (with 95% confidence intervals on slopes).

essentially a rejection of social conservatism—had a significant positive association with Antizionist Antisemitism but a significant negative association with Judeophobic Antisemitism, while the factor of the same scale that was found (in both studies) to be positively associated with both, i.e. Anti-hierarchical Aggression, appeared to be much less closely aligned with ‘left-wing’ identity. All of these points highlight the importance of studying specific ideological tendencies, rather than relying on a blanket measure of political identification, such as self-placement on an abstract spectrum.

Particular attention must be drawn to the finding in Study 2 that Anti-hierarchical Aggression is an almost equally good predictor both of Judeophobic Antisemitism and of Antizionist

Antisemitism, both before and after demographic controls, and that further controlling for other ideological variables sees it emerge as the strongest ideological predictor of Generalised Antisemitism. Anti-hierarchical Aggression reflects a desire to overturn the current social order: a desire that (on the face of it) would appear able to exist on the political right as well as on the political left, as well as across many other ideological groupings, although descriptive statistical analysis suggests that it is more prevalent on the self-identified left, at least in the samples collected for this study. The finding in Studies 1 and 2 that scores for Generalised Antisemitism and for both of its subscales tend to be higher among members of other-than-white ethnic groups replicates earlier research findings, while the finding, also

common to both studies, that female gender was positively associated with Antizionist Antisemitism, appears to be novel (the association with Judeophobic Antisemitism replicates the findings of earlier studies). Furthermore, the positive relationship of conspiracy beliefs not only to Generalised Antisemitism but also to both of its subscales, made in Study 1 with regard to multiple forms of conspiracy belief and replicated in Study 2 with regard to the form of conspiracy belief found to be most closely correlated in Study 1, also supports existing scholarship on the historical and contemporary relationship between antisemitism and conspiracism.

In sum, the findings of the studies reported here align with much recent qualitative scholarship in suggesting that, at least in the UK, it is neither the left nor the right per se that threatens Jews. Rather, it is individuals (and, by extension, perhaps also groups) with a conspiracist view of world affairs, as well as those who desire to overthrow the social order, and those attracted to the idea of installing or living under a totalitarian regime, regardless of whether such people are to be found on the left, on the right, or in any other ideological space. This implies that the focus of those who would oppose antisemitism should not be on attacking or defending the left or the right as supposedly homogeneous blocs, but rather on examining the specific ideological position of political movements or formations that may identify themselves with one, the other, neither, or perhaps even both—and applying criticism accordingly.

Limitations and scope for future work

As noted above, a limitation of the research presented here was the inability to re-test more than three scale predictors of antisemitism in Study 2. (This may perhaps account for the full model's ability to explain only half as much variation in Antizionist Antisemitism as in Judeophobic Antisemitism.) Employing multiple forms of conspiracy belief as predictors (as in Study 1, although in multi-variable models such as those used in Study 2) would be an obvious first step in such a direction. A further problem is arguably perhaps seen in the decision to employ a simple linear model to predict antisemitism, when the measure employed was comprised of two related but imperfectly correlated subscales. An alternative approach might have been to select the strongest predictors of each of the two subscales and then construct a more complex model, such as a path model.

A further limitation is inherent in the use of a scale eliciting agreement or disagreement with antisemitic beliefs: as Greene and colleagues have argued, it is possible that more highly educated participants 'may be more likely to detect what they are being asked and [to] give socially desirable answers' to such questions, such that measures of antisemitism may in part be measures of (in)ability to guess the researcher's intention (Greene et al., 2021, p. 2). Thus, it would seem expedient to attempt a conceptual replication of the above findings using other methods to measure antisemitism, such as presentation of participants with manipulated scenarios (as, indeed, in Greene et al., 2021).

Finally, the finding of contradictory associations between both gender and educational attainment and the two forms of antisemitism measured in this study, as well as the finding of congruent associations between ethnicity and the same two forms of antisemitism, require further investigation. Because these associations survived the introduction of the three ideological scale predictors employed in Study 2, the data analysed here cannot be taken to support the view that these associations might be explained by gender-, education-, or ethnicity-based differences in those variables (with the partial exception of belief in Malevolent Global conspiracies in the case of ethnicity). This means that it will be necessary to test for further potential mediating

variables before drawing conclusions as to the possible reasons for the aforementioned relationships. Distinguishing between different fields of educational attainment might also be of help, as it could potentially reveal contradictory correlations obscured by the unidimensional measure of education employed here.

Technical note

Analysis was carried out using R v. 4.2.2 (R Core Team, 2022), with use of various libraries, most notably `dplyr` v. 1.0.10 (Wickham et al., 2022). Visualisations were created using `ggplot2` v. 3.3.6 (Wickham, 2016). Drafts were compiled using `knitr` v. 1.39 (Xie, 2014), with additional use of `kableExtra` v. 1.3.4 for tables (Zhu, 2021).

Data availability

The datasets generated and analysed during the current study were made available ahead of this article's publication via the Open Science Framework repository, alongside the code used to generate the analysis presented here, as part of the project 'Predictors of antisemitism among UK-resident adults' (<https://osf.io/9p2f8/>). Following this article's publication, datasets and code may potentially be republished via other platforms, as appropriate.

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Competing interests

The authors declare no competing interests.

Ethical approval

Ethical and data protection guidelines at King's College London, the University of Derby, and YouGov were followed. Ethical clearance was sought and received at King's College London, MRA-19/20-20918.

Informed consent

Freely-given, informed consent to participate in the study was obtained from all participants.

Additional information

Supplementary information The online version contains supplementary material available at <https://doi.org/10.1057/s41599-023-01624-y>.

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