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Authoritarianism, Political Attitudes, and Vote Choice: A Longitudinal Analysis of the British Electorate

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Abstract

The nature, measurement, and correlates of the psychological trait of authoritarianism have spurred an intense and long-lasting debate in political psychology, dating back to the 1950s. This article aims at advancing extant knowledge on authoritarianism—measured here by child-rearing items—in two ways. First, by investigating the impact of authoritarianism on political attitudes and voting, net of individual heterogeneity, thus improving causal estimation. Second, by investigating the extent to which there exists reverse causality between authoritarianism and political attitudes. To do so, we employ a longitudinal analysis that covers a timespan of two years using the 2021 British Election Study Panel. The results suggest that authoritarianism in Britain is positively associated with anti-immigration attitudes, anti-EU preferences, and opposition to economic redistribution. However, when accounting for potential confounding through the inclusion of individual fixed effects, we find that authoritarianism retains its significant association with anti-immigration preferences alone. Further, lagged relations between authoritarianism and immigration preferences indicate that within-person changes in immigration attitudes precede changes in authoritarianism—not the other way around. Finally, the findings indicate that authoritarianism's correlation with vote choice is a product of omitted variable bias rather than representing a causal relationship.

Introduction

Few concepts have been debated more in political behavior literature than authoritarianism. Popularized in social science research after the end of WWII by the seminal work of Adorno and his colleagues (1950), authoritarianism was initially conceived as a personality trait that provided a psychological proclivity to support

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totalitarian leaders and movements. Seven decades after the publication of Adorno et al.'s work, the concept remains relevant today as is manifested by the rise of far-right populist politicians and parties across the globe who regularly target minorities, restrict individual freedoms, and undermine fundamental democratic processes. This rise of authoritarian leaders and parties in the past years has been accompanied by a stream of intense and fruitful research around the psychological construct of authoritarianism and its association with political choice in mass publics (Aichholzer & Zandonella, 2016; Bakker et al., 2021; Choma & Hanoch, 2017; Cohen & Smith, 2016; Dunn, 2015; Engelhardt et al., 2023; Hetherington & Weiler, 2018; Luttig, 2021; MacWilliams, 2016; Nilsson & Jost, 2020; Pettigrew, 2017; Vasilopoulos & Jost, 2020; Vasilopoulos & Lachat, 2018).

However, despite a very productive and animated debate over the existence and the direction of associations between authoritarianism and a range of social and political attitudes, the available literature draws almost exclusively on cross-sectional (e.g. Dunn, 2015; Napier & Jost, 2008; Vasilopoulos & Lachat, 2018) or—more recently—cross-lagged panel studies (see Bakker et al., 2021; Engelhardt et al., 2023; Luttig, 2021; Osborne et al., 2021). With these approaches, it becomes difficult to disentangle the net effect of authoritarianism from unobservable factors that simultaneously correlate both with authoritarianism and political attitudes. Apart from issues arising from possible omitted variable bias, some of the recent longitudinal studies have questioned the extent to which authoritarianism is truly exogenous to politics, arguing that individuals may adjust their responses to self-reported authoritarianism questionnaires based on their partisan convictions (Luttig, 2021).

In this article we aim at advancing extant knowledge on the psychological orientation of authoritarianism. Drawing on the case of Britain we investigate its impact on attitudes toward immigration, preferences for income redistribution, support for European integration, and vote choice, from a longitudinal perspective. This allows us to assess the role of authoritarianism on political behavior, net of individual heterogeneity, as well as investigate the direction of causality between authoritarianism and political preferences. To this end, we draw on the British Election Study, a large representative panel study that measures authoritarianism at four points in time over a timespan of two years. We measure authoritarianism using Feldman's child-rearing scale (Feldman, 2003; Feldman & Stenner, 1997; Stenner, 2005), which is an increasingly popular measure of the trait in mass publics across contexts (Bakker et al., 2021; Engelhardt et al., 2023; Hetherington & Suhay, 2011; Hetherington & Weiler, 2009, 2018; MacWilliams, 2016; Vasilopoulos & Lachat, 2018; Vasilopoulos et al., 2019; Velez & Lavine, 2017). Three longitudinal methods are used: first, we use random effects models that provide an assessment of the between-person association of authoritarianism with political preferences. Second, we employ individual fixed effects models that estimate whether within-person changes in authoritarianism are associated with corresponding changes in policy preferences and enable us to control for stable unobservable characteristics of individuals that may impact both authoritarianism and political preferences. Finally, we draw on random-intercept cross-lagged panel models (RI-CLPMs) to assess the direction of causality

between authoritarianism and political behavior. The latter two approaches allow for a rigorous assessment of causal effects of authoritarianism on political choice.

Results suggest that authoritarianism in Britain is positively associated with anti-immigration attitudes, anti-EU preferences, and opposition to economic redistribution. However, when accounting for potential confounding through the inclusion of individual fixed effects, we find that authoritarianism retains its significant association with anti-immigration preferences alone. Assessing causal direction through RI-CLPMs, results cast doubt on the assumption that authoritarianism is causally prior to political preferences. Lagged relations between authoritarianism and immigration preferences indicate that within-person changes in immigration attitudes precede changes in authoritarianism—not the other way around. Finally, the findings indicate that authoritarianism's correlation with vote choice is a product of omitted variable bias rather than representing a causal relationship.

These findings have important theoretical and methodological implications both for understanding authoritarianism and the psychology of political attitudes. In our data, the relationship between authoritarianism and anti-immigrant attitudes is not driven by time invariant unobservables that may simultaneously affect both authoritarianism and political attitudes. However, the results suggest that authoritarianism is endogenous to anti-immigration attitudes, as it is changes in political preferences that impact authoritarianism (or at least survey responses corresponding to its measurement). This finding is in line with a recent bevy of scholarship querying the assumed causal precedence of dispositional traits on political preferences (Bakker et al., 2021; Hatemi & Verhulst, 2015; Luttig, 2021). Third, our results provide a rigorous empirical assessment of a widely used authoritarianism scale, Feldman's child-rearing values scale (Feldman, 2003; Feldman & Stenner, 1997) by illustrating that in line with its original conception and design, the scale exhibits some construct validity. Overall, the child rearing scale indeed captures a long-term disposition that correlates with prejudicial attitudes independently of individual heterogeneity. Nonetheless, our results suggest that prejudice influences authoritarianism and not the other way around. This indicates that an increase in anti-immigration hostility may trigger a broader authoritarian response that extends beyond immigration.

Theoretical Framework

Authoritarianism, conceived as an individual difference, has been inexorably linked with the landmark study *The Authoritarian Personality* (Adorno et al., 1950). Relying heavily on the premises of Freudian psychology, Adorno and his colleagues posited that authoritarianism stemmed from socialization processes within the context of the family during childhood and consists of the interrelated yet seemingly distinct components of conventionalism, authoritarian submission, authoritarian aggression, anti-intellectualism, obsession with power and toughness, stereotypical thinking, generalized cynicism, exaggerated concerns with sex, and the projection of one's own aggressive impulses to others. These were interlinked to form a common *personality* type that was characterized by strong aggressive impulses toward minorities and was prone to follow antidemocratic leaders and movements (Adorno et al.,

1950). The authors constructed the F-scale, a scale designed to measure levels of authoritarianism, which they found to correlate with anti-Semitism, as well as social and economic conservatism. Despite its important influence in the study of political psychology, *The Authoritarian Personality* has been the focus of much criticism. The theory was questioned on the basis of the heavy reliance on the Freudian framework that was later disputed by psychological research. Methodological concerns mostly focused on the F-scale, and included sampling choices, possible acquiescence bias, and the low correlations between the subscales for each of the nine components (see Brown, 1965).

These criticisms lead to a major reconceptualization of authoritarianism developed by Altemeyer (1981). He argued that instead of constituting a personality trait, authoritarianism is a general orientation that is rooted in personality but is at the same time influenced and updated by features of the social environment. Further, Altemeyer (1981, p. 148) kept only three of the nine components of *The Authoritarian Personality*, which he described as "attitudinal clusters": Conventionalism, which refers to "a high degree of adherence to the social conventions which are perceived to be endorsed by society and its established authorities''; Authoritarian Submission—"a high degree of submission to the authorities who are perceived to be established and legitimate in the society in which one lives''; and Authoritarian Aggression, which refers to "a general aggressiveness, directed against various persons, which is perceived to be sanctioned by established authorities". Importantly, Altemeyer developed the Right Wing Authoritarianism (RWA) scale as an alternative to the F-Scale (1981). The original scale included 30 items to capture each of the three dimensions. It included items such as "What our country really needs is a strong, determined leader who will crush evil, and take us back to our true path." or "It would be best for everyone if the proper authorities censored magazines so that people would not get their hands on trashy and disgusting material".

Altemeyer's refinement of authoritarianism and the RWA scale stimulated an intense and productive wave of research. Subsequent works showed high correlations between the RWA scale and heterogenous aspects of prejudice and conservatism, as well as voting for far-right parties in different settings (e.g. Altemeyer, 1988; Choma & Hanoch, 2017; Peresman et al., 2021). However, the conceptualization and measurement of Right Wing Authoritarianism has been criticized for being partly tautological by directly measuring some of the social and political attitudes that it is designed to predict. That is, instead of capturing a psychological orientation that motivates prejudice, the RWA rather captures the *outcomes* of prejudice by directly asking attitudes toward minorities and perceived social deviants (Cohrs, 2013; Feldman, 2003, 2013; Hetherington & Weiler, 2009; Pérez & Hetherington, 2014; Stenner, 2005; Stenner, 2005). Another criticism of the scale is that the wording of the items closely resembles the rhetoric of far-right leaders, which may produce spurious correlations between RWA and voting for the far right (Engelhardt et al., 2023; Feldman, 2003).

Considering these issues, Feldman and colleagues proposed a second major theoretical and methodological refinement of the psychological construct of authoritarianism, described as a *predisposition* (Feldman & Stenner, 1997; Feldman, 2003; Engelhardt et al., 2023; see also Stenner, 2005). These authors posit that every

society is characterized by a trade-off between individual autonomy and social control. On the one end is the need for social homogeneity and the development of collective social norms. On the other end lies the need for individual expression and the pursuit of self-interest. Some people show a proclivity to prioritize individual autonomy over control, while others prioritize social control at the expense of autonomy. These relative priorities constitute the basis of the authoritarian spectrum. On the one end of the spectrum are those who value autonomy. These individuals are more committed to freedom of expression, supportive of civil liberties, and against state control in individuals' lives. Further, they are less likely to feel threatened by and hostile toward those leading lives outside of conventional norms, such as ethnic and sexual minorities or immigrants. On the other end are those who show a strong preference for social control over autonomy. These individuals are supportive of state control and are more likely to endorse punitive tendencies against diversity and those with nonconformist lifestyles.

In addition to their theoretical refinement, Feldman and colleagues proposed a set of questions focusing on child rearing ideals (Engelhardt et al., 2023; Feldman, 2003). These have no apparent political content and thus allow for the measurement of authoritarianism without the endogeneity issues that characterized the RWA scale. Further, they offer the advantage of comparability across time and space. Subsequent research has found that the child-rearing scale strongly correlates with different manifestations of authoritarianism such as prejudice toward sexual minorities and ethnic intolerance (Brandt & Henry, 2012; Brandt & Reyna, 2014; Cizmar et al., 2014; Cohen & Smith, 2016; Oyamot et al., 2012; Stenner, 2005; Vasilopoulos & Lachat, 2018), support for restricting civil liberties (Feldman, 2020; Hetherington & Suhay, 2011; Hetherington & Weiler, 2009), voting for far right parties and candidates (Bakker et al., 2021; Cohen & Smith, 2016; Dunn, 2015; MacWilliams, 2016; Vasilopoulos & Lachat, 2018), as well as broader opposition to equality and adherence to tradition (Federico et al., 2011).

Despite its popularity in political psychology research this refinement has also attracted scholarly criticism. Napier and Jost (2008) have criticized Feldman's conceptualization for being too limited, describing the authoritarian syndrome solely in terms of conventionalism and obedience rather than including other important psychological correlates of prejudice such as intolerance, cognitive rigidity, or cynicism. Others have questioned the content of the scale, especially regarding its cross-racial validity in the US context (Pérez & Hetherington, 2014).

The Consequences of Authoritarianism for Economic Attitudes

Despite a well-established link between authoritarianism and exclusionary political attitudes, the direction of the association between authoritarianism and economic preferences remains a point of debate in the literature. One stream of research argues that authoritarianism should be negatively associated with economic conservatism (Stenner, 2005, 2009). According to Stenner (2009, p. 146), it is "illogical" that "those who demand authoritative constraints on the individual in all matters moral, political, and racial would tend to reject government

intervention in the economy''. Others argue that authoritarianism is unassociated with economic ideology. For instance, Feldman and Johnston (2014) draw on American National Election Studies data to show that when taking into account need for cognition, need for closure, egalitarianism, and religiosity, authoritarianism (measured using the child-rearing items) is significantly associated with social conservatism but unassociated with economic conservatism.

Yet these perspectives are in contrast with the conclusions of *The Authoritarian Personality* that argued for a positive association between authoritarianism and economic conservatism based on rigid and hierarchical categorizations of social and economic groups. Azevedo et al. (2019, p.58) offer a further theoretical justification over a positive association between authoritarianism and economic conservatism, arguing that "a firm distinction between social and economic attitudes seems unwarranted and, indeed, untenable" because of the interconnection between race, gender, and economic status. In a large-scale comparative study in 19 democratic countries, Napier and Jost (2008) use an extensive range of authoritarianism measures that include child-rearing values but also cynicism, dogmatism, moral absolutism, and conventionalism. They find that conventionalism and moral absolutism are positively associated with economic conservatism. In a study on authoritarianism in France, Vasilopoulos and Lachat (2018) find a weak but statistically significant association between authoritarianism and opposition to income redistribution. This association was especially strong among managerial classes. Finally, more recent work by Azevedo et al. (2019) on samples in the US and the UK finds a positive association between authoritarianism, measured both using the RWA and the child-rearing scales, and multiple facets of economic conservatism.

Finally, a third stream of research argues that the direction of the association between authoritarianism and economic preferences is dependent on contextual factors. For instance, the studies by McFarland and coauthors that compared the correlates of Russian and Western authoritarianism found that increased authoritarianism was associated with economically conservative attitudes in the USA but with egalitarian attitudes in Russia (McFarland et al., 1996). The authors attribute this finding to the association of authoritarianism with the endorsement of Soviet norms that combined totalitarianism with economic egalitarianism and argue that, unlike the link between authoritarianism and prejudice, there is no inherent psychological motivation of authoritarians to endorse economically inegalitarian policies. Johnston et al. (2017) and Johnston (2018) come up with a similar conclusion. Drawing on the case of the US they argue that voters choose which elites to trust based on their broader cultural worldview. In turn, they tend to adopt these elites' positions on economic policy, resulting in an alignment of their social preferences with a set of economic policy ideas. In sum, Johnston and his colleagues argue that the positive association between authoritarianism and economic conservatism is a by-product of a causal link between authoritarianism and partisan choice, rather than being independently and causally associated.

Authoritarianism and Political Behavior: Issues of Causality

Since the birth of the concept, authoritarianism was conceived and developed as a trait that was exogenous and causally prior to political attitudes and voting. This assumption has dominated the relevant literature and has been informing hypothesis-building and empirical modeling for over seven decades. Yet, several studies, some dating back to the early days of authoritarianism research, cast doubt on this claim. The skepticism rests on two potential issues. First, it has long been argued that the widely reported correlations between authoritarianism and political attitudes or behavior may be driven by unobservable factors and hence the relationship may be spurious (Brown, 1965; Hyman & Sheatsley, 1954). Second, more recently, Luttig (2021), Osborne et al. (2021), and Bakker et al. (2021) provide evidence of reverse causality, arguing that vote choice and political attitudes may—at least to some extent—affect reported levels of authoritarianism rather than the other way round.

Omitted Variable Bias

There are indeed plausible reasons to anticipate that the impact of authoritarianism on political attitudes may be a product of other stable factors that operate outside of personality. The causal role of authoritarianism in predicting prejudice has been questioned since the publication of *The Authoritarian Personality*, with critics suggesting instead that the covariance between authoritarianism and prejudice may be instead rooted in feelings of marginalization, low cultural sophistication, and other norms that are a product of growing up in a low socioeconomic environment (Brown, 1965; Hyman & Sheatsley, 1954).

For instance, low socioeconomic status (SES) correlates with, and is assumed to precede, authoritarianism (Carvacho et al., 2013; Lipset, 1960; Napier & Jost, 2008). But low SES also directly influences the attitudinal outcomes associated with authoritarianism, such as prejudice. This raises the possibility of confounding if the effect of SES on exclusionary attitudes occurs via mechanisms independent of authoritarianism. Evidence suggests this to be the case. First, low SES predicts a subjective sense of impotence or group deprivation (Jenssen & Engesbank, 1994; Pettigrew et al., 2008), which is associated with prejudice toward outgroups (Pettigrew et al., 2008; Yoxon et al., 2019). Importantly, evidence suggests that economic self-interest can provide the mechanism from deprivation to exclusionary attitudes (Algan et al., 2017; Dehdari, 2022): authoritarianism is not the only route through which this can occur.

Additionally, some theories of authoritarianism posit that low SES (particularly lack of education) leads to authoritarianism through the communication of particular norms and worldviews (Gabennesch, 1972). But it is feasible to assume that the beliefs and norms produced by a low-SES developmental environment could prompt the adoption of prejudicial and intolerant attitudes, independent of authoritarianism. For example, Stephens et al. (2007) present evidence supporting the argument that SES produces differing models of agency—working class developmental contexts

promote beliefs about normatively good action that emphasise similarity with others. These beliefs could well translate into exclusionary attitudes toward minority groups.

This evidence demonstrates the possibility that low SES fosters exclusionary attitudes, beyond the influence of authoritarianism. Consequently, the association between authoritarianism and political attitudes might not represent a causal association but the product of confounding, driven by low SES. Extant evidence provides support for this possibility, suggesting that both group deprivation and prejudicial norms influence prejudice, independent of authoritarianism (Pettigrew et al., 2007; Yoxon et al., 2019). A similar case can be made for a number of other unobservable factors: socialization (Lipset, 1960), cognitive ability (Choma & Hanoch, 2017; Onraet et al., 2015) and lack of outgroup contact (Altemeyer, 1988), all of which correlate both with authoritarianism and prejudice.

Accounting for the nuanced and multifaceted (and often unobservable) implications of SES and other factors is therefore necessary to accurately estimate the causal association between authoritarianism and political attitudes. Failure to do so risks attributing to authoritarianism the influence of omitted variables on prejudice. Drawing on cross-sectional data, vulnerable to omitted variable bias, is not well suited to this task. In contrast, through panel data—measuring within-individual changes in authoritarianism over time whilst controlling for time-invariant factors, both observed and unobserved—this objective can be achieved.

Reverse Causality

A second stream of research has highlighted possible reverse causality between authoritarianism and political behavior. In a recent study in New Zealand, Osborne et al. conducted a longitudinal analysis covering a timespan of 10 years using RI-CLPMs to show that the RWA (and Social Dominance Orientation) scales precede various forms of prejudice (2021). Yet, they also find that RWA and SDO are—to a lesser extent—also predicted by levels of prejudice (2021). Two recent important studies come up with similar findings that, according to their authors, cast doubt on the causal influence of authoritarianism on political behavior. Luttig (2021) investigates potential reverse causality between authoritarianism and voting, drawing on panel data. Drawing on two two-wave panel studies and a cross-lagged regression model he finds that authoritarianism (measured with the child-rearing items) was unassociated both with a change in the probability of supporting Trump between September and October 2016 and with a change in voting for Romney between 2012 and 2013. Based on these findings he concludes that "contradicting long-held assumptions, the child-rearing measure of authoritarianism is not exogenous to politics" (Luttig, 2021, p. 786). Luttig instead suggests that support for authoritarian leaders may be driven by top-down factors where voters adjust their preferences in line with elite cues rather than authoritarianism per se. Another study by Bakker et al. (2021), drawing on a series of cross-lagged panel models in US samples, found that authoritarianism (measured by two child-rearing items) both influenced and was influenced by political attitudes such as opposition to abortions and LGBTQ rights.

Further, the authors experimentally illustrate that priming political issues influences responses to the authoritarianism child-rearing scale, compared to a control group that was not primed with political issues.

Why would authoritarianism, which is considered an enduring psychological orientation, be affected by issue attitudes? Bakker and his coauthors offer two explanations. First, they argue that the inclination of politically similar-minded people to interact more frequently with each other may foster common norms, patterns of behavior, and consequently trigger a broader attitudinal change. This in turn could be reflected in measures of general psychological characteristics (Bakker et al., 2021). A second explanation could be that many people are aware of the stereotypical behavioral repertoires of their political ingroups and tend to adjust their answers to psychological trait measures accordingly (Bakker et al., 2021).

In addition to these two mechanisms, there is a further key theoretical reason that leads us to anticipate that, on top of being affected by authoritarianism, attitudes toward outgroups should also affect levels of authoritarianism. As Duckitt (1989) asserts, even though authoritarianism has been predominantly conceptualized as an individualistic construct, it fundamentally concerns intergroup phenomena insofar as it has been built to explain prejudice, ethnocentrism, and hostility toward minorities. Hence, increasing opposition to outgroups (such as immigrants or ethnic minorities) may lead to increased authoritarianism through a process of strengthening ingroup identification and increasing the desire for homogeneity and group cohesiveness (Duckitt, 1989). Duckitt's hypothesis over a reciprocal association between outgroup attitudes and authoritarianism should be particularly relevant for Feldman's theorization of authoritarianism as an enduring orientation toward social homogeneity at the expense of personal autonomy: an increase in hostility toward outgroups should strengthen the motivation to maintain homogeneity at the expense of individual freedom, leading to more authoritarian scores on the child-rearing scale.

The Present Study

In the light of the literature we reviewed above, the aims of this research are threefold. The first aim is to address the issue of omitted variable bias that has cast doubt on the causal effect of authoritarianism on political behavior. Past research predominantly relies on cross-sectional designs and falls short of capturing the effect of authoritarianism outside of factors such as low socio-economic status that may correlate both with authoritarianism and political behavior. Further, whilst being greatly superior to cross-sectional studies, cross-lagged regressions are still affected by omitted variable bias (Hamaker et al., 2015), which hampers confidence in the causal role of authoritarianism on political attitudes and voting. Thus, this article aims at investigating the impact of authoritarianism on political attitudes and propensity to vote for different parties using longitudinal data that make it possible to control for stable unobservable traits of individuals. This is the first study—to the best of our knowledge—that investigates the effect of authoritarianism on political attitudes and voting, net of individual heterogeneity.

Second, given recent evidence of reverse causality between authoritarianism and facets of political behavior (Bakker et al., 2021; Luttig, 2021; Osborne et al., 2021), we aim at advancing extant knowledge by investigating the extent to which authoritarianism has an influence on and is influenced by a broad set of political preferences (immigration, EU attitudes, and economic redistribution) using a large-N panel study that covers a timespan of two years. To assess the questions of reverse and reciprocal causation, we employ random-intercept cross-lagged panel models (RI-CLPMs). The traditional CLPM has long been the dominant means of assessing reciprocal relations in observational research, but suffers from potential shortcomings. CLPMs are vulnerable to omitted variable bias (Hamaker et al., 2015), raising confounding as a potential issue when analysing the relationship between authoritarianism and political preferences. In addition, the conventional CLPM procedure does not separate out between-person and within-person relations, meaning that if these two concurrent processes diverge in either direction or magnitude, CLPMs can produce biased or even uninterpretable estimates (Berry & Willoughby, 2017). The RI-CLPM addresses both of these concerns. By decomposing observed scores into stable, between-person components and fluctuating within-person components, this strategy is able to assess reciprocal within-person relations between constructs, whilst controlling for time-invariant confounding (Hamaker et al., 2015; Mulder & Hamaker 2021). Consequently, the RI-CLPM produces estimates that are less biased than those produced by the traditional CLPM (Hamaker et al., 2015; see also Osborne & Sibley, 2020).[1]

A third aim is to shed light on the impact of authoritarianism on the endorsement of economic conservatism. In addition to the question of whether authoritarianism has a causal effect on attitudes, extant research finds contrasting evidence regarding the nature of the relationship between authoritarianism and right-wing economic preferences. Given that these studies tend to rely on cross-sectional designs, our goal is to advance available knowledge on the relationship between authoritarianism and economic conservatism by providing evidence from a longitudinal design that can help establish or refute a causal link between the two. Britain offers an ideal case of testing the association between authoritarianism and economic attitudes: There exist intense disparities in terms of income and wealth (Piketty, 2014) and political parties are increasingly divided on economic issues (Gunderson, 2022), thus providing clear-cut cues to voters. Consequently, drawing on longitudinal data from Britain allows us to directly test whether any association between authoritarianism and economic attitudes is causal or a byproduct of omitted variables.

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[1] Recognising concerns raised with the RI-CLPM—in particular, that the RI-CLPM can produce estimates that suffer from downward bias (i.e. underestimating the true relationship: see Leszczensky and Wolbring (2022)—we also estimate CLPMs to assess reciprocal relations in section 4 of the supplementary materials. For a full discussion of the strengths of each estimation strategy and the theoretical and empirical justification for our choices, see Sect. 3.1 of the supplementary materials.

Data and Methods

Data come from the British Election Study panel (BESP), collected by the polling organization YouGov. It selects around 30,000 respondents using a series of quotas (such as age, gender, education, past turnout) in each wave from an online sample of a panel consisting of around one million respondents. The sample is designed to be representative of the British population (England, Scotland, and Wales) aged 16 and over (see Fieldhouse et al., 2021).

We draw on the four waves of the BESP that include measures of authoritarianism. These cover a timespan of 2 years: April–May 2016 (Wave 7), November–December 2016 (Wave 10), April–May 2017 (Wave 11), and May 2018 (Wave 14).[2] Authoritarianism has been asked of a sub-sample of the panel consisting of around 7500 respondents in each wave. The sample includes a total of 13,085 respondents, corresponding to 26,911 observations. Some respondents are observed only once (43%), while the majority have repeated observations over time. Table 1.1 of the supplementary materials reports the panel structure. As with all panel studies the BESP suffers from panel attrition, which may compromise the representativeness of the sample if loss is non-random. To ensure that attrition will not hinder the validity of the findings we compared the full sample with the fixed-effects subsample (supplementary materials Table 1.2). The comparison indicates that there are no differences between the full and reduced sample and consequently that panel attrition does not undermine the validity of the obtained results.

Authoritarianism was measured using Feldman's child rearing items described in the theoretical section. The responses "respect for elders" (v. "independence"), "obedience" (v. "self-reliance"), "well behaved" (v. "considerate") and "good manners" (v. "curiosity") indicated an authoritarian response. The final scale ranges from 0 (least authoritarian) to 4 (most authoritarian—see Feldman, 2003; Engelhardt et al., 2023).

We draw on four types of dependent variables that have all been measured in the same four panel waves as authoritarianism. The first dependent variable measures attitudes toward immigration in the UK, using a scale constructed from two items ($\alpha = 0.85$): an 11-point scale measuring support for immigration (where "0" indicates "allow many fewer" immigrants and "10" indicates "allow many more"), and a 7-point scale measuring attitudes concerning the cultural impact of immigration (where "1" indicates "undermines Britain's cultural life" and "7" indicates "enriches Britain's cultural life"). The second dependent variable measures attitudes toward economic redistribution in a similar scale where "0" indicates that "the government should try to make incomes equal" and "10" indicates "the government should be less concerned with equal incomes". Thirdly, we measure support for European integration with a scale variable ranging from "unite fully" with the EU (0) to "protect our independence" (10). We reverse code this measure so that higher scores correspond to pro-European attitudes.

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[2] Authoritarianism has also been measured in Wave 19, with the replacement of one of the four items and hence cannot be used in a panel analysis.

The last set of dependent variables are three propensity to vote (PTV) scores (Van der Eijk et al., 2006). These items ask respondents how likely it is that they will ever vote for a party in question on a scale ranging from "0" ("not at all likely") to "10" ("extremely likely"). We use the PTV scores for three major UK parties, namely the incumbent Conservative party (center right), the Labour party (center left), and the United Kingdom Independence Party (populist right).[3] PTV scores have been designed to measure the electoral utility of each party separately without being affected by parameters outside of utility, such as strategic voting. They are thus ideal to investigate the psychological correlates of party appeal, net of strategic considerations. The data also include controls for age, gender, education, ethnicity, social grade, and income. Age, social grade, and income are all treated as time-variant, while gender, education and ethnicity are treated as time invariant.[4]

We draw on three sets of models for our analysis. We start with random effects models, which draw on the full sample of respondents – whether they were observed once or repeatedly over time. The random effects estimator accounts for both between-person and within-person variation in predictors (i.e. providing a combined estimate of the effect of differences between those high and low in authoritarianism alongside within-person changes in authoritarianism over time). Given that the panel structure potentially includes multiple observations (over time) per respondent, we cluster standard errors at the individual level. We include wave fixed effects, to account for the influence of over-time trends that exert a uniform influence across the study population. As all dependent variables are scales, we employ Ordinary Linear Regression. These models do not provide causal estimates but allow us to understand the influence of between-person differences in authoritarianism on policy preferences and vote propensity—for example, whether individuals high in authoritarianism are more opposed to immigration than those individuals low in authoritarianism.

In the second set of models, we include individual fixed effects. These models essentially treat each respondent as their own control (Allison, 2009), estimating the effects of within-person changes in authoritarianism (over time) on the outcomes. In other words, these models assess whether an individual who becomes more authoritarian also adopts (for example) more exclusionary attitudes toward immigrants. Here, the effects of stable characteristics of individuals are automatically factored out of the model, thus significantly reducing omitted variable bias linked to individual heterogeneity and allowing us to account for the stable unobservables that may be confounding the relationship between authoritarianism and political preferences (Brown, 1965; Hyman & Sheatsley, 1954). An important consideration when using individual fixed effects is the amount of within-person variation in the predictor of interest—if it is stable over time, estimates of its effect can be biased (see Clark & Linzer, 2015). In Sect. 1.4 of the supplementary materials we present evidence of substantial within-person variation in authoritarianism over time, indicating that this

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[3] PTV scores are only available at waves 7, 10 and 11.

[4] The data supports this decision—less than 1% of observations for education and ethnicity vary from one wave to the next, and none for gender.

source of potential bias in the fixed effects estimator is not a concern. With the combination of random and fixed effects, we are able to understand whether the influence of authoritarianism on policy attitudes and vote choice is a stable, between-person difference, or whether individuals update their preferences as they become more (or less) authoritarian.

The third set of models aim at assessing potential reverse causality between authoritarianism and the target variables, using RI-CLPMs. All RI-CLPM models were estimated using R 4.3.1 (R Core Team, 2022), using the *lavaan* package version 0.6-17 (Rosseel, 2012). We utilize Full Information Maximum Likelihood estimation to handle missing (at random) data. Following Mund et al. (2021), time-varying confounders were modeled by including their observed scores at each wave as wave-specific controls. We also account for measurement error in both authoritarianism and policy preferences by generating reliability estimates for the child-rearing scale and policy preferences at each wave and inputting these estimates into the RI-CLPM modelling procedure.[5] Results indicate that the items are highly reliable, with α scores ranging from 0.79 to 0.93. In Sect. 1.3 of the supplementary materials, we discuss our measurement error models and results in detail. A full breakdown of the preliminary analyses, model specification and estimation procedures for the RI-CLPMs are available in supplementary materials section 3.

Results

Random Effects

Table 1 summarizes the results of the random effects models. The first three columns report the association between authoritarianism and attitudes toward immigration, income redistribution, and EU integration respectively. The last three columns report the corresponding association with the propensity to vote scores for UKIP, the Conservative Party, and Labour. All variables in this model are standardised, running from 0 to 1.

Overall, and expectedly, the findings suggest that authoritarianism is, all else equal, negatively associated with the willingness to allow more immigrants in the UK ($b = -0.16$, $SE = 0.01$, $p < 0.001$), positively associated with opposition to income redistribution ($b = 0.06$, $SE = 0.01$, $p < 0.001$), and negatively associated with support for greater integration with the EU ($b = -0.13$, $SE = 0.01$, $p < 0.001$). Moving on to the association between authoritarianism and the PTV scores, the results suggest a positive association between authoritarianism and the propensity to vote for the two rightwing parties of the UK, the rightwing Eurosceptic UKIP

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[5] We recognise that given we have multiple indicators for authoritarianism, a superior approach to accounting for measurement error would be to model authoritarianism as an latent variable, inputting the indicators directly into *lavaan*. However, *lavaan* arrives at improper solutions to the RI-CLPMs when adopting this approach, so we instead fit measurement models and then input these reliability estimates into the RI-CLPMs, as described in supplementary materials Sect. 1.3.

Table 1 Authoritarianism, political attitudes, and vote choice in Great Britain (random effects)

	Allow more immigrants	Against income redistribution	Pro EU integration	UKIP	Tory	Labour
Authoritarianism	− 0.161*** (0.006)	0.056*** (0.007)	− 0.125*** (0.007)	0.135*** (0.008)	0.129*** (0.01)	− 0.089*** (0.009)
Wave 10	0.032*** (0.003)	− 0.023*** (0.004)	0.057*** (0.003)	− 0.042*** (0.004)	0.042*** (0.004)	− 0.036*** (0.004)
Wave 11	0.052*** (0.003)	0.005 (0.004)	0.076*** (0.004)	− 0.062*** (0.004)	0.085*** (0.004)	− 0.012*** (0.004)
Wave 14	0.072*** (0.003)	0.018*** (0.004)	0.1*** (0.004)			
Controls:	YES	YES	YES	YES	YES	YES
Observations	20,092	20,213	21,144	15,796	15,538	15,534
Number of id	10,270	10,396	10,647	9009	8885	8887

Entries are coefficients with robust standard errors (in parentheses). Controls include age, gender, education, social grade, ethnicity and income

***$p < 0.01$, **$p < 0.05$, *$p < 0.1$

($b = 0.14$, $SE = 0.01$, $p < 0.001$) and the Conservative Party ($b = 0.13$, $SE = 0.01$, $p < 0.001$). Further, there is a negative relationship between authoritarianism and voting for the center left Labour Party ($b = -0.09$, $SE = 0.01$, $p < 0.001$). Interpreting these results substantively, an individual at the top of the child-rearing scale (i.e. the most authoritarian) is, in comparison to those at the bottom of the scale (i.e. the least authoritarian) 16 percentage points more opposed to immigration; 6 pp more opposed to economic redistribution; 13 pp more opposed to EU integration; 14 pp more likely to vote UKIP; 13 pp more likely to vote Conservative; and 9 pp less likely to vote Labour. Across these models, authoritarianism is the largest predictor of immigration preferences, EU preferences and party support, exceeding the coefficients of demographic and socioeconomic characteristics. Full model output is available in Table 2.1, supplementary materials. These results echo the findings of past research over the positive correlation of authoritarianism with attitudes toward immigration and voting for rightwing parties (Dunn, 2015; Engelhardt et al., 2023; Stenner, 2005; Vasilopoulos & Jost, 2020; Vasilopoulos & Lachat, 2018). They further point to a positive association of authoritarianism with economic conservatism and a negative association between authoritarianism and voting for leftwing parties. Given that random effects do little to account for omitted variable bias, in the next section we investigate the extent to which these findings are affected by individual unobservables.

Individual Fixed Effects

Table 2 reports the results of individual fixed effects models for each of the dependent variables. Again, all model variables are standardised from 0 to 1. Beginning with attitudes toward immigration, the findings suggest a negative effect of authoritarianism on the willingness to allow more people to migrate to the UK, net of individual heterogeneity ($b = -0.02$, $SE = 0.01$, $p < 0.01$). Moving on, the results indicate that, when controlling for stable unobservables, authoritarianism is unrelated to attitudes to economic redistribution ($b = 0.01$; $SE = 0.01$, $p = 0.263$) and attitudes toward European integration ($b = -0.01$, $SE = 0.01$, $p = 0.32$). In sum, within-person increases in authoritarianism are associated with increased opposition to immigration but are unrelated to other policy preferences. Substantively, the association between authoritarianism and immigration preferences is small: moving from the minimum to the maximum value on the child-rearing scale is associated with a change of around 2-percentage points on the immigration scale.

The last three columns of Table 2 provide results regarding the impact of authoritarianism on the propensity to vote for UKIP, the Conservatives, and Labour. Here the coefficients are small and non-significant, indicating the absence of a net effect of authoritarianism on the propensity to vote score for any of these parties. These findings suggest that—at least in the case of Great Britain—authoritarianism does not have a net causal effect on voting but rather the associations reported in the random effects models are due to omitted variable bias. Full model output for each outcome is available in supplementary materials Table 2.2.

Table 2 Authoritarianism, political attitudes, and vote choice in Great Britain (fixed effects)

	Allow more immigrants	Against income redistribution	Pro EU integration	UKIP	Tory	Labour
Authoritarianism	− 0.021** (0.006)	0.011 (0.01)	− 0.007 (0.007)	0.014 (0.01)	0.017 (0.012)	0.016 (0.01)
Wave 10	0.031*** (0.003)	− 0.019*** (0.005)	0.047*** (0.003)	− 0.037*** (0.004)	0.046*** (0.005)	− 0.037*** (0.004)
Wave 11	0.044*** (0.004)	0.016** (0.006)	0.059*** (0.005)	− 0.06*** (0.005)	0.093*** (0.006)	− 0.015** (0.005)
Wave 14	0.076*** (0.006)	0.028** (0.01)	0.078*** (0.008)			
Controls	YES	YES	YES	YES	YES	YES
Observations	23,402	23,516	24,612	18,310	18,012	17,999
Number of id	11,560	11,718	11,964	10,238	10,097	10,096

Entries are coefficients with robust standard errors (in parentheses). Controls include age, education, social grade, ethnicity and income

***$p < 0.01$, **$p < 0.05$, *$p < 0.1$

Random Intercept Cross-Lagged Panel Models

Fixed effects results indicate that, when accounting for individual heterogeneity, the only preference for which we find a significant association with authoritarianism is immigration attitudes. Probing this result further, we estimate an RI-CLPM to assess possible reciprocal effects.[6] We first fit a baseline model to assess the bivariate relationship between authoritarianism and immigration attitudes, before including time-varying covariates (age, social grade and income). Positive and significant cross-lagged effects of authoritarianism on immigration attitudes (i.e., attitude at T regressed on authoritarianism at T_{-1}) would indicate that authoritarianism shapes immigration preferences. Conversely, positive and significant cross-lagged effects of immigration attitudes on authoritarianism (i.e., authoritarianism at T regressed on attitude at T_{-1}) would indicate that immigration preferences shape authoritarianism. We report beta-standardized coefficients and interpret the substantive size of the cross-lagged effects using the benchmark values detailed by Orth et al. (2022): $b = 0.03$ for a small effect, $b = 0.07$ for a medium effect, and $b = 0.12$ for a large effect.[7] Assessments of model fit using CFI, SRMR and RMSEA statistics all indicated good fit (Browne & Cudeck, 1992; Hu & Bentler, 1999see Table 3.2.1 of the supplementary materials). We test for stationarity in all models, comparing model fit when the bidirectional effects of authoritarianism on immigration preferences (and vice versa) are allowed to vary over time with that of a model in which these effects are constrained to stability over time. Comparison indicates that imposing stationarity has little impact on model fit (see supplementary materials Table 3.3.2), so we report the time-homogenous effects. Results with time-varying effects are presented in Sect. 4.1.1 of the supplementary materials.

Baseline RI-CLPM results indicate that authoritarianism is unrelated to support for immigration, with the cross-lagged effects close to zero in both directions. In the covariate model, results reveal that within-person increases in authoritarianism at T_{-1} are negatively associated with support for immigration, although this does not reach statistical significance ($b = -0.026$, $SE = 0.02$, $p = 0.202$). In contrast, within-person increases in support for immigration at T_{-1} are negatively and significantly associated with authoritarianism ($b = -0.047$, $SE = 0.022$, $p < 0.05$).[8] Alongside the

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[6] We recognise that individual fixed effects do not offer a panacea for the assessment of relations between variables (Clark & Linzer, 2015). Consequently, we further probe the relationship between authoritarianism and attitudes to redistribution and the EU by fitting RI-CLPMs (and CLPMs). The interested reader is directed to supplementary materials Sects. 4.2 for these results.

[7] Orth et al. (2022) derive these values from a quasi-representative sample of 1184 effects from previously published work, with these benchmarks corresponding to the 25th, 50th, and 75th percentile of the distribution of effect sizes in this sample. A more substantive interpretation of RI-CLPM effect sizes is difficult given that the cross-lagged effects represent a complex process: the effect of the within-person change from the trait level of authoritarianism at T_{-1} on the within-person change from the trait level of immigration preferences at T (and vice versa).

[8] We recognise that this difference is potentially important—for a number of reasons, we attribute the difference between the baseline and covariate parameters to the attenuation of suppression effects when covariates are included. Consequently, we have greater confidence in the covariate model parameters reported here. For a detailed discussion of our reasoning, see supplementary materials Sect. 4.1.1.

fixed effects results, this model points to the existence of a small but significant relationship between authoritarianism and opposition to immigration when accounting for potential confounders (see supplementary materials Table 4.1.1 for full model output, including time-varying effects). Interestingly, RI-CLPM results suggest this is driven by the effect of immigration preferences on authoritarianism, consistent with recent evidence that political preferences influence authoritarianism (or at least self-perceptions of authoritarianism measured via survey items), not the other way round (Bakker et al., 2021; Luttig, 2021). Further supporting this conclusion, CLPM results (Table 4.1.2, supplementary materials) also indicate that the cross-lagged effect of immigration preferences on authoritarianism is larger than the effect of authoritarianism on immigration preferences.

Moderation Effects

Our results provide inconsistent evidence for a relationship between authoritarianism and redistribution preferences. However, recent evidence suggests that the relationship between personality and political preferences might be conditioned by individual-level factors. In particular, Johnston et al. (2017) show that, in the US, political engagement moderates the relationship between authoritarianism and redistribution preferences, with authoritarians high in political engagement opposed to economic redistribution, and authoritarians low in political engagement supportive of economic redistribution. We test this expectation using random effects, hybrid models, and cross-lagged models, and find inconsistent evidence that political engagement moderates the relationship between authoritarianism and support for economic redistribution. Specifically, random effects and CLPM results provide results consistent with the reversal hypothesis, whereas hybrid models and RI-CLPMs do not (see supplementary materials Sect. 5.1 for an overview of our approach, analysis and conclusions). This suggests that whilst between-person differences exist between the engaged and less-engaged, the within-person effect of authoritarianism on redistribution preferences (or of preferences on authoritarianism) does not vary with political engagement.[9]

Discussion and Conclusion

More than seven decades after the publication of *The Authoritarian Personality*, illiberalism is making a stark comeback in mainstream politics across nations, either in the form of the electoral rise of far-right parties or through the accommodation of far-right demands by center-right parties. The surge of authoritarian candidates and parties evokes anti-immigrant hostility, prejudice toward ethnic minorities and

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[9] We also assess whether engagement moderates the relationship between authoritarianism and other political preferences (SM Sect. 5.1.2) and whether ethnicity moderates the relationship between authoritarianism and all outcomes (SM Sect. 5.2). Results again point to an absence of within-person differences between the high- and low-engaged, and between white and non-white respondents.

LGBTQ members, and poses a threat to civil liberties. Producing theories that can help understand the mindset of authoritarian followers has been one of the first and most important aims of political psychological research since the birth of the discipline. Extant literature offers competing theories and the concept of authoritarianism has been significantly refined both conceptually and methodologically. Importantly, the bulk of evidence over the influence of authoritarianism comes from cross-sectional studies that are particularly prone to omitted variable bias and cannot account for reverse causality. In this paper, we aimed at moving research in authoritarianism forward by offering a robust longitudinal analysis on the causal relationship of authoritarianism with attitudes toward immigration, economic redistribution, the EU, and vote choice. Further, we put the most popular authoritarianism measure in political behavior literature, the child-rearing item scale, to the testbed of construct validity.

Overall, the findings suggest that authoritarianism is positively associated with anti-immigration attitudes, anti-EU attitudes, opposition to economic redistribution and right-wing voting preferences. However, when accounting for potential confounding through the inclusion of individual fixed effects, authoritarianism retains its association with immigration preferences alone. This is a significant finding as it illustrates that authoritarianism (conceived and measured as a psychological trait) is meaningfully and independently associated with exclusionary attitudes and not merely an epiphenomenon of time-invariant omitted variables (such as norms and beliefs associated with low socioeconomic status) as has long been suspected by critics (e.g. Hyman & Sheatsley, 1954).

Importantly, however, results question the assumption that authoritarianism is causally prior to preferences. In the case of immigration attitudes, RI-CLPM results suggest that within-person changes in authoritarianism are caused by within-person changes in immigration preferences, not the other way round. In other words, our findings suggest it is anti-immigration attitudes that lead to a broader authoritarian response. This finding is in line with recent evidence over the impact of political attitudes on long term psychological traits (Bakker et al., 2021; Luttig, 2021) and has important political implications. It suggests that holding anti-immigration attitudes for reasons unrelated to authoritarianism may function as a gateway to adopt a broader authoritarian adaptation. The mechanisms behind this may include the development of social networks, selective exposure to rightwing partisan media, or a tendency to adjust to the stereotypical behaviors of one's own political ingroup (see Bakker et al., 2021). We believe that this is a key finding that helps explain a reported authoritarian turn among segments of mass electorates (e.g. Inglehart & Norris, 2016). In times where voters adopt increased anti-immigration attitudes or the topic of immigration increases in salience, as was the case with Britain in the 2010s (Sobolewska & Ford, 2019), a general rise in authoritarianism could follow. We believe that this is key for explaining the transition of significant segments of the electorate toward authoritarianism, but also recognise that further replication of this analysis in other national contexts is needed, particularly given competing evidence that authoritarianism precedes prejudice (e.g. Osborne et al., 2021).

Regarding the evidence on the much-discussed association between authoritarianism and economic conservatism, our findings are mixed. On the one hand

we find a clear positive correlation between authoritarianism and opposition to economic redistribution when accounting for sociodemographic controls. This is in line with research arguing for a psychological connection between authoritarianism and economic conservatism (Napier & Jost, 2008; Vasilopoulos & Lachat, 2018). However, when accounting for stable unobservables through fixed effects or an RI-CLPM, the association between authoritarianism and redistribution preferences (in either direction) drops to null. Regarding the hypothesis that political engagement conditions the relationship between authoritarianism and redistribution preferences (see Johnston et al., 2017), a similar pattern emerges: we identify significant differences between the two groups when estimated using random effects, but this relationship disappears when accounting for stable unobservables. In summary, our results provide little support for a causal relationship between authoritarianism and economic attitudes, at least when using the child-rearing scale as a measure of authoritarianism. Future research could assess the extent to which within-person changes in alternative measures of authoritarianism have an impact on economic conservatism.

Importantly, results indicate that the correlation between authoritarianism and vote choice is spurious, being driven by unobservable characteristics. When using random effects, we find a positive association between authoritarianism and voting for the Conservative party and the populist Eurosceptic UKIP, and a negative association between authoritarianism and voting for the Labour party. However, these relationships do not hold when individual heterogeneity is considered. This is a surprising finding given past research that finds clear associations between levels of authoritarianism and vote choice in different settings (Dunn, 2015; Vasilopoulos & Jost, 2020; Vasilopoulos & Lachat, 2018). A possible explanation over the absence of an effect, especially regarding UKIP, is the fact that the latter is not a prototypical far-right party associated with neo-fascist organizations and movements, as is the case for instance with the Rassemblement National in France, the Golden Dawn in Greece, or Jobbik in Hungary.

Despite the vast superiority of panel data compared to cross-sectional designs, some limitations remain. Individual fixed-effects models in large representative samples, such as the BES, combine high external validity with a stronger causal advantage. Yet fixed-effects models still come with the limitation that they cannot account for time-varying unobservables, that is any variable that fluctuates across time alongside authoritarianism. Still, even though this methodological limit is hard to overreach, the combination of individual fixed-effects and RI-CLPMs offers a particularly stringent test on the potency of authoritarianism to explain political behavior. In addition, we are limited to single-item measures of policy preferences for redistribution and EU integration preferences, which introduces potential measurement error, although we have addressed this concern by accounting for this error in the RI-CLPMs. A final limitation is that the evidence is limited to the British case. Future research could assess the extent to which the findings obtained here replicate across contexts and party systems.

Declarations

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